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Part 2 of 2

OREGON

ENVIRONMENTAL QUALITY

COMMISSION MEETING

MATERIALS 12/22/2005

State of Oregon
Department of Environmental Quality

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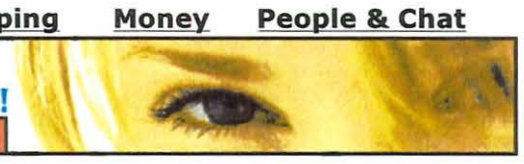
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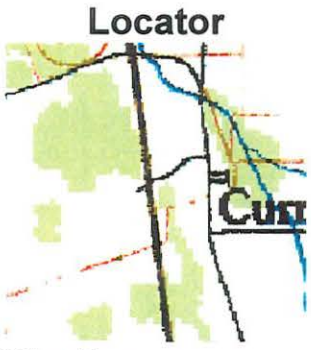
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State of Oregon
Department of
Environmental
Quality

Umatilla Chemical Demilitarization Program
Status Update
Environmental Quality Commission
December 22, 2005
(Agenda Item D)

Umatilla Chemical Demilitarization Program

Permit Modification Requests (PMRs) for the Umatilla Chemical Agent Disposal Facility (UMCDF) and the Umatilla Chemical Depot (UMCD)

Since the last update, the Department has received the following UMCDF PMRs of note:

- Class 2 PMR UMCDF-05-044-PAS(2) – proposes to delete monitoring requirements for nitrogen oxide (NO_x) on the common stack. The existing permanent NO_x monitor would be removed, and a temporary monitor would be used during all future trial burn testing activities to gather NO_x emissions data for use in the post trial burn risk assessment and to meet requirements in the air contaminant discharge permit. This PMR was submitted on November 29 and the public comment period ends January 30.
- Class 3 PMR UMCDF-05-034-WAST(3) – proposes to delete all requirements associated with operation of the Dunnage Incinerator, which was not constructed at UCMDF. Additionally, proposes to add design and operating requirements for the Carbon Micronization System, which would be used in conjunction with the Deactivation Furnace System (DFS) to process all potentially agent-contaminated carbon generated from operation of UMCDF. Spent carbon is the final secondary waste stream that needs to be addressed to meet requirements imposed by the Commission when it approved the start of UMCDF operations. This PMR was submitted on October 25 and the public comment period ends December 27.

The Department has approved the following UMCDF and UMCD PMRs of note:

- On December 6, Class 2 PMR UMCD-05-001-MISC(2) – approved numerous changes (mostly administrative in nature) updating the UMCD Hazardous Waste Storage Permit and Permit Application information to reflect current conditions. A significant length of time passed between the time the Department determined the Application was complete and when the Permit was issued on January 31, 2005, so the Department had required that the Army submit this PMR and bring all information up to date.
- On November 18, Class 1 PMR UMCD-05-003-KBLK(1) – approved administrative changes that will allow the mustard agent ton containers to be moved from I-Block back to K-Block as igloos there are emptied of other munitions. Having the ton containers in K-Block at the earliest possible time will facilitate preliminary sampling in preparation for processing.

- On November 9, Class 1 PMR UMCDF-05-051-MISC(1R) – approved the final sampling and analysis requirements for processing the four GB agent ton containers that were moved into the Munitions Demilitarization Building (MDB) for storage. Ton containers have since been drained, the agent destroyed and the empty containers are being stored in the MDB until they can be processed in the Metal Parts Furnace (MPF) when it is restarted.
- On November 4, Class 1 PMR UMCDF-05-041-DFS(1R) – approved changes to the permit limits for key operating parameters (exhaust gas temperature, exhaust gas flow rate, agent feed rate) in the Deactivation Furnace System (DFS) based on the preliminary results of the DFS GB rocket agent trial burn. Adjustment of these operating limits prior to formal review of the final agent trial burn report was necessary to ensure ongoing DFS operations are conducted consistent with how the agent trial burn was performed.
- On November 3, Class 1 PMR UMCD-05-007-MISC(1) – approved minor language changes that clarify the extent of Department enforcement authority as it relates to UMCD operations that are unrelated to the management of hazardous waste. Approval of this PMR resulted in the Army withdrawing their previous appeal of the Department's January 31, 2005 issuance of the final UMCD Hazardous Waste Storage Permit.
- On October 31, Class 1 PMRs UMCDF-05-048-MISC(1R) and UMCD-05-004-MCE(1) – approved changes to the criteria that are used to determine when it is safe and appropriate to transport chemical agent munitions and bulk items from the storage area to the demilitarization facility for destruction. Previously, the determination had been made strictly based on a plume prediction model that assumed a worst case accident scenario and the existing weather conditions to determine if there were potential off-site impacts. The new criteria rely on a more complete evaluation of the overall public risk of the project and whether or not the movement of munitions poses a greater public risk than continued storage of the munitions.
- On October 27, Class 1 PMR UMCDF-05-049-LIC(1R) – approved changes to the permit limits for key operating parameters (exhaust gas flow rate, agent feed rate, primary/secondary chamber temperature) in the Liquid Incinerator 1 (LIC1) based on the preliminary results of the LIC1 GB agent trial burn. Adjustment of these operating limits prior to formal review of the final agent trial burn report was necessary to ensure ongoing LIC1 operations are conducted consistent with how the agent trial burn was performed.
- On October 27, Class 1 PMR UMCDF-05-040-PFS(1R) – approved changes to the monitoring instrumentation on the furnace pollution abatement system carbon filter systems to more accurately measure the moisture in the exhaust gas. Accurate measurements of the moisture content are necessary to ensure that the carbon remains sufficiently dry to adequately adsorb any chemical agent that may be present.
- On October 17, Class 1 PMR UMCDF-05-019-WAP(1R) – approved the criteria that will be used to determine whether or not the laboratory liquid waste stream is multi-agent contaminated. Since UMCDF does not monitor for multiple chemical agents downstream of the furnace systems, they cannot process multi-agent contaminated waste streams. However, both the Army and Department wanted the laboratory liquid waste stream to be processed in the liquid incinerators instead of stored in drums until a later date. Sample results showed no detectable quantities (non-detect was established as the criteria to determine that this waste stream was not multi-agent contaminated) of non-campaign chemical agents in this waste stream.

Agent Operations at UMCDF
As of December 14, 2005, UMCDF had processed 46,577 GB rockets (51 % of the original inventory of GB rockets at UMCD) and destroyed more than 500,000 lbs. of GB agent (approximately 25% of the original inventory of GB agent at UMCD). This represents approximately a 53% reduction in public risk from continued storage of the original stockpile.

The Department has approved preliminary agent trial burn reports and revised operating parameters for the Deactivation Furnace System (DFS) and the Liquid Incinerator #1 (LIC1) that allow UMCDF to operate both incinerators at 75% of the permitted feed rates (27 GB rockets/hr. in the DFS and 750 lbs./hr of GB agent in LIC1) until the final agent trial burn reports for the furnaces have been approved and the Department has completed the post-trial burn health and ecological risk assessments.

Since the start of chemical agent operations in the Metal Parts Furnace (MPF), the site has processed 88 MC-1 GB bombs. Each bomb contains approximately 220 lbs. of GB agent.

Rocket Fire on December 7, 2005
On December 7, a rocket fire occurred in Explosive Containment Room (ECR) B – this is the fifth fire during GB rocket processing at UMCDF since April 2005. As in the case of previous fires, the event occurred on the fifth cut of the GB rocket (the first cut into the rocket propellant). Once again, a low order explosion was followed by ignition of the rocket propellant. In contrast to the most recent previous fire on July 29, 2005, the pressure surge in the ECR was somewhat greater and the peak temperature in the ECR reached 117 deg. F (compared to 81 deg. F in July). Also, unlike the May 18 and July 29 fires, on December 7 the deluge system in the ECR was unable to quickly extinguish the flames, so the fire burned vigorously for 90 – 110 seconds, then burned for about another 30 seconds at a much slower rate. No chemical agent was released outside of engineering controls (although there was a migration of GB agent to the observation corridors of the munitions demilitarization building), no one was injured, and minimal damage occurred to equipment in the ECR. UMCDF implemented their recovery plan and was ready to resume rocket processing in ECR-B by mid-afternoon on December 8.

In the time interval from July 29 until December 7, approximately 20,000 GB rockets had been processed without a rocket fire in either ECR.

Analysis of Rocket Propellant Samples
Evaluation of propellant samples from rockets at UMCD and the Pine Bluff Arsenal has been completed at the Picatinny Arsenal in New Jersey. Propellant samples from Pine Bluff GB rockets showed a similar separation of nitroglycerin from the propellant and migration of liquid nitroglycerin to the outer edge of the propellant grain as was seen in the propellant samples from UMCD. A final report on the propellant evaluations from both sites is expected to be issued by the Army in the very near future.

Trial Burns
UMCDF completed its Toxic Substances Control Act trial burn on October 28 – 30 in order to demonstrate compliance with federal requirements for destruction of PCBs that are contained in

some of the rocket shipping and firing tubes. Preliminary results indicate that the site was successful in demonstrating a PCB destruction efficiency greater than 99.9999%.

GB Ton Containers
On November 14, UMCDF punched and drained four non-stockpile ton containers of GB agent. After sampling and analysis, the contents of the four ton containers were processed in LIC1. Due to a mechanical problem with the pollution abatement system of the MPF, the drained containers were moved to the buffer storage area of the munitions demilitarization building. The openings to the containers have been closed during this time and the buffer storage area is being monitored for agent. The containers will remain there until an extended outage of the MPF is completed to install a backup combustion air blower (expected to be completed in December). After the MPF is restarted (expected to be the first week of January), the containers will be processed in the MPF.

Tetrytol Rocket Test
Of the remaining GB rockets at UMCD, 18,587 contain Tetrytol bursters. The Tetrytol bursters have a higher explosive content than the Composition B bursters utilized in most of the GB rockets. UMCD is the only chemical weapons storage facility with rockets containing Tetrytol bursters.

In order to evaluate and demonstrate satisfactory processing of Tetrytol rockets, UMCDF will conduct a test in mid-January. A copy of the test plan has been provided to the Department. The site will process 300 Tetrytol rockets while conducting function tests, comparing the processing of Tetrytol rockets vs. historical rocket processing at UMCDF, and demonstrating acceptable operation of the rocket handling system, the rocket shear machine, and the DFS. The Tetrytol rockets will be cut into smaller pieces than the rockets with Composition B bursters and dropped into the DFS in smaller increments in order to segregate the explosive content in the kiln to reduce the likelihood of explosions or high pressure excursions inside the furnace. At the completion of the processing test, a visual inspection of the furnace interior will be performed and documented to determine if there have been any adverse effects upon the kiln. Staff from the Department will observe the Tetrytol rocket processing test.

CDC Evaluation of the chemical agent monitoring program at UMCDF
On October 21, 2005, the Centers for Disease Control and Prevention (CDC) issued a report of its findings from a July 2005 review of the chemical agent monitoring program at UMCDF. CDC has been designated as the agency of the U.S. Department of Health and Human Services that provides public health oversight of the Department of Defense's chemical weapons disposal facilities. The CDC report commended UMCDF for outstanding performance in its agent monitoring and laboratory operations and recommended that the other chemical demilitarization sites should be encouraged to take advantage of many of the ideas and practices at UMCDF.

Enforcement Action
On November 4, 2005, the Department issued a Notice of Violation and civil penalties of $25,800 to the Washington Demilitarization Company (WDC) for a series of hazardous waste management violations, including failure to mark accumulation start dates on containers of hazardous waste, failure to mark containers as hazardous waste, and failure to keep a number of

hazardous waste containers closed. The violations were based upon inspections by the Department in March and April 2005, as well as the facility's own self-reporting of violations during the first quarter of 2005. WDC has paid the assessed penalties and taken extensive actions to prevent a recurrence of these violations of hazardous waste management regulations.

Umatilla Chemical Depot (UMCD)

Appeal of Permit Conditions in UMCD Hazardous Waste Storage Permit

As a consequence of receiving the Department's approval of PMR UMCD-05-007-MISC(1) on November 30, the Umatilla Chemical Depot withdrew its Notice of Appeal of six conditions in the hazardous waste storage permit issued on January 31, 2005.

Significant Events at Other Demilitarization Facilities

Anniston Chemical Agent Disposal Facility, Alabama

In November, Anniston processed its 100,000th munition. The site expects to complete its GB campaign in late January 2006. Then they will begin the campaign changeover process to begin destruction of VX munitions. The changeover process will include the installation of 50 additional chemical agent monitors and decontamination of the weapons processing systems. The VX campaign is expected to begin in May or June.

Newport Chemical Agent Disposal Facility, Indiana

After an extended shutdown due to a gasket failure on October 29 that resulted in a spill of 490 gallons of hydrolysate from a neutralization reaction tank system, Newport resumed operations on November 19. Workers at the site installed replacement gaskets with inner and outer stainless steel rings that should prevent "material creep" and gasket rupture.

Pine Bluff Chemical Agent Disposal Facility, Arkansas

On November 12, a fire occurred inside an explosive containment room at Pine Bluff. The cause of the fire appeared to be the ignition of residue material near the hopper area of the deactivation furnace system. The hopper is the container that holds sheared rocket pieces before they are released into the deactivation furnace.

On November 29, another fire occurred in an explosive containment room at Pine Bluff. Rocket processing had been paused when a slide gate malfunctioned before a rocket, already drained of chemical agent, was completely processed. The remaining portion of the rocket, at the shear machine, ignited. The flames were extinguished within a minute and no release of agent occurred outside of engineering controls.

Blue Grass Chemical Agent Destruction Pilot Plant, Kentucky

The National Academies' National Research Council (NRC) reported on November 14 that they had completed a review of the design of the pilot plant that will destroy chemical weapons at the Blue Grass Army Depot in Kentucky. The NRC report concluded that the facility design includes all steps required for safe and effective destruction of the weapons, but the steps have

yet to be integrated and tested. Blue Grass will utilize chemical neutralization, followed by oxidation in water under very high temperature and pressure (super critical water oxidation). The report noted that some operational issues need to be addressed, such as how to cut the rockets without igniting the propellant inside. Also, the NRC concluded that "the methods designed to treat secondary wastes at Blue Grass are immature and untested, for the most part."

Aberdeen Chemical Agent Disposal Facility, Maryland
Aberdeen has completed its neutralization of drained mustard agent from its inventory of ton containers and is decontaminating the drained containers. Interestingly (in view of NRC's comment about the methods to be utilized at Blue Grass to treat secondary wastes), Aberdeen has been shipping some of its agent-contaminated secondary waste to a commercial hazardous waste incinerator in Port Arthur, Texas. It is our understanding that the Army has suspended further shipments pending a review of their waste transportation plan by the CDC.

Tooele Chemical Agent Disposal Facility, Utah
Tooele continues its agent changeover activities in preparation for beginning its mustard agent campaign in 2006.

Pueblo Chemical Agent Disposal Facility, Colorado
In January 2005, the NRC released a report on the neutralization plan for the Pueblo Chemical Depot similar to the November report regarding the design for destruction of chemical weapons at Blue Grass. Pueblo's stockpile includes only mustard agent, contained in mortars and projectiles.

Chemical Weapons Destruction Program
Glossary of Acronyms and Terms of Art

ABCDF – Aberdeen Chemical Agent Disposal Facility, located at the Aberdeen Proving Grounds in Maryland

ACAMS – Automatic Continuous Air Monitoring System – the chemical agent monitoring instruments used by the Army to provide low-level, near real time analysis of chemical agent levels in the air

ANCDF – Anniston Chemical Agent Disposal Facility, located at Anniston Army Depot in Alabama

ATB – agent trial burn – test burns on incinerators to demonstrate compliance with emission limits and other permit conditions

AWFCO instrument– Automatic Waste Feed Cutoff – an instrument that monitor key operating parameters of a high temperature incinerator and automatically shuts off waste feed to the incinerator if prescribed operating limits are exceeded

BGCA – Blue Grass Chemical Activity, located at the Blue Grass Army Depot in Kentucky

BRA – Brine Reduction Area – the hazardous waste treatment unit that uses steam evaporators and drum dryers to convert the salt solution (brine) generated from pollution abatement systems on the incinerators into a dry salt that is shipped off-site to a hazardous waste landfill for disposal

CAC – Chemical Demilitarization Citizens Advisory Commission – the nine member group appointed by the Governor to receive information and briefings and provide input and express concerns to the U.S. Army regarding the Army's ongoing program for disposal of chemical agents and munitions – each state with a chemical weapons storage facility has its own CAC – in Oregon the DEQ's Chemical Demilitarization Program Administrator and the Oregon CSEPP Manager serve on the CAC as non-voting members

CAMDS – Chemical Agent Munitions Disposal System – the former research and development facility for chemical weapons processing, located at the Deseret Chemical Depot in Utah

CDC – Centers for Disease Control and Prevention – a federal agency that provides oversight and technical assistance to the U.S. Army related to chemical agent monitoring, laboratory operations, and safety issues at chemical agent disposal facilities (Website: http://www.cdc.gov/nceh/demil/)

CMA – U.S. Army's Chemical Materials Agency, the agency responsible for chemical weapons destruction (website: http://www.cma.army.mil/)

CSEPP – Chemical Stockpile Emergency Preparedness Program – the national program that provides resources for local officials (including emergency first responders) to provide protection to people living and working in proximity to chemical weapons storage facilities and to respond to emergencies in the event of an off-post release of chemical warfare agents (Website: http://csepp.net/)

CWWG – Chemical Weapons Working Group, an international organization opposed to incineration as a technology for chemical weapons destruction and a proponent of alternative technologies, such as chemical neutralization (Website: http://www.cwwg.org/)

DAAMS – Depot Area Air Monitoring System – the system that is utilized for perimeter air monitoring at chemical weapons depots and to confirm or refute ACAMS readings at chemical agent disposal facilities – samples are collected in tubes of sorbent materials and taken to a laboratory for analysis by gas chromatography

DCD – Deseret Chemical Depot – the chemical weapons depot located in Utah

DFS – deactivation furnace system – a high temperature incinerator (rotary kiln with afterburner) used to destroy rockets and conventional explosives (e.g., fuses and bursters) from chemical weapons

DPE – demilitarization protective ensemble – the fully-encapsulated personal protective suits with supplied air that are worn by workers in areas with high levels of agent contamination

G.A.S.P. – a Hermiston-based anti-incineration environmental group that has filed multiple lawsuits in opposition to the use of incineration technology for the destruction of chemical weapons at the Umatilla Chemical Depot – G.A.S.P. is a member of the Chemical Weapons Working Group

GB – the nerve agent sarin

HD – the blister agent mustard

I-Block – the area of storage igloos where ton containers of mustard agent are stored at UMCD

JACADS – Johnston Atoll Chemical Agent Disposal System, the prototype chemical agent disposal facility located on the Johnston Atoll in the Pacific Ocean (now closed and dismantled)

J-Block – the area of storage igloos where secondary wastes generated from chemical weapons destruction are stored at UMCD

K-Block – the area of storage igloos where chemical weapons are stored at UMCD

LIC1 & LIC2 – liquid incinerators #1 & #2 – high temperature incinerators (liquid injection with afterburner) used to destroy liquid chemical agents

MPF – metal parts furnace – high temperature incinerator (roller hearth with afterburner) used to destroy secondary wastes and for final decontamination of metal parts and drained munition bodies

NECDF – Newport Chemical Agent Disposal Facility, located at the Newport Chemical Depot in Indiana

PBCDF – Pine Bluff Chemical Agent Disposal Facility, located at the Pine Bluff Arsenal in Arkansas

PFS – the carbon filter system installed on the pollution abatement systems of the incinerators used for chemical agent destruction

PICs – products of incomplete combustion – by-product emissions generated from processing waste materials in an incinerator

PMR – permit modification request

PUCDF – Pueblo Chemical Agent Disposal Facility, located at the Pueblo Chemical Depot in Colorado

TOCDF – the Tooele Chemical Agent Disposal Facility, located at the Deseret Chemical Depot in Utah

UMCD – Umatilla Chemical Depot

UMCDF – Umatilla Chemical Agent Disposal Facility

VX – a nerve agent



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Good morning Mr. Chairman, Commissioners and Director Hallock,

My name is Kathleen Feehan and I am a Water Quality Policy Analyst for the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). I address you this morning on behalf of Eric Quaempts, the Director of the Department of Natural Resources. The Director regrets that he could not be here in person this morning.

In the past the Umatilla Tribes have enjoyed an excellent and productive relationship with DEQ and the State of Oregon. We highly value these important relationships because the Tribe is a member, not an abstraction, of the Oregon community. Over the past three years many representatives of the Umatilla tribal government have spoken to the Commission and to Director Hallock requesting your action and DEQ's action to protect the health of tribal people by choosing water quality criteria for toxic chemicals that protect the heath of people who eat fish from Oregon waters. The tribe raised their objections over DEQ's toxic criteria after careful consideration because it is the responsibility of the tribal government to protect the health of the people it represents. We also believe it is the responsibility of Oregon's government to protect all Oregonians; this includes tribal people when the matter is within Oregon's jurisdiction.

The Umatilla tribes have asked for DEQ's help because DEQ's toxic water quality criteria will not protect the health of Oregonians, including CTUIR members, who eat more than two fish meals per month. This problem is not esoteric or abstract in what it means to the members of the Umatilla tribes. DEQ has acknowledged that the Department understands that their toxic criteria will exclude the vast majority of tribal people from protection. In October the tribe's Board of Trustees was deeply disappointed to learn that our efforts to sway DEQ's decision to exclude active fish consumers from protection in Oregon's toxic criteria had failed.

The tribe strongly objected to the proposed toxic criteria and now objects to their approval by the Environmental Protection Agency. The DEQ and the Environmental Quality Commission are knowingly excluding tribal members and all active fish consumers from protection under Oregon's water quality criteria for toxic pollutants. The toxic criteria are not, as has been suggested, a matter of protecting "special populations" verses the general public in Oregon. This is a matter of Oregon choosing toxic criteria that do not support the designated use of fishing. This is a matter of Oregon choosing not to protect the health of Oregonians who eat more than two meals of fish per

month. This is a matter of DEQ choosing to ignore the risk to the health of Oregon children and mothers from toxic pollution.[1]

For three years the tribe has tried to engage DEQ in a government-to-government effort to create a cooperative resolution to this problem. Nonetheless, DEQ has decided to delay protecting the health of fish consumers and tribal people until at least 2008. Such a decision only delays the discussion with municipalities and industry that is needed now to protect at risk Oregon families who eat fish. If it is sensible to protect the health of Oregon fish consumers in 2008 we are left to wonder why it is not sensible to protect the health of Oregon fish consumers now.

When we were last before you, we asked to have the opportunity to present to the Commission the results of an independent scientific panel's review of the threat to CTUIR members, and to other Oregonians, of the fish consumption rate used in DEQ's toxic criteria. Because this expert panel is doing their work strictly as volunteers, we have not yet seen the results and the work product is months past due. Though we have no control over that, I apologize to you for the delay. When that report is finalized if you so desire we will present it to you and will be happy to provide copies of the report.

The tribe will continue to work to protect the health of their tribal members and all fish eating Oregonians. The Governor's Oregon Principles state that "Oregon is a place where we value taking care of those who are the most vulnerable, including children, and seniors." We hope that in the near future that protection will be extended to demonstrably vulnerable tribal people and other members of the Oregon community who actively eat Oregon fish.

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[1] U.S. Environmental Protection Agency. *Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health (2000)*. Office of Water, Office of Science and Technology. EPA-822-B-00-004. p. 4-29, 4-30.

State of Oregon
DEQ of Environmental Quality Memorandum

Date: December 22, 2005

To: Environmental Quality Commission

From: Stephanie Hallock, Director S. Hallock

Subject: Agenda Item E, Rule Adoption: Renewal of NPDES 1200-C Construction Stormwater General Permit, December 22-23, 2005 EQC Meeting

DEQ Recommendation

DEQ recommends that the Environmental Quality Commission (Commission) renew in rule the proposed construction stormwater general permit as proposed in the attachments to this report.

Need for Rulemaking

Background

This general permit expires on December 31, 2005. This rulemaking is needed to renew the permit for a five-year term and update and make improvements to permit conditions. Federal Clean Water Act regulations require stormwater runoff to surface waters from construction activity disturbing one or more acres to be regulated through a National Pollutant Discharge Elimination System (NPDES) permit. A general permit is the most efficient mechanism for permitting these activities because it allows DEQ to regulate hundreds of similar types of activities and discharges through a single permit, rather than by issuing hundreds of individual permits

Potential Impact of Stormwater Runoff from Construction Sites

There is a well-established and direct connection between construction site activity without effective erosion and sediment controls and the levels of sediment loadings in receiving waters. In promulgating its original 1990 federal stormwater regulations, the U.S. Environmental Protection Agency (EPA) stated that sediment loading rates from construction sites are typically 10 to 20 times that of agricultural lands, with runoff rates as high as 100 times that of agricultural lands and 1,000 to 2,000 times that of forest lands. Additionally, EPA stated that over a short period of time, construction sites can contribute more sediment to streams than was previously deposited over several decades.

There are a wide range of cost-efficient erosion prevention and sediment control measures available to the construction industry to minimize these potential impacts. DEQ believes that the best management practice (BMP) approach used in the expiring general permit and its proposed renewal has been and will continue to be the most effective way of reducing stormwater runoff from construction sites in the state.

Effect of Rule

The proposed revisions to Oregon Administrative Rule (OAR) 340-045-0033 *Regulations Pertaining to General Permits* (Attachment A) will renew the NPDES 1200-C general permit for stormwater runoff from construction sites that disturb one or more acres of land.

How many construction sites will be affected?

Approximately 1,500 sites are currently registered under this general permit. However, the number of permit registrants at any one time changes frequently because of the temporary nature of soil disturbance from construction activity. DEQ also has agreements with nine local government agencies to assist in the implementation of the 1200-C permit. In general, the local government agencies review and approve erosion control plans and conduct site inspections, while DEQ maintains NPDES enforcement authority and oversees the work of the local agencies. The total number of permit registrations referenced above includes those in the jurisdictions of these local agencies.

Summary of Revisions

The proposed rule revisions recommend the following noteworthy additions to the permit:

- **A 14-day public notice and review period on permit applications and erosion and sediment control plans (ESCPs) is required for construction sites disturbing five or more acres of land.** The expiring permit contains no provisions for public notice and comment on permit applications and ESCPs. The recommended permit would be the first DEQ general permit with such public notice and review provisions. Based on current construction site figures, 40% of permit registrants disturb five or more acres of land, which accounts for over 80% of construction land disturbances regulated by this permit. While future construction project numbers and sizes are difficult to predict, DEQ estimates that 40% of new permit registrants will need to comply with the new public notice process and believes that this process will provide for public participation on the majority of land disturbances caused by construction activities regulated by this permit. DEQ proposes that this requirement take effect for all new applications received on or after June 1, 2006.

- **An explicit prohibition on causing violations of in-stream water quality standards.** The expiring permit states that the "ultimate goal" of the permit is to comply with water quality standards. The new language states that the permit registrant must not cause a violation of instream water quality standards. However, the language further explains that DEQ will assume a permit registrant's stormwater discharges will not violate

water quality standards if they develop, implement and revise their ESCP in compliance with permit conditions, unless evidence is obtained to the contrary. This evidence would be based on instream water quality monitoring data obtained by DEQ during a compliance investigation. For instance, samples taken upstream of the site's discharge point could be compared with samples collected downstream of the site to document a standards violation. This condition of the permit also identifies the actions DEQ will require the permit registrant to take if a determination is made that the registrant has caused a violation of water quality standards.

- **More stringent requirements for sites discharging stormwater into waterbodies that are listed for turbidity or sedimentation on the most recent EPA-approved Oregon 303(d) list[1] or that have an established Total Maximum Daily Load[2] (TMDL) for turbidity or sedimentation.** The expiring permit states that DEQ may establish additional controls for construction activities discharging to water quality limited streams if TMDLs are established or require application for an individual permit. The recommended renewal permit includes specific requirements for sites discharging to waterbodies on the 303(d) list for turbidity or sedimentation, or to waterbodies that have an established TMDL for one of those two pollutants. Currently, the proposed requirements would directly impact 1% of the total universe of 1200-C permit registrants. Of the active 1200-C sites that would be affected by these requirements, nearly all of them are located in the Eagle Point area of Jackson County. The recommended permit requires affected permit registrants to either:
  (1) Collect stormwater runoff samples, analyze them for turbidity, and compare results to a numeric turbidity benchmark (a target concentration or numeric goal designed to determine effectiveness of pollution controls), or
  (2) Implement one or more specified best management practices designed to treat, control or prevent sediment discharges.

- **A new requirement to implement immediate corrective actions when sediment or turbidity is visibly detected in discharges to surface**

[1] The Oregon 303(d) list is composed of water bodies that do not meet water quality standards for one or more pollutant parameters.
[2] A Total Maximum Daily Load (TMDL) is a pollution load limit for a water body that represents the maximum amount of a pollutant a water body can receive and still meet water quality standards. TMDLs are established by DEQ for water bodies on the 303(d) list.

waters or stormwater conveyance systems. This was an expectation in the expiring permit, but not explicitly stated.

- **New procedures for reporting and approving revisions to a permit registrant's ESCP.** The expiring permit does not directly address ESCP revisions, other than to state that DEQ may request modifications at any time if the ESCP is deemed ineffective. The procedures in the recommended permit are designed to minimize the paperwork involved with revision submittals, while ensuring prior DEQ approval for most ESCP revisions. Rather than requiring the permit registrant to re-submit the entire ESCP every time revisions are made, the proposed permit allows for the submittal of an "Action Plan" that simply summarizes the changes being proposed.

Commission Authority

The Commission has authority to take this action under ORS 468.020, 468.065(2), 468B.035, and 468B.050.

Stakeholder Involvement

Early in the rulemaking process DEQ held numerous meetings with affected parties and individuals interested in changes to the 1200-C construction stormwater general permit. DEQ met with current 1200-C permit holders, business associations, state and federal agencies, environmental organizations and local governments.

Initially, DEQ discussed the proposal and received informal comments during ten stakeholder scoping meetings in March and April 2005 in Portland, Salem, Eugene, and Medford. In addition, DEQ placed a preliminary draft of the revised 1200-C permit on its website in June 2005. The agency then held three meetings in June to discuss this initial draft and to generate further informal comments and suggested changes to the permit.

Public Comment

The formal public comment period was open from August 22, 2005, through September 30, 2005. Public hearings on the proposal were held in Eugene, Portland, and Medford. The major issues raised during the comment period are summarized below under "Key Issues." Attachment B, the summary of Public Comments and Agency Responses, provides the detailed results of the formal public input and corresponding rule changes.

Key Issues Key issues raised during the public comment period include the following:

1. **Public Notice and Review of Individual Permit Applications and Erosion and Sediment Control Plans (ESCPs)**

   Initial Proposal:
   The proposed renewal draft of the 1200-C permit presented for public comment included a 14-day public notice and review period, and an opportunity for an information meeting when requested by ten (10) or more persons, for *all* permit applications and ESCPs. That notice period would occur prior to DEQ registering the applicant under the permit. This provision was included to be consistent with a similar public notice condition to be proposed in the upcoming renewal of the industrial stormwater general permits as a result of a December 2004 settlement agreement with the Northwest Environmental Defense Center (NEDC). While the 1200-C was not specified in this agreement, it is similar in nature to the industrial stormwater permits, which, when proposed for public comment, will also include a requirement for public notice of permit applications and erosion and sediment control plans as agreed to in the settlement.

   Public Comments:
   Many commenters opposed inclusion of this permit condition because they believed it would unnecessarily delay permit registration and construction projects, and questioned why DEQ would divert its scarce resources to an administrative process that was not viewed by these commenters as a federal Clean Water Act requirement. In contrast, environmental advocates commented that the federal Clean Water Act does require public notice and comment on individual applications and ESCPs, but stated the comment period should be 35 days, as specified in the settlement agreement.

   Legal Background:
   The case law on public notice of general permit applications and management plans remains unsettled. The Ninth U.S. Circuit Court ruled that such notice is required for municipal stormwater general permits, and the Second U.S. Circuit Court issued a similar ruling for concentrated animal feeding operations (CAFO) permits. However, the Seventh U.S. Circuit Court ruled in 2005 that EPA was not required to provide public notice and comment on applications for EPA's construction stormwater general permit. The Seventh U.S. Circuit Court decision applies to EPA issued construction general permits throughout the nation, while the Ninth

U.S. Circuit Court decision similarly applies to all EPA-issued small municipal separate storm sewer system (MS4) general permits.

Analysis of Alternatives:
DEQ analyzed the following three alternative public notice and comment approaches in response to public comments:

(a) ***No Public Notice and Comment on Permit Applications and ESCPs***
This option represents the status quo under the expiring permit. Given that the case law regarding the need for public notice and comment on general permit applications and plans remains unsettled, waiting for more clear direction from the courts or EPA may be warranted. Additionally, the environment may be better protected by using limited DEQ resources to review ESCPs, respond to complaints, and conduct site inspections rather than administering a public notice process.

Workload Analysis: Previously, four full time equivalents (FTEs) were working on 1200-C permit tasks statewide.DEQ allocated one additional FTE to 1200-C permit work effective November 2005. If DEQ directs staff resources to develop and maintain an additional public notice and review process, ESCP review and site inspection work would decrease proportionally. With no public notice and comment process, the additional one (1) FTE added in November 2005 would be directed to increasing the number of ESCP reviews and site inspections conducted by staff. DEQ estimates that all ESCPs submitted with new applications could be reviewed, and the increased number of site inspections would be a combination of complaint responses and DEQ-initiated inspections, which are not currently conducted. The specific implementation commitments are summarized in the table on page 8.

(b) ***Public Notice and Comment on All Permit Applications and ESCPs***
Another option is to require a 14-day public notice and comment period on all 1200-C permit applications and ESCPs. Under this option, the public notice process would be streamlined from what was originally proposed in the draft 1200-C permit by removing the provision for an informational hearing if requested by ten (10) or more persons and the public notice for revisions to an ESCP after permit registration. The notice period would still only apply to new applications as originally proposed.

Workload Analysis: If DEQ were to implement a public notice and review process for all permit applications and ESCPs, it would also need to review all ESCPs. Currently, 70% of the ESCPs are reviewed. DEQ estimates that administering a public notice for all applications and reviewing all ESCPs will require more than the one (1) additional FTE added in November for 1200-C implementation. The FTE required for these additional activities would be approximately 1.5 FTE. Under this scenario, no additional site inspections would be conducted. The same number of complaint-driven inspections conducted in 2004 would be anticipated for 2006 and 2007. The viability of this option is limited by the availability of resources. Since only one (1) additional FTE has been allocated for 1200-C implementation, no other sources of revenue are immediately available to augment the funding needs of this option. For specific workload commitments, see the summary table on p. 8.

(c) ***Public Notice and Comment on Five Acres or More Permit Applications and ESCPs for five or more acres***

This option is similar to (b) above, but is further streamlined to projects disturbing five or more acres. It does not include an opportunity for an informational hearing or public notice on revisions to the ESCP. As discussed earlier in "Effect of Rule," DEQ estimates that focusing the public notice and review process on construction projects disturbing five or more acres will have the potential to impact about 40% of new permit registrants. This is based on current construction site figures indicating that 40% of permit registrants disturb five or more acres of land and account for over 80% of the acres of land disturbed from construction activity regulated by this permit. While future construction project numbers and sizes are difficult to predict, DEQ believes that this alternative provides for public participation on the majority of land disturbances caused by construction activities regulated by this permit. DEQ proposes that this requirement take effect for all new applications received on or after June 1, 2006.

Workload Analysis: Administering a public notice and comment process for new construction projects that disturb five or more acres will require approximately 0.6 FTE (60% of the planned additional 1 FTE for November 2005). With the one (1) additional FTE, DEQ would implement the public notice and review process for new permit applications and ESCPs for about 40% of the new permit applications and ESCPs that are submitted each year. In addition, DEQ would be

able to complete reviews of 100% of the ESCPs it expects to receive (currently 70% are reviewed). However, no additional site inspections could be conducted. The same number of complaint-driven inspections conducted in 2004 would be anticipated for 2006 and 2007. For more specific workload commitments, see the summary table below:

Summary of Workload Commitments for the 3 Alternatives
The table below summarizes DEQ's specific 1200-C permit implementation commitments for the three public notice alternatives evaluated in this report. The total numbers of applications and ESCPs are estimates based on the numbers submitted in 2004. The total number of applications referenced for public notice activity (605) is higher than the number listed for ESCP reviews and inspections (450), because the public notice process will include those permit applications and ESCPs under the purview of local agents and DEQ (i.e., an estimated 155 additional permit applications will be received by local agents each year).

Action	2004	2006 & 2007		
		Option A (No Public notice)	**Option B* (Public notice for all sites)**	**Option C (Public notice on 5+ acre sites)**
Public notice	NA	Not required	605 of 605 new permit registrants (100%)	242 of 605 new permit registrants (40%)
ESCP reviews	315 of 450 ESCPs submitted (70%)	450 of 450 ESCPs submitted (100%)	450 of 450 ESCPs submitted (100%)	450 of 450 ESCPs submitted (100%)
Site inspections	35 of 450 new permitted sites (8%)	112 of 450 new permitted sites (25%)	35 of 450 new permitted sites (8%)	35 of 450 new permitted sites (8%)

* NOTE: To implement Option B, 1.5 FTE would be required, while Option A and C would be implemented with the 1 FTE added in November for additional 1200-C implementation activities. Because no

other resources are available to support the additional FTE needed, Option B is currently not feasible. DEQ cannot reduce its current commitments to industrial and municipal stormwater permit implementation to free up additional resources for the construction program. In addition, the site inspection level in Option B cannot be scaled back because this level represents the minimal complaint response activity DEQ must maintain to be responsive to the public.

DEQ Recommendation:
DEQ recommends a 14-day public notice and review period on new permit applications and ESCP for construction projects disturbing five or more acres. This public notice and review requirement would become effective on June 1, 2006, thereby giving DEQ time to develop specific internal procedures for this process and to coordinate with local government agents. DEQ recommends this option for the following reasons:

- Implementing this option meets the intent of the 2003 Ninth U.S. Circuit Court decision, which may become applicable to all stormwater general permits as a result of future court rulings. An Oregon Court would likely find a Ninth U.S. Circuit Court decision binding.

- Public notice and review has the potential to result in environmental benefits because citizens may provide information on site conditions and considerations that are not known by DEQ.

- Currently, 40% of permit registrants (600 of 1500) disturb five or more acres of land. This accounts for over 80% of disturbed land from all construction projects regulated by this permit. Focusing on these larger construction activities is the most efficient and effective use of DEQ resources.

- While this process does not include an opportunity for an informational hearing or public notice on revisions to the ESCP, it still provides for significant public comment opportunities. Including an informational hearing opportunity and notice and comment on ESCP revisions would place a significant additional demand on DEQ's already limited resources. As stated previously, the primary advantage of issuing a general permit is that it is a practical and efficient way of regulating hundreds of small sources. If informational hearings and notice and comment on ESCP revisions were included in the 1200-C permit, the permitting process would begin to more closely resemble that used for individual permits, thus negating many of the resource

efficiency benefits of a general permit program.

2. Water Quality Standards Compliance

Initial Proposal:
Generally, an NPDES permit must include requirements designed to ensure that authorized discharges will not lead to a violation of instream water quality standards. Hence, DEQ included in the public notice draft a simple statement that permit registrants may not cause instream water quality standards violations.

Public Comment:
Several commenters expressed concern that this simple statement did not specify how the permit registrant is to ensure standards compliance. Without this explanation, these commenters asserted that a permit registrant could be complying with all other permit conditions and following their ESCP, yet could still potentially be violating water quality standards. Including a requirement for which a permit registrant is unable to determine their compliance was deemed an unfair and inappropriate permit condition. For instance, to determine turbidity violations, the background level of turbidity in the receiving stream will need to be determined. Since many permitted sites are not adjacent to the receiving streams, such determinations are difficult to make.

DEQ Recommendation:
DEQ recommends retaining the explicit prohibition on causing a water quality standards violation and has further clarified that DEQ assumes compliance with water quality standards if the permit registrant implements the ESCP in compliance with Schedule A of the permit, unless evidence to the contrary is obtained. This evidence will be based on instream water quality monitoring data obtained by DEQ during a compliance investigation. This permit condition also provides additional certainty regarding DEQ's response(s) if a standards violation does occur.

3. TMDL & 303(d) Requirements and Benchmarks

Initial Proposal:
As noted previously, DEQ is recommending more stringent requirements for those permit registrants discharging to waterbodies that are on the 303(d) list for turbidity and sedimentation or that have established TMDLs for those parameters. Initially, DEQ proposed two options:

Option 1 - Collect stormwater runoff samples, analyze them for turbidity, and compare results to a numeric turbidity benchmark (a goal or target concentration designed to determine effectiveness of pollution controls), or

Option 2 - Implement one or more specified best management practices designed to treat, control or prevent sediment discharges.

Public Comment:
Most of the comments received concerned the turbidity benchmark option, Option 1. Comments on the public notice draft related to both the benchmark number 160 nephelometric turbidity units (NTU) and the proposal to convert the benchmark to an enforceable effluent limit in response to repeated non-conformance with the benchmark. A benchmark is a numeric goal that, if not met, would result in changes to the ESCP to improve pollution controls. An effluent limit is a numeric concentration level or pollutant amount that, if not met, would constitute a permit violation that could result in DEQ enforcement action. Some commenters asserted that the benchmark was too low and unachievable at most construction sites, while others believed the benchmark was too high and not sufficiently protective of receiving waters.

In addition, the proposal to convert the benchmark to an effluent limit when four consecutive sample results exceeded the benchmark was opposed by numerous commenters for many reasons, including:

a. Benchmarks, not limits, are appropriate for stormwater permits as evidenced by the approach used by EPA.
b. The short time frame for converting benchmarks to limits does not provide permit registrants with enough time to make adaptive management changes.
c. Benchmarks and limits are applied in permits for different purposes, and therefore, the methodology for deriving the numbers for a benchmark versus a limit are different.
d. The process for determining benchmark exceedances and when the benchmark converts to a limit is very complex, as it involves the use of a daily median and the calculation of a geometric mean. Small construction contractors would have difficulty making these determinations.

DEQ Recommendation:
In the permit proposed to the Commission, DEQ recommends the

following:

- **Retaining Option 1, the benchmark of 160 NTU, but eliminating the requirement for the benchmark to convert to a limit.**
  DEQ believes that establishing a benchmark promotes adaptive management and will assist in determining the effectiveness of BMPs. DEQ also believes the methodology used to develop the 160 NTU benchmark is sound, and has not received data or alternative methodologies from commenters that would cause a re-evaluation of the methodology or the number. Upon further consideration, DEQ agrees that conversion of the benchmark to a limit is problematic for short-term activities like construction sites because the time frame for making adaptive management changes prior to the conversion becomes compressed to a few weeks. In such a circumstance, the permit registrant does not realistically have enough time to assess the problem and ESCP, implement corrective actions, and measure the results. In addition the administrative burden on DEQ staff to constantly track the benchmark or limit status of all affected sites could become significant.

- **Retaining Option 2 that requires the implementation of additional erosion prevention or sediment control and treatment BMPs described in the permit.**
  In response to public comment, DEQ modified the list of additional BMPs under Option 2 to ensure the referenced BMPs are the ones that most effectively reduce and treat both turbidity and sedimentation, without other unintended environmental impacts.

  DEQ believes that the stormwater discharges of permit registrants who properly implement either of the two options will not cause or contribute to violations of instream water quality standards.

4. Reporting of Visual and Water Quality Monitoring Results

Initial Proposal:
The public notice draft of the permit included a requirement for permit registrants to submit quarterly reports containing visual monitoring information, as well as water quality monitoring data if applicable (e.g., if subject to 303(d) or TMDL requirements).

Public Comment:
Several commenters opposed this proposed requirement because they considered it a paperwork exercise that did not result in any environmental

benefit and they asserted that DEQ did not have the staff resources to review all of these reports.

DEQ Recommendation:

DEQ agrees that collecting and reviewing the reports and enforcing non-compliance with reporting requirements would require significant agency resources. This staff time could result in greater environmental benefits if it were spent on site compliance and technical assistance activities. Therefore, DEQ recommends to the Commission that the quarterly reporting requirement not be included in the permit. However, the permit was revised to explicitly state that the permit registrant must document all required monitoring and inspections and that this documentation must be kept on-site and maintained. In addition, the permit registrant must provide this monitoring information within three working days of a request by DEQ (based on DEQ needs or a third party request).

Next Steps

DEQ has developed an implementation plan that outlines the necessary steps for ensuring the renewed 1200-C permit is implemented in an efficient and effective manner. These steps include updating application guidance information, revising checklists for conducting permit and ESCP compliance evaluations, and implementing the public notice provision for construction activities disturbing five or more acres.

DEQ recommends that the public notice and review requirement take effect on June 1, 2006. This five month period after permit adoption will allow DEQ to develop the procedures and infrastructure necessary for effective implementation. This will include developing the webpage for the public notice process and training regional DEQ staff on the public notice procedures.

In addition, DEQ currently has memorandum of agreements (MOAs) with nine local government agencies to assist in the implementation of the 1200-C permit in exchange for a portion of DEQ permit fees. With the adoption of the renewed 1200-C permit, DEQ needs to revise and update the MOAs to reflect new permit conditions, delineate new roles and responsibilities, and ensure consistency in the implementation of the renewed permit. DEQ also plans to encourage other local governments to assist DEQ in streamlining construction permitting requirements. The goal of this effort will be to provide one-stop permitting opportunities for contractors and builders so both the local building permit and 1200-C may be obtained at the local agency.

Attachments

A. Summary of Proposed Rule Revisions
   A-1. Proposed Final Rules
   A-2. Proposed General Permit
B. Summary of Public Comment and Agency Response
C. Presiding Officer's Report on Public Hearings
D. Relationship to Federal Requirements
E. Fiscal and Economic Impact Statement
F. Land Use Evaluation Statement
G. Evaluation Report for General Permit

Available Upon Request

- Legal Notice of Hearing
- Cover Memorandum from Public Notice
- Written Comment Received
- Public Hearing Audio Tapes
- Previous Versions of Proposed Rule and General Permit
- Implementation Plan

Approved:

Section:

Division:

Report Prepared By: Don Yon and Kevin Masterson

Attachment A-1

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal
for
1200-C NPDES General Permit Issuance

Proposed Final Rules

OAR 340-045-0033

General Permits

(1) The Director may issue general permits for certain categories of minor discharge sources or minor activities where individual NPDES or WPCF permits are not necessary to adequately protect the environment. Before the Director can issue a general permit, the following conditions must be met:

(a) There must be several minor sources or activities that involve the same or substantially similar types of operations.

(b) The sources or activities must have the potential to discharge or dispose of the same or similar types of wastes.

(c) The general permit must require the same or similar monitoring requirements, effluent limitations and operating conditions for the categories.

(d) The category of sources or activities would be more appropriately controlled under a general permit than an individual permit.

(e) The Commission has adopted the general permit into rule by reference.

(2) General permits issued after the effective date of this rule will specify the following:

(a) The requirements to obtain coverage under a general permit, including application requirements and application submittal deadlines. The Department may determine that submittal of an application is not necessary after evaluating the type of discharge, potential for toxic and conventional pollutants in the discharge, expected discharge volume, availability of other means to identify dischargers, and estimated number of dischargers to be covered by the permit. The Department's evaluation must be provided in the public notice for the general permit.

(b) The process used by the Department to notify a person that coverage under a general permit has been obtained and the discharge or activity is authorized.

(3) Although general permits may include activities throughout the state, they may also be restricted to more limited geographical areas.

(4) Prior to issuing a general permit, the Department will follow the public notice and participation procedures outlined in OAR 340-045-0027, 340-045-0035(3), and ORS 183.325 to 183.410. In addition the Department will make a reasonable effort to mail notices of pending actions to those persons known by the Department who are likely to be covered by the general permit.

(5) Any person operating a discharge source or conducting an activity described in a general permit must apply for coverage under the general permit, unless the general permit does not require submission of an application pursuant to (2)(a) of this rule or the source or activity is specifically covered by an individual NPDES or WPCF permit. Any person seeking coverage under a general permit must submit an application as required under the terms of the applicable NPDES or WPCF general permit. If application requirements are not specified in the general permit, procedures in OAR 340-045-0030 or 340-071-0162, whichever is applicable, must be followed. A person who fails to submit application in accordance with the terms of the general permit, OAR 340-045-0030 or 340-071-0162, whichever is applicable, is not authorized to conduct the activity described in the permit.

(6) Any person required to have coverage under a general permit must pay permit fees as required in OAR 340-045-0070 to 340-045-0075 or 340-071-0140 to obtain and maintain coverage under that permit.

(7) Any permittee covered by an individual NPDES or WPCF permit may request that the individual permit be canceled or allowed to expire, and that it be covered by a general permit if its discharge or activity may be covered by an existing general permit. As long as the permittee is covered by an individual NPDES or WPCF permit, the conditions and limitations of the individual permit govern, until such time as it is canceled or expires.

(8) Any person not wishing to be covered by a general permit may make application for an individual permit in accordance with OAR 340-045-0030 or 340-071-0162, whichever is applicable.

(9) The Director may revoke coverage and authorization under a general permit pursuant to OAR 340-045-0060 as it applies to any person and require such person to apply for and obtain an individual NPDES or WPCF permit. Any interested person may petition the Director to take action under this section. Cases where an individual permit may be required include the following:

(a) The discharge or activity is a significant contributor of pollution or creates other environmental problems;

(b) The permittee is not in compliance with the terms and conditions of the general permit, submitted false information, or is in violation of any applicable law;

(c) A change occurs in the availability of demonstrated technology or practices for the control or abatement of pollutants being discharged;

(d) For NPDES general permits, effluent limitation guidelines are promulgated for point sources covered by a general permit and the guidelines are not already in the general permit; or

(e) Circumstances have changed so that the discharge or activity is no longer appropriately controlled under a general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary.

(10) The following general permits are adopted by reference in this rule and available for review at the Department:

(a) NPDES 200-J, Filter backwash (issued August 29, 1997)

(b) NPDES 500-J, Boiler blowdown (issued August 29, 1997)

(c) WPCF 600, Offstream placer mining (issued April 9, 1997)

(d) NPDES 700-J, Suction dredges (issued May 3, 1999)

(e) WPCF 800, Confined animal feeding operations (issued August 8, 1990)

(f) NPDES 900-J, Seafood processing (issued June 7, 1999)

(g) WPCF 1000, Gravel mining (issued July 26, 2002)

(h) NPDES 1200-A, Storm water runoff from sand, gravel & non-metallic quarrying & mining in Standard Industrial Classification (SIC) 14, asphalt mix batch plants, and concrete batch plants. Facilities may qualify for a conditional exclusion from the requirement to obtain a permit if there is no exposure of industrial activities and materials to storm water pursuant to 40 CFR §122.26(g); see permit for details. (issued July 26, 2002)

(i) NPDES 1200-C, Storm water runoff from construction activities, including clearing, grading, and excavation, and stockpiling that disturbs ~~five~~ one or more acres, and may discharge to surface waters or conveyance systems leading to surface waters. Also included are ~~including~~ activities that will disturb less than ~~five~~ one ~~or more~~ acres if such activities ~~over time as~~ are part of a larger common plan of development that will disturb one or more acres over time; ~~effective December 1, 2002, construction activities that disturb one or more acre are covered~~ (issued ~~February 2~~ , December, 200~~51~~)

(j) NPDES 1200-CA, Government agencies responsible for storm water runoff from construction activities that disturbs five or more acres; effective December 1, 2002, construction activities that disturb one or more acres are covered (issued February 20, 2001)

(k) NPDES 1200-COLS, Storm water runoff in the Columbia Slough watershed from industrial activities listed in 8(l) of this rule (issued December 22, 1999)

(l) NPDES 1200-Z, Storm water runoff from: Warehousing in SIC 4221-4225; Food processing in SIC 20; Landfills, land app. sites; Heavy industrial in SIC 28, 29, 30, 31, 32, 33 & steam electric power generating (includes coal/hogged fuel handling); Light mfg. in SIC 34, 35, 36, 37, 38 & 39 includes ship & boat building/repair; Printing in SIC 27; Textile & apparel mfg. in SIC 22 & 23; Transportation in SIC 40, 41, 42, 43, 44, 45 & 5171; Wood products mfg. in SIC 24 & 25; Metal scrap yards, battery reclaimers & auto salvage yards in SIC 5015 & 5093; Hazardous waste treatment, storage, & disposal facilities. Facilities may qualify for a conditional exclusion from the requirement to obtain a permit if there is no exposure of industrial activities and materials to storm water pursuant to 40 CFR §122.26(g); see permit for details. (issued July 26, 2002)

(m) NPDES 1300-J, Oily storm water runoff and oil/water separators (issued January 11, 2000)

(n) WPCF 1400-A, Seasonal food processing & wineries, less than 25,000 gallons/day (issued August 22, 2000)

(o) WPCF 1400-B, Other food processing, less than 25,000 gallons/day (issued August 22, 2000)

(p) NPDES 1500-A, Petroleum hydrocarbon cleanups discharged to surface waters (issued August 22, 2000)

(q) WPCF 1500-B, Petroleum hydrocarbon cleanups (issued August 22, 2000)

(r) NPDES 1700-A, Vehicle and equipment wash water discharged to surface waters (issued March 5, 1998)

(s) WPCF 1700-B, Vehicle and equipment wash water (issued March 5, 1998)

(t) NPDES 1900-J, Non-contact geothermal heat exchange (issued September 11, 1997)

(u) NPDES 01, Confined animal feeding operations (issued October 1, 2003)

Stat. Auth.: ORS 468.020, ORS 468B.020 & ORS 468B.035
Stats. Implemented: ORS 468.065, ORS 468B.015, 468B.035 & ORS 468B.050
Hist.: DEQ 28-1980, f. & ef. 10-27-80; DEQ 15-2000, f. & cert. ef. 10-11-00; DEQ 13-2001, f. & cert. ef. 10-16-01; DEQ 8-2002, f. & cert. ef. 8-9-02; DEQ 14-2002, f. & cert. ef. 10-16-02; DEQ 12-2003, f. & cert. ef. 9-2-03

Attachment A-2

PROPOSED GENERAL PERMIT

RED-LINED CURRENT 1200-C PERMIT WITH PROPOSED CHANGES
construction* = *New language
~~construction~~ = Deleted language
construction = Original language not moved
construction = Original language moved

GENERAL PERMIT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
STORM WATER DISCHARGE PERMIT

Oregon Department of Environmental Quality
811 SW Sixth Avenue, Portland OR 97204~~,~~
Telephone: (503) 229-5279 or 1-800-452-4011 (toll free in Oregon)

Issued pursuant to ORS 468B.050 and Section 402 of The Federal Clean Water Act

~~ISSUED~~REGISTERED *TO*:

~~All owners or operators responsible for construction activities with storm water discharges that are covered by this permit. The submittal of an approved application and Erosion and Sediment Control Plan, and payment of applicable fees are required.~~

SOURCES COVERED BY THIS PERMIT:

~~Construction activities including clearing, grading, excavation, and stockpiling activities that will result in the disturbance of five or more acres. Also included are activities that disturb a total of five or more acres if part of a larger common plan of development.~~

~~Effective December 1, 2002 the previously described construction activities will include land disturbance of one acre or more, and will also include activities that disturb a total of one or more acres if part of a larger common plan of development. Two waivers from this permit can apply at projects of one to five acres where the operator certifies that a site has a rainfall erosivity factor less than five or when an approved total maximum daily load or equivalent analysis determines that allocations for construction activities for the pollutants of concern are not needed to protect water quality. [40 CRF 122.26 (b)(15)(i)(A)(B)]~~

~~This permit does not authorize in-water or riparian work. These activities are regulated by the Oregon Division of State Lands, US Army Corp of Engineers, and/or the DEQ Section 401 certification program.~~

Construction activities including clearing, grading, excavation, and stockpiling that will ***disturb one*** or more acres ***and may discharge to surface waters or conveyance systems leading to surface waters of the state***. Also included are activities that disturb less than ***one acre that are part of a common plan of development or sale,*** if the larger common plan of development or sale will ultimately disturb one acre or more ***and may discharge to surface waters or conveyance systems leading to surface waters of the***

state. Oregon Administrative Rules (OAR) 340-045-0015 and 0033(5) require all owners or operators responsible for these sources to register under this permit or obtain an individual permit.

This permit does not authorize in-water or riparian ***work regulated the Federal Clean Water Act Section 404 permit program***. These types of activities are regulated by the Oregon ***Department*** of State Lands, U.S. Army Corp of Engineers, and the ***Department of Environmental Quality*** Section 401 certification program. Unless specifically authorized by this permit, by another ***National Pollutant Discharge Elimination System*** (NPDES) ***or Water Pollution Control Facilities*** (WPCF) permit, or by ***OAR***, any other direct or indirect discharge to waters of the state is prohibited, including discharges to an underground injection control ***(UIC)*** system.

~~2/20/2001~~ ~~a~~Issued:
(insert EQC adoption)
Effective Date***: (insert SOS filing)***
Expiration Date: (5 years from issuance)

~~Michael T. Llewelyn~~ ***Lauri Aunan***, Administrator
Water Quality Division

~~Water Quality Division~~

PERMITTED ACTIVITIES

Until this permit expires ~~or,~~ is modified or revoked, the ~~permittee~~ ***permit registrant*** is authorized to construct, install, modify, or operate erosion and sediment control measures and storm-water treatment and control facilities, and to discharge storm-water ***and certain specified non-stormwater discharges*** to ~~public~~ ***surface*** waters ***of the state*** in conformance with all the requirements, limitations, and conditions set forth in the ***permit including*** attached schedules as follows:

		~~Page~~
~~Schedule A~~	~~Limitations and Controls for Storm Water Discharges~~	~~2~~
~~Schedule B~~	~~Minimum Monitoring Requirements~~	~~8~~
~~Schedule C~~	~~Compliance Schedule~~	~~10~~
~~Schedule D~~	~~Special Conditions~~	~~11~~
~~Schedule F~~	~~General Conditions~~	~~12~~

~~Unless specifically authorized by this permit, by another NPDES or WPCF permit, or by Oregon Administrative Rule, any other direct or indirect discharge to waters of the state is prohibited, including discharges to an underground injection control system.~~

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~~**SCHEDULE A**~~
~~LIMITATIONS AND CONTROLS FOR STORM WATER DISCHARGES~~

1. ~~**Performance Limitations** An Erosion and Sediment Control Plan (ESCP) shall be developed and implemented to prevent the discharge of significant amounts of sediment to surface waters. The following conditions describe significant amounts of sediment and shall be prevented from occurring.~~

   i. ~~Earth slides or mud flows that leave the construction site and are likely to discharge to surface waters.~~

   ii. ~~Evidence of concentrated flows* of water causing erosion when such flows are not filtered or settled to remove sediment prior to leaving the construction site and are likely to discharge to surface waters. Evidence includes the presence of rills, rivulets or channels.~~

   iii. ~~Turbid flows* of water that are not filtered or settled to remove turbidity prior to leaving the construction site and are likely to discharge to surface waters.~~

   iv. ~~Deposits of sediment at the construction site in areas that drain to unprotected storm water inlets or catch basins that discharge to surface waters. Inlets and catch basins with failing sediment controls due to lack of maintenance or inadequate design will be considered unprotected.~~

Page
Schedule A - Limitations and Controls for ***Stormwater and Non-Stormwater*** Discharges.....6
Schedule B - Minimum Monitoring Requirements.....17
Schedule C - Compliance Schedule.....20
Schedule D - Special Conditions.....21
Schedule E - (Not Applicable) .....***NA***
Schedule F - General Conditions.....24

PERMIT REGISTRATION

~~v. Deposits of sediment from the construction site on public or private streets outside of the permitted construction activity that are likely to discharge to surface waters.~~

1. ***Renewal Requirements***
   a. ***Activities registered under the previous 1200-C permit (issued February 2001).***
      i. ***Permit registrants must submit a complete permit renewal application to the department prior to the permit expiration date of December 31, 2005 to ensure uninterrupted permit coverage under this permit for construction activities continuing beyond December 31, 2005.***
      ii. ***An Erosion and Sediment Control Plan (ESCP) submitted prior to December 31, 2005 is not required to be resubmitted to the department or Agent except as required in Schedule C.***
      iii. ***Permit registrants that do not submit a renewal application by the previous 1200-C expiration date must submit a new application for coverage under this permit and follow condition #2 below.***
   b. ***Renewal of Permit Registration under this Permit (insert issued EQC adoption date).***
      i. ***To maintain continuous permit registration during the renewal process, a permit registrant must submit a complete renewal application with a revised ESCP, if applicable, to the department 180 days prior to this permit expiration unless otherwise approved by the department.***
      ii. ***If the department fails to act on the application by the expiration date, permit registration is administratively extended until the department takes action on the application.***
      iii. ***If registration under the renewed permit is not required or appropriate, the department will notify the applicant.***

~~vi. Deposits of sediment from the construction site on any adjacent property outside of the permitted construction activity that are likely to discharge to surface waters.~~

2. ***New Construction Activities***
   a. ***Applicants seeking registration under this permit must:***
      i. ***Submit a complete department-approved application form with an ESCP that complies with the permit requirements to the department or Agent at least thirty (30) days prior to the planned soil disturbance unless otherwise approved by the department.***
      ii. ***Prior to beginning any soil disturbance activity, receive written notice from the department or Agent that permit registration has been approved.***
   b. ***The department or Agent will register the applicant after the ESCP has been approved by the department or Agent. For construction activities that disturb five (5) or more acres, a public notice period is required as provided in Condition 4 below. The ESCP is approved when the department or Agent provides written notice of approval.***
   c. ***If the application for registration is denied by the department or Agent, a construction activity cannot be registered under this permit or the applicant does not wish to be regulated by this permit, the applicant may apply for an individual permit in accordance with OAR 340-045-0030.***

~~* Flow to storm water inlets or catch basins located on the site will be considered "leaving the site" if there are no sediment control structures designed for expected construction flows downstream of the inlets or catch basins that are under the permittee's control.~~

3. ***Transfer of Permit Registration***
   To transfer permit registration, an owner or permit registrant must submit a department-approved transfer form prior to permit expiration and prior to transfer of ownership or operation.

4. ***Public Review Period on Application and ESCP***
   Permit registrants that submit an application and ESCP for construction activities that disturb five (5) or more acres after June1, 2006 will be subject to a 14-day public review period before permit registration

by the department or Agent. The public review period will begin after the department or Agent has determined that the application is complete.

SCHEDULE A
LIMITATIONS AND CONTROLS FOR *STORMWATER* DISCHARGES

~~2. **Erosion and Sediment Control Plan Preparation and Submittal** The permittee shall ensure that a comprehensive ESCP is prepared and implemented for the construction activity regulated by this permit.~~

1. Water Quality Standards

a. ***The permit registrant must not cause a violation of instream*** water quality standards.

b. ***If the permit registrant develops, implements, and revises its ESCP in compliance with Schedule A of this permit, the department assumes that the discharges authorized by this permit will not cause a violation of water quality standards unless the department obtains evidence to the contrary.***

c. ***In instances were the department determines that the permit registrant's stormwater discharges are causing a violation of water quality standards, the department may take enforcement action for violating the permit and will require the permit registrant to do one or more of the following:***

i. ***Develop and implement an Action Plan, which is considered an addendum to the ESCP, describing ESCP modifications that are necessary to prevent and control erosion and sediment discharges to meet water quality standards;***

ii. ***Submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is meeting water quality standards; or***

iii. ***Curtail stormwater pollutant discharges to the extent possible and submit an individual permit application.***

~~a) For construction activities disturbing 20 or more acres, the ESCP shall be prepared and stamped by an Oregon Registered Professional Engineer, Oregon Registered Landscape Architect, or Certified Professional in Erosion and Sediment Control (Soil and Water Conservation Society)~~

2. ***Water Quality Requirements for TMDL and 303(d) Listed Waterbodies***

In addition to other applicable requirements of this permit if sediment or turbid water from a permit registrant's construction project has the potential to discharge into waterbodies that are listed for turbidity or sedimentation on the most recently EPA-approved Oregon 303(d) list or that have an established Total Maximum Daily Load (TMDL) for sedimentation or turbidity, the permit registrant must implement one of the two following sets of actions, in accordance with Schedule C.

~~b) If engineered facilities such as sedimentation basins or diversion structures for erosion and sediment control are required, the ESCP shall be prepared and stamped by an Oregon Registered Professional Engineer.~~

a. ***Option #1: Collect and analyze samples for turbidity of stormwater runoff from the construction site as required by condition B.2 (p. 17) and compare the results to the benchmark value of 160 Nephelometric Turbidity Units (NTUs). The benchmark is used to determine if best management practices are effective; it is not an effluent limit. If any stormwater sample exceeds the benchmark, then the permit registrant must evaluate the best management practices (BMPs) and the adequacy of the ESCP and take corrective actions. If after such actions have been implemented and sample results still exceed the 160 NTU benchmark, the requirements of Option #2 below must be followed, and the permit registrant must submit an Action Plan to the department identifying the selected BMP(s) that will be implemented and the rationale for choosing the selected BMP(s).***

~~c) The ESCP shall be submitted to the Department of Environmental Quality (Department) and/or its authorized agent (Agent) for approval. An ESCP approved prior to February 15, 2001 is not required to be resubmitted to the Department or Agent.~~

a) ***Option #2: In addition to the applicable BMPs required by condition A.7, implement one or more of the following BMPs to control and treat sediment and turbidity:***

i. ***Compost berms, compost blankets, or compost socks;***

ii. ***Erosion control mats (rolled or blown);***

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iii. ***Tackifiers used in combination with perimeter sediment control BMPs;***
iv. ***Established vegetated buffers sized at 50 feet plus 25 feet per 5 degrees of slope;***
v. ***Water treatment by electro-coagulation, chemical flocculation, or filtration; or***
vi. ***Other substantially equivalent sediment or turbidity BMP approved by the department.***

~~d) Prior to beginning clearing, grading, excavation, or construction, the ESCP shall be approved by the Department or Agent. If the Department has not commented on the ESCP within 30 days of receipt, the ESCP shall be approved by default. If the ESCP is required to be submitted to the Department's Agent, the permittee shall follow the schedule set forth by the Agent. The Department or Agent's approval of the ESCP does not constitute compliance with this permit. The permittee shall be responsible for complying with all permit conditions.~~
The selected BMP(s) must be specifically identified in the ESCP as addressing this condition of the permit, and the rationale for choosing the selected BMP(s) must also be provided.

~~a)~~b)~~A copy of the ESCP shall be retained on-site and made available to the Department, Agent, or the local municipality upon request. During inactive periods of greater than seven (7) consecutive calendar days, the ESCP shall be retained by the permittee.~~

3. Performance *Requirements*

a. ***Prevent Discharge of Significant Amounts of Sediment. The permit registrant*** must prevent the discharge of significant amounts of sediment to surface waters ***or conveyance systems leading to surface waters. Significant amounts of sediment result from the actions or inactions of the permit registrant at a site and result in visual indications that sediment has left or is likely to leave the site. The following conditions describe significant amounts of sediment:***
   i. Earth slides or mud flows;
   ii. Concentrated flows of ***stormwater such as*** rills, rivulets or channels ***that cause erosion when such flows are not filtered or settled to remove sediment;***
   iii. Turbid flows of ***stormwater*** that are not filtered or settled to remove turbidity;
   iv. Deposits of sediment at the construction site in areas that drain to unprotected ***stormwater*** inlets or catch basins that discharge to surface waters. Inlets and catch basins with failing sediment controls due to lack of maintenance or inadequate design ***are*** considered unprotected;
   v. Deposits of sediment from the construction site on public or private streets outside of the permitted construction activity; or
   vi. Deposits of sediment from the construction site on any adjacent property outside of the permitted construction activity.

~~f) The Department or Agent may request modifications to the ESCP at any time if the ESCP is ineffective at preventing the discharge of significant amounts of sediment and turbidity to surface waters.~~

b. ***Corrective Action. If significant amounts of sediment or turbidity (as described in A.3.a. above) are visibly detected in: 1) the discharge to a conveyance system leading to surface waters, 2) the discharge to surface waters 50 feet downstream, or 3) the discharge in surface waters at any location where more than one-half of the width of the receiving surface waters is affected, the permit registrant must:***
   i. ***Immediately, but no later than 24 hours after initial detection, take corrective actions or implement additional effective BMPs until the significant amounts of sediment or turbidity are no longer visually detectable and to ensure that the requirements of conditions A.1 and A.3.a are met.***
   ii. ***Evaluate the ESCP to determine the cause of the discharge.***
   iii. ***Document in the inspection records the corrective actions taken.***
   iv. ***Submit an Action Plan to the department within ten (10) calendar days of the discharge identifying the correction actions taken to cease the discharge, if such actions require a change***

to the ESCP or a change in the method(s) of implementing the ESCP, (e.g., increased inspection frequency). Approval of the Action Plan by the department prior to implementation of corrective actions is not required. The Action Plan must be kept onsite as per condition B.3., p. 18.

~~g) The ESCP shall include any procedures necessary to meet local erosion and sediment control requirements or storm water management requirements.~~

~~h. If possible, during the period of October through May, construction activities should avoid or minimize excavation and bare ground activities. If the operator chooses to continue land disturbance activities within this period, additional wet weather requirements (refer to A.3.d) are required in the ESCP. Specifically, if construction activity occurs during the winter season where slopes are greater than five (5) percent and the soils have medium to high erosion potential additional erosion controls will be required.~~

c. ***Authorized Stormwater Discharges. Subject to compliance with the terms and conditions of this permit, the permit registrant is authorized to discharge the following:***
   i. ***Stormwater associated with construction activity that is authorized by this permit.***
   ii. ***Stormwater from support activities at the construction site (e.g., concrete or asphalt operations, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided:***
      (1) ***The support activity is directly related to the construction site required to have NPDES permit coverage for discharges of stormwater associated with construction activity;***
      (2) ***The support activity is not a commercial operation serving multiple unrelated construction projects by different permit registrants, and does not operate beyond the completion of the construction activity at the last construction project it supports; and***
      (3) ***Appropriate controls and measures are identified in an ESCP covering the discharges from the support activity areas.***

d. ~~The~~ ***Allowable Non-Stormwater Discharges. This permit authorizes*** the following non-storm-water discharges ***to surface water*** ~~are allowed as long as~~***provided*** they are identified in the ESCP and all necessary controls are implemented to minimize sediment transport~~. These include: firefighting activity,~~:
   i. ***Discharges from*** fire-fighting activities;
   ~~i.~~ii. ***Fire*** hydrant ~~flushing~~ and potable water~~line~~ flushing (refer to ~~DEQ~~ ***department*** guidance~~), air conditioning condensate, dewatering activities of uncontaminated groundwater or spring water, and uncontaminated foundation or footer drain water.)~~;
   iii. ***Waters used to wash vehicles where detergents or hot water are not used;***
   iv. ***Potable water including uncontaminated water line flushing;***
   v. ***Routine external building wash down that does not use detergents or hot water;***
   vi. ***Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents or hot water are not used;***
   vii. ***Uncontaminated*** air conditioning ***or compressor*** condensate;
   viii. ***Construction*** dewatering activities;
   ix. Foundation or footing drains ***where flows are not contaminated with process materials such as solvents; and***
   x. ***Landscape irrigation.***

~~5. **Erosion and Sediment Control Plan Requirements** The ESCP shall, at a minimum, include the following elements.~~

For other non-stormwater discharges, the permit registrant may ask the department to determine if another permit is needed. The disposal of wastes to surface water or onsite is not authorized by this permit. The permit registrant must submit a separate permit application for such discharges.

~~a. Site Description A description of the following:~~
~~i. Nature of the construction activity, including a proposed timetable for major activities.~~
~~ii. Estimates of the total area of the permitted site and the area of the site that is expected to undergo clearing, grading and/or excavation.~~
~~iii. Nature of the fill material to be used, the insitu soils, and the erosion potential of such soils.~~
~~iv. Names of the receiving water(s) for storm water runoff.~~

4. Erosion and Sediment Control Plan *(ESCP)* and *Action Plan* Preparation and Submittal

a. ***Responsibilities of Permit Registrant.***
The permit registrant must ensure that ***an ESCP*** is prepared and ***revised as necessary*** for the construction activity regulated by this permit ***and submitted to the department or Agent as required by this permit.***

~~b. Site Map Indicating the following: (Note: In order to provide all the required information, a general location map in addition to the site map is required.)~~
~~i. Areas of total development~~
~~ii. Drainage patterns~~
~~iii. Areas of total soil disturbance (including, but not limited to, showing cut and fill areas and pre and post development elevation contours)~~
~~iv. Areas used for the storage of soils or wastes~~
~~v. Areas where vegetative practices are to be implemented. Include type of vegetation seed mix.~~
~~vi. Location of all erosion and sediment control measures or structures~~
~~vii. Location of impervious structures after construction is completed. Include buildings, roads, parking lots, outdoor storage areas, etc., if any.~~
~~viii. Springs, wetlands and other surface waters located on-site~~
~~ix. Boundaries of the 100-year flood plain if determined~~
~~x. Location of storm drainage outfalls to receiving water(s) if applicable~~
~~xi. Location of drinking water wells and underground injection controls~~
~~xii. Details of sediment and erosion controls~~
~~xiii. Details of detention ponds, storm drain piping, inflow and outflow details~~

b. ***Qualifications to Prepare ESCP.***
i. For construction activities disturbing 20 or more acres, the ESCP ***must*** be prepared and stamped by an Oregon Registered Professional Engineer, Oregon Registered Landscape Architect, or Certified Professional in Erosion and Sediment Control (Soil and Water Conservation Society).
ii. If engineered facilities such as sedimentation basins or diversion structures for erosion and sediment control are required, the ESCP must be prepared and stamped by an Oregon Registered Professional Engineer.

~~c. Required Controls and Practices The following controls and practices are required:~~
~~i. Each site shall have graveled, paved, or constructed entrances, exits and parking areas, prior to beginning any other work, to reduce the tracking of sediment onto public or private roads.~~
~~ii. All unpaved roads located on-site shall be graveled. Other effective erosion and sediment control measures either on the road or down gradient may be used in place of graveling.~~
~~iii. When trucking saturated soils from the site, either water-tight trucks shall be used or loads shall be drained on-site until dripping has been reduced to minimize spillage on roads.~~
~~iv. A description of procedures that describe controls to prevent the discharge of all wash water from concrete trucks.~~
~~v. A description of procedures for correct installation or use of all erosion and sediment control measures.~~
~~vi. A description of procedures for prompt maintenance or repair of erosion and sediment control measures utilized on-site (refer to A.4).~~

c. ***Submittal of ESCP and if Required, Action Plans.***

i. ***The permit registrant must submit the ESCP to the department or Agent prior to obtaining registration under this permit (see Permit Registration, condition #2 of this permit, p. 4).***

ii. ***If ESCP revisions are made after permit registration is approved, the permit registrant must submit revisions to the ESCP in the form of an Action Plan to the department, or if corrective actions are required by A.3.b, p. 7, within 24 hours of initial detection of the stormwater discharge..***

(1) ***The Action Plan is considered and addendum to the ESCP***

(2) ***Approval of the Action Plan by the department prior to implementation of corrective actions is not required.***

(3) ***An Action Plan may be required due to changes in the project design, local conditions, project schedule (e.g., schedule delays postpone earthwork to wet weather season so additional controls are needed), weather conditions or other appropriate reasons.***

(4) ***The Action Plan must clearly identify any necessary changes (such as type or design) to the BMPs identified in the ESCP, their location, maintenance required, and any other revisions necessary to prevent and control erosion and sediment runoff.***

iii. ***If the permit registrant does not receive a response on the Action Plan from the department or Agent within 10 days of the Action Plan receipt, the proposed revisions are deemed approved.***

iv. ***The department or Agent may require the permit registrant to submit an Action Plan at any time if the ESCP is inadequate to prevent the discharge of significant amounts of sediment or turbidity to surface waters or to conveyance systems that discharge to surface waters. The permit registrant must submit the Action Plan according to the timeframe specified by the department or Agent.***

~~d. Additional Controls and Practices Additional controls and practices shall be developed that are appropriate for the site. At a minimum the following shall be considered:~~

5. ***ESCP Implementation***

a. ***The permit registrant must ensure that the ESCP is implemented for the construction activity regulated by this permit. Failure to implement any portion of the ESCP constitutes violation of the permit on the part of the permit registrant.***

b. **The permit registrant must ensure that the ESCP is implemented according to the following sequence:**

i. ***Before Construction.***

(1) ***Identify, mark, and protect (by fencing off or other means) critical riparian areas and vegetation including important trees and associated rooting zones and vegetation areas to be preserved.***

(2) ***Identify vegetative buffer zones between the site and sensitive areas (e.g., wetlands), and other areas to be preserved, especially in perimeter areas.***

(3) ***Hold a pre-construction meeting of project construction personnel including the required inspector as per condition A.6.b. to discuss of erosion and sediment control measures and construction limits.***

ii. ***During and After Construction.***

(1) ***Site Access Areas (construction entrances, roadways equipment parking areas). Stabilize site entrances and access roads prior to earthwork.***

(2) ***Install Sediment Control Measures.***
Install perimeter sediment control, including storm drain inlet protection as well as all sediment basins, traps, and barriers which must be in place before vegetation is disturbed.

(3) ***Non-Stormwater Pollution Control Measures.***
Concurrent with establishing construction access controls and sediment controls, the permit registrant must establish material and waste storage areas, concrete truck and other concrete equipment washout areas and other non-stormwater controls prior to the start of construction activities.

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(4) Runoff Control.
Stabilize stream banks and construct the primary runoff control measures to protect areas from concentrated flows.
(5) Land Clearing, Grading and Roadways.
(a) Begin land clearing, excavation, trenching, cutting or grading after installing applicable sediment and runoff control measures.
(b) Provide appropriate erosion and sediment control BMPs for all roadways including gravel roadways.
(c) Install additional control measures as work progresses as needed.
(6) Surface Stabilization (temporary and permanent seeding, mulching).
Apply temporary or permanent soil stabilization measures immediately on all disturbed areas as grading progresses.
(7) Construction and Paving (install utilities, buildings, paving).
Erosion and sediment control measures must remain in place for the duration of construction, including protection for active storm drain inlets and appropriate non-stormwater pollution controls.
(8) Final Stabilization and Landscaping.
Provide permanent erosion prevention measures on all exposed areas and remove all temporary control measures as areas are stabilized.

~~i. A description of clearing and grading practices, including a schedule of implementation, that will minimize the area of exposed soil throughout the life of the project. Whenever practicable, clearing and grading shall be done in a phased manner to prevent exposed inactive areas from becoming a source of erosion.~~

6. ***ESCP Elements***
The permit registrant must ensure that the ESCP contains the following elements:

~~ii. A description of vegetative erosion control practices, including a schedule of implementation, designed to preserve existing vegetation where practicable and re-vegetate open areas when practicable after grading or construction.~~

a. ***Local Government Requirements.*** Include any procedures necessary to meet ***applicable*** local government erosion and sediment control or stormwater management requirements.

~~In developing vegetative erosion control practices, at a minimum the following shall be considered: temporary seeding, permanent seeding, mulching, sod stabilization, vegetative buffer strips, and protection of trees with protective construction fences.~~

b. ***Inspections.***
i. ***Inspections must be conducted by a person knowledgeable in the principles and practice of erosion and sediment controls, who possesses the skills to assess conditions at the construction site that could impact stormwater quality, who is knowledgeable in the correct installation of the erosion and sediment controls, and who is able to assess the effectiveness of any sediment and erosion control measures selected to control the quality of stormwater discharges from the construction activity.***
ii. Identify the person(s) or title ***and experience*** of the personnel that will conduct inspections. ***Provide the following for each person:***
(1) ***Name;***
(2) Contact phone number ***and, if available e-mail address; and***
(3) ***Description of experience and training.***

~~iii. A description of additional erosion control practices, including a schedule of implementation, designed to protect exposed areas and prevent soil from being eroded by storm water.~~

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c. ***Narrative*** Site Description.
   i. Nature of the construction activity, including a proposed timetable for major activities;
   ii. Estimates of the total area of the permitted site and the area of the site that is expected to undergo clearing, grading or excavation;
   iii. Nature of the fill material to be used, the insitu soils, and the erosion potential of such soils; and
   iv. Names of the receiving water(s) for stormwater runoff.

~~In developing additional erosion control practices, at a minimum the following shall be considered: mulching with straw or other vegetation, use of erosion control blankets, and application of soil tackifiers.~~

d. Site Map.
   i. ***The site map kept on site must represent the actual BMP controls being used onsite, particularly those BMPs identified in the most recent Action Plan(s)***
   ii. ***The site map must show sufficient roads and features for the department or Agent to locate and access the site;***
   iii. ***Total property boundary including surface area of the development;***
   iv. Areas of total soil disturbance (including, but not limited to, showing cut and fill areas and pre and post development elevation contours);
   v. ***Drainage patterns before and after finish grading;***
   vi. ***Location(s), size, and type of discharge point(s);***
   vii. Areas used for the storage of soils or wastes;
   viii. ***Areas where vegetative practices are to be implemented;***
   ix. Location of all erosion and sediment control measures or structures;
   x. Location of impervious structures after construction is completed. Include buildings, roads, parking lots, outdoor storage areas, etc., if any;
   xi. Springs, wetlands and other surface waters located on-site;
   xii. Boundaries of 100-year floodplains if determined and easily available;
   xiii. Location of stormwater discharge points to receiving water(s) or stormwater conveyance systems if applicable;
   xiv. ***Location of storm drain catch basins and the location of catch basins with inlet protection, if applicable and a description of the type of catch basins used (e.g., curb inlet, field inlet, grated drain, combination, etc.);***
   xv. ***Location of septic drain fields, if applicable;***
   xvi. ***Location of existing or proposed drywells or other UICs, if applicable;***
   xvii. Location of drinking water wells;
   xviii. Details of sediment and erosion controls ***including installation techniques; and***
   xix. Details of detention ponds, storm drain piping, inflow and outflow details.

~~iv. A description of sediment control practices, including a schedule of implementation, that will be used to divert flows from exposed soil, store flows to allow for sedimentation, filter flows, or otherwise reduce soil laden runoff. All temporary sediment control practices shall not be removed until permanent vegetation or other cover of exposed areas is established.~~

e. ***Implementation Schedule and Description of BMPs***
Include in the ESCP the implementation schedule and description of BMPs to be used at the site. See condition A.5 for implementation requirements and conditions A.7 and A.8 for minimum BMP requirements.

~~In developing sediment control practices, at a minimum the following shall be considered: use of silt fences, earth dikes, brush barriers, drainage swales, check dams, subsurface drains, pipe slope drains, rock outlet protection, sediment traps, and temporary or permanent sedimentation basins.~~

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7. Required ***BMPs***

The following controls and practices, ***if appropriate for the site, are required in the ESCP and must be implemented according to the schedule in the ESCP. If the permit registrant determines that any of these controls or practices is not appropriate, the rationale for the change must be provided in the ESCP.***

~~v. A description of erosion and sediment control practices that will be used to prevent stockpiles from becoming a source of erosion. Stockpiles located away from the construction activity but still under the control of the permittee shall also be protected to prevent significant amounts of sediment from discharging to surface waters. At the end of each workday the soil stockpiles must be stabilized or covered.~~

a. ***Wet Weather BMPs.***

i. Generally construction activities ***must avoid or*** minimize excavation and bare ground activities ***that occur on*** slopes greater than five (5) percent during the period of October ***1*** through May ***31***.

ii. ***Temporary stabilization of soils must be installed at the end of the shift before a holiday or weekend if needed based on weather forecast.***

~~In developing these practices, at a minimum the following shall be considered: diversion of uncontaminated flows around stockpiles, use of cover over stockpiles, and installation of silt fences around stockpiles.~~

b. ***Runoff Controls.***

In developing runoff control practices, at a minimum the following BMPs must be considered: Slope Drains, Energy Dissipaters, Diversion of Run-on, Temporary Diversion Dikes, Grass-lined Channel (Turf Reinforcement Mats), Trench Drains, Drop Inlets, and Check Dams.

~~vi. A description of the best management practices that will be used to prevent or minimize storm water from being exposed to pollutants from spills, cleaning and maintenance activities, and waste handling activities. These pollutants include fuel, hydraulic fluid, and other oils from vehicles and machinery, as well as debris, leftover paints, solvents, and glues from construction operations. The reuse and recycling of construction wastes should be promoted.~~

c. ***Erosion Prevention Methods.***

In developing erosion prevention methods, at a minimum the following BMPs must be considered:

i. ***Clearing and Grading Practices.***

(1) ***Provide structural erosion prevention during grading and earthwork-surface roughening and prevent erosion on graded surfaces.***

(2) ***Top-soiling***, temporary seeding ***and planting,*** permanent seeding ***and planting, mycorrhizae/ biofertilizers, mulches, compost blankets, erosion control blankets and mats, soil binders, soil tackifiers, sodding vegetative*** buffer strips, and protection of trees with protective construction fences.

ii. ***Wind Erosion/Dust Control.***

(1) All erosion and sediment controls not in the direct path of work must be installed before any land disturbance.

(2) Whenever practicable, clearing and grading must be done in a phased manner to prevent ***exposed*** inactive areas from becoming a source of erosion.

iii. ***Vegetative Erosion Control Practices.***

(1) Preserve existing vegetation ***and revegetate open areas when*** practicable ***before and after grading or construction.***

(2) ***Biotechnical erosion control measures - live staking, live fascines and brush wattles, stabilization mats, pole planting, brush box, fascines with sub-drains, live pole drains, and brush packing or live gully fill repair.***

(3) All temporary sediment control practices must not be removed until permanent vegetation or other cover of exposed areas is established.

(4) ***If vegetative seed mix is used, identify the type of seed mix (percentages of the various seeds of annuals, perennials and clover).***

~~In developing these practices, at a minimum the following shall be considered: written spill prevention and response procedures; employee training on spill prevention and proper disposal procedures; regular maintenance schedule for vehicles and machinery; and covered storage areas for waste and supplies.~~

d. ***Sediment Controls.***

i. ***Peripheral Erosion and Sediment Controls.***

(1) ***Sediment control must be provided along the site perimeter and at all operational internal storm drain inlets at all times during construction.***

(2) ***Active inlets must be considered part of the site perimeter because they provide an avenue for sediment and other pollutants to leave the site.***

ii. ***Erosion Control Practices.***

In developing sediment control practices, include in the ESCP installation details and at a minimum the following ***must*** be considered: ***sediment fences, sand bag barrier, gravel bag berm,*** earth dikes, ***drainage swales***, check dams, subsurface drains ***which daylight to the surface,*** pipe slope drains, rock outlet protection, sediment traps, ***rock and*** brush ***filters, compost berm/compost sock, fiber rolls / wattles, storm drain inlet protection,*** and temporary or permanent sedimentation basins.

iii. ***Reducing Sediment Tracking.***

(1) ***Prior to any land disturbing activities*** each site must have graveled, paved, or constructed entrances, exits and parking areas ***with exit tire wash***, to reduce the tracking of sediment onto public or private roads.

(2) All unpaved roads located onsite must be graveled. Other effective erosion and sediment control measures either on the road or down gradient may be used in place of graveling.

(3) When trucking saturated soils from the site, either water-tight trucks must be used or loads must be drained on-site until dripping has been reduced to minimize spillage on roads.

~~4. **Maintenance Requirements** The following maintenance activities shall be implemented.~~

e. ***Non-Stormwater Pollution Controls.***

Non-Stormwater Pollution Controls BMPs must be in-place throughout the grading and construction phases. In developing non-stormwater pollution control practices, at a minimum the following must be considered:

i. ***Pollution Prevention.***

(1) ***BMPs used to prevent pollution of stormwater or to treat stormwater from the following activities: dewatering and ponded water management, paving operation controls, temporary equipment bridge, illicit connection, and illegal discharge.***

(2) ***BMPs that will be used to prevent or minimize stormwater from being exposed to pollutants from spills, no discharge of concrete truck wash water, vehicle and equipment cleaning, vehicle and equipment fueling, maintenance, and storage, other cleaning and maintenance activities, and waste handling activities.*** These pollutants include fuel, hydraulic fluid, and other oils from vehicles and machinery, as well as debris, leftover paints, solvents, and glues from construction operations.

ii. ***Stockpile Erosion and Sediment Control Practices.***

(1) Stockpiles located away from the construction activity but still under the control of the ***permit registrant must*** also be protected to prevent significant amounts of sediment ***or turbid water*** from discharging to surface waters.

(2) At the end of each workday the soil stockpiles must be stabilized, covered ***or other BMPs must be implemented to prevent discharges to surface waters.***

(3) In developing these practices, at a minimum the following must be considered: diversion of uncontaminated flows around stockpiles, use of cover over stockpiles, and installation of ***sediment*** fences around stockpiles

iii. ***Solid Waste and Hazardous Materials Management.***

(1) The department encourages the permit registrant ***to reuse and recycle construction wastes.***

(2) Any use of toxic or other hazardous materials must include proper storage, application, and disposal.

(3) In developing these practices, at a minimum the following ***must be described in the ESCP and implemented where practical:*** written spill prevention and response procedures, employee training on spill prevention and proper disposal procedures; regular maintenance schedule for vehicles and machinery; ***and material delivery and storage controls, training and signage, material use,*** covered storage areas for waste and supplies.

(4) The ***permit registrant must*** manage hazardous wastes, used oils, contaminated soils, ***concrete management, sanitary waste management, liquid waste management,*** or other toxic substances discovered or generated during construction activities in ***accordance with state and federal regulations. In some cases, department approval for management and disposal may be required.***

f. ***Inspection and*** Maintenance.

To provide for the continued performance, BMPs must be inspected before, during, and after significant storm events. During grading and construction, the permit registrant is responsible for maintaining the stormwater pollution control BMPs. The permit registrant must establish and promptly implement procedures for maintenance and repair of erosion and sediment control measures..

i. ***General Site Maintenance.***

~~a.~~(1) Significant amounts of sediment that leave the site ~~shall~~must be cleaned up within 24 hours and placed back on the site ***and stabilized*** or ~~properly~~ disposed~~.~~ **of properly.** ***In addition, the source(s) of the sediment must be controlled to prevent continued discharge within 24 hours.*** Any in-stream clean up of sediment ~~shall~~must be preformed according to requirements and timelines set by the Oregon ~~Division~~ ***Department*** of State Lands~~' required timeframe.~~.

(2) Sediment ***must not*** be intentionally washed into storm sewers or drainage ways. ***Vacuuming or dry sweeping must be used to clean up released sediments.***

(3) If fertilizers are used to establish vegetation, the application rates must follow manufacturer's guidelines and the application must be done in such a way to minimize ***nutrients discharging to surface*** waters.

ii. ***Maintenance of Erosion and Sediment Controls.***

(1) For a ***sediment fence***, the trapped sediment must be removed before it reaches one third of the above ground fence height.

(2) ***Other sediment barriers (e.g., biobags), the sediment must be removed before it reaches two inches of accumulation in any area above the sediment barrier(s).***

(3) For catch basin protection, cleaning must occur when sediment retention capacity has been reduced by fifty percent.

(4) For a sediment basin, removal of trapped sediments ***must*** occur when design capacity has been reduced by fifty percent.

iii. ***Stormwater Treatment System Requirement.***

If a stormwater treatment system ***(e.g., electro-coagulation, chemical flocculation, filtration, etc.) for sediment removal*** is employed, an operation and maintenance plan must be submitted to the department for approval ***before start up of the treatment system. Upon department approval of the plan, the permit registrant must implement the plan.***

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~~b. Under no conditions shall sediment intentionally be washed into storm sewers or drainageways unless it is captured by a BMP before entering receiving waters.~~

8. Additional *BMP Requirements During Inactive Periods*

a. If ***all*** construction activities cease ***at the site*** for thirty (30) days or more, the entire site must be stabilized using vegetation or a heavy mulch layer, temporary seeding, or another method that does not require germination to control erosion.

~~c. For a filter fence, the trapped sediment shall be removed before it reaches one third of the above ground fence height.~~

~~d. For catch basin protection, cleaning must occur when design capacity has been reduced by fifty percent.~~

b. ***On any significant portion of the site, if construction activities cease for fifteen (15) days or more, temporary covering with straw or compost mulch or other covering that is tackified to prevent soil or wind erosion must occur until work resumes.***

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SCHEDULE B
MINIMUM MONITORING REQUIREMENTS

1. *Visual Monitoring Requirement*

a. *The following must be inspected by the permit registrant:*

i. All areas of the site disturbed by construction activity to ensure that BMPs are in working order.

ii. Discharge point(s) identified in the ESCP for evidence of, or the potential for, the discharge of pollutants, and to ascertain whether erosion and sediment control measures are effective in preventing significant impacts to surface waters. Where discharge points are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable.

iii. BMPs identified in the ESCP and any ESCP revisions documented in Action Plan(s) to assess whether they are functioning properly.

~~iii.~~*iv. Locations where vehicles enter or exit the site for evidence of off-site sediment tracking.*

v. Areas used for storage of materials that are exposed to precipitation for evidence of spillage or other potential to contaminate stormwater runoff.

~~e. For a sediment basin, removal of trapped sediments shall occur when design capacity has been reduced by fifty percent.~~

b. ***All ESCP controls and practices must be inspected visually according to the following schedule:***

~~f. All erosion and sediment controls not in the direct path of work shall be installed before any land disturbance.~~

Site Condition	***Minimum Frequency***
1. Active period	Daily ***when*** stormwater runoff, ***including runoff from*** snow melt, ***is occurring***.
2. Prior to ***the*** site ***becoming*** inactive or in anticipation of site inaccessibility	***Once to ensure that erosion and sediment control measure are in working order.*** Any necessary maintenance and repair must be made prior to leaving the site.
3. Inactive periods greater than seven (7) consecutive calendar days	Once every two (2) weeks.
4. Periods during which the site is inaccessible due to inclement weather	***If practical, inspections must occur daily at a relevant and accessible discharge point or downstream location.***

~~g. If fertilizers are used to establish vegetation, the application rates shall follow manufacturer's guidelines and the application shall be done in such a way to minimize nutrient-laden runoff to receiving waters.~~

2. *Turbidity Monitoring Requirements for TMDL and 303(d) Listed Waterbodies per Option #1 in Schedule A.2.a, p. 6*

In addition to the requirements in condition B.1 above, permit registrants discharging into waterbodies that are listed for turbidity or sedimentation on the most recently EPA approved Oregon 303(d) list or have an established TMDL for sedimentation or turbidity are subject to the following requirements if Option #1 (Schedule A.2.a.) is being followed:

~~a.If construction activities cease for thirty (30) days or more, the entire site must be stabilized, using vegetation or a heavy mulch layer, temporary seeding, or another method that does not require germination to control erosion.~~

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Parameter	*Minimum Frequency*	*Monitoring Points*	*Type of Sample*[1]	*Test Method*[2]
Turbidity (NTU)	*At a minimum one stormwater sample that represents the flow and characteristics of the stormwater discharge must be collected at each monitoring point on a weekly basis when stormwater runoff is detectable.*	*All stormwater discharge points indicated on the site map see A.6.d.xiii, p. 12*	*Grab*	*Field turbidimeter*

~~h. Any use of toxic or other hazardous materials shall include proper storage, application, and disposal.~~

[1] Occurring during regular working hours at the construction site.

[2] The permit registrant must use sampling procedures, testing methods and turbidity meter calibration methods approved by the department.

3. ***Recordkeeping Requirements***

a. ***Documentation of Visual Inspection.*** All visual inspections must ***be*** documented ***in writing as follows:***

i. Inspection date and inspector's name.

ii. At ***the designated*** discharge location(s) ***inspections*** of the quality of the discharge for any turbidity, color, sheen, or floating materials.

(1) ***Inspect*** and record color and turbidity or clarity ***in: 1) the discharge to a conveyance system leading to surface waters, 2) the discharge to surface waters 50 feet downstream, or 3) the discharge in surface waters at any location where more than one-half of the width of the receiving surface waters is affected.***

(2) For turbidity and color, describe any apparent color and the clarity of the discharge, and any apparent difference in comparison with the ***surface waters.*** For a sheen or floating material, ***describe whether this is*** present ***or*** absent. ***If present,*** it could indicate concern about a possible spill or leakage from vehicles or materials storage.

iii. If a site is inaccessible due to ***inclement*** weather, ***record the inspections noted at a relevant discharge point or downstream location if practical.***

iv. ***Location(s) of BMPs that need to be maintained, inspections*** of all BMPs, ***including*** erosion and sediment controls, chemical and waste controls, locations where vehicles enter and exit the site, status of areas that employ temporary or final stabilization control, soil stockpile area, and non-stormwater ***pollution (e.g., paints, oils, fuels, adhesives) controls.***

v. ***Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location;***

vi. ***Location(s) where additional BMPs are needed that did not exist at the time of inspection; and***

vii. ***Corrective action required and implementation dates.***

~~i. The permittee shall manage abandoned hazardous wastes, used oils, contaminated soils or other toxic substances discovered during construction activities in a manner approved by the Department.~~

b. ***ESCP including Action Plan(s) Retained Onsite.*** A copy of the ESCP ***and the Action Plan must*** be retained on-site ~~or~~ ***and*** made available on request to the department, Agent, or the local municipality. During inactive periods of greater than seven (7) consecutive calendar days, the ESCP must be retained by the ***permit registrant but does not need to be at the construction site.***

~~j. If a storm water treatment system for construction activities is employed, an operation and maintenance plan shall be submitted to the Department for approval.~~

c. ***Inspection and Monitoring Results. All inspection records and monitoring results must be kept on-site and be maintained with the permit registrant, and must be made available to the department, Agent, or local municipality upon request which must include:***

i. ***The construction site name as it appears on the registrant's permit and the file or site number.***

ii. ***All Action Reports that describe reasons for required changes or modifications to the ESCP and/or other corrective measures implemented during the previous reporting period.***

iii. ***Turbidity sampling results required by condition B.2, p. 17 if applicable.***

~~5. **Additional Requirements**~~

~~a. Water Quality Standards:~~
~~The ultimate goal for permittees is to comply with water quality standards in OAR 340-41. In instances where a storm water discharge adversely impacts water quality, the Department may require the facility to implement additional management practices, apply for an individual permit, or take other appropriate action.~~

~~b. Turbidity (Nephelometric Turbidity Units, NTU) Water Quality Standard:~~
~~No more than a ten percent cumulative increase in natural stream turbidities shall be allowed, as measured relative to a control point immediately upstream of the turbidity causing activity. However, limited duration activities necessary to address an emergency or to accommodate essential dredging, construction or other legitimate activities and which cause the standard to be exceeded may be authorized provided all practicable turbidity control techniques have been applied and one of the following has been granted:~~

~~(A) Emergency activities: Approval coordinated by DEQ with the Department of Fish and Wildlife under conditions they may prescribe to accommodate response to emergencies or to protect public health and welfare;~~

~~(B) Dredging, Construction or other Legitimate Activities: Permit or certification authorized under terms of Section 401 or 404 (Permits and Licenses, Federal Water Pollution Control Act) or OAR 141-085-0100 et seq. (Removal and Fill Permits, Division of State Lands), with limitations and conditions governing the activity set forth in the permit or certificate.~~

~~[see OAR 340-041-(basin)(2)(c)]~~

d. ***Retention of Inspection and Monitoring Results for Three Years:***

i. All inspection records ***and monitoring results must be retained for at least*** three years ***after*** project completion.

ii. In addition, these records must be delivered or made available to the department within (3) working days of request.

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SCHEDULE C
COMPLIANCE SCHEDULE

Potential discharges into waterbodies that are on the most recent EPA-approved Oregon 303(d) list for turbidity or sedimentation or have a TMDL for turbidity or sedimentation

1. ***Permit registrants who obtained permit coverage prior to October 1, 2006 must:***
   a. ***For EPA-approved TMDLs or 303(d) listings existing at the time permit application is made, comply with the requirements in condition A.2 by October 1, 2006.***
   b. ***For future TMDLS or 303(d) listings approved by EPA after permit application is made, comply with the requirements in condition A.2 no later than 90 days after EPA-approval of the TMDL or 303(d) list.***

2. ***Permit registrants obtaining coverage after October 1, 2006 must:***
   a. ***For EPA-approved TMDLs or 303(d) listings existing at the time permit application is made, comply with the requirements of condition A.2 upon obtaining coverage under the permit. If Option 2 is selected, the BMP(s) must be specifically identified in the ESCP as addressing this condition of the permit, and the rationale for choosing the selected BMP(s) must also be provided.***
   b. ***For future TMDLS or 303(d) listings approved by EPA after permit application is made, comply with the requirements in condition A.2 no later than 90 days after EPA-approval of the TMDL or 303(d) list.***

~~***Agent***~~

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SCHEDULE D

SPECIAL CONDITIONS

1. ***In the event of any inconsistency between Schedules A through D and F, Schedules A through D will apply.***

~~c. Water Quality Limited Streams:~~
~~The Department may establish additional controls on construction activities that discharge storm water runoff to water quality limited streams if Total Maximum Daily Loads are established and construction activities are determined to be a significant contributor to these loads. The Department may also require application for individual permit or develop a watershed-based general permit for the activity.~~

~~6. **Required Actions Prior to Termination of the Permit** The following actions shall be completed before permit coverage is terminated.~~

2. ***Registration under*** this permit does not relieve the ***permit registrant*** from all other permitting and licensing requirements. Prior to beginning construction activities, ***the permit registrant must obtain*** all other necessary approvals.

3. **Required Actions Prior to Termination of Permit Registration**
   a. The following *conditions must* be ***met*** before permit ***registration*** is terminated:
      ~~a.~~i. There is no ***reasonable*** potential for discharge of a significant amount of construction related sediment ***or turbidity*** to surface waters.

      ~~b. All elements of the ESCP have been completed.~~

      ~~c.~~ii. Construction materials, waste, and temporary erosion and sediment controls have been removed and disposed of properly. This includes any sediment that was being retained by the temporary erosion and sediment controls.
      iii. All soil disturbance activities by the permittee have been completed and all stormwater discharges from construction activities that are authorized by this permit are eliminated.
      iv. All temporary erosion and sediment controls have been removed and properly disposed.
      v. All disturbed or exposed areas of the site must be ***fully*** stabilized, ***as defined in condition D.4.l. below.***

   b. ***The permit registrant must complete and submit a*** Notice of Termination form ***to the department or Agent after the conditions in D.4.a below have been satisfied. The department or Agent will not act on a request for termination until all outstanding compliance issues are resolved.***

4. **Permit-specific Definitions**
   a. ***Action Plan means an addendum to the ESCP that describes ESCP modifications.***
   b. ***Agent means a governmental entity that has an agreement with the department to assist with implementation of this general permit.***
   c. *Best Management Practices* ***or*** *BMPs* ***means*** schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, erosion and sediment control, source control, and operating procedures and practices to control site runoff, spillage or leaks, and waste disposal.
   d. ***Borrow Area means the area from which material is excavated to be used as fill material in another area.***
   e. ***Clean Water Act or CWA means the Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, and 97-117; USC 1251 et seq.***

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f. ***Department or DEQ means the Oregon Department of Environmental Quality.***
g. ***Detention means the temporary storage of stormwater to improve quality or reduce the volumetric flow rate of discharge or both.***
h. *Dewatering* ***means the*** removal and disposal of surface water or groundwater for purposes of preparing a site for construction.
i. ***Discharge Point means the location where stormwater leaves the site. It includes the location where stormwater is discharged to surface water or a stormwater conveyance system.***
j. *Erosion* ***means*** the movement of soil particles ***or rock fragments by*** water or wind.
k. ***Erosion and Sediment Control BMPs means BMPs that are intended to prevent erosion and sedimentation, such as preserving natural vegetation, seeding, mulching and matting, plastic covering, filter fences, and sediment traps and ponds. Erosion and sediment control BMPs are synonymous with stabilization and structural BMPs.***
l. ***Erosion Prevention Methods means a wide range of erosion prevention practices, materials and methods to be applied during earthwork activities including structural methods, techniques to prevent erosion on already graded surfaces, and biotechnical erosion control methods. The best way to control the discharge of sediment and related pollutants from a construction site is to prevent erosion from occurring in the first place.***
m. ***Final Stabilization or Fully Stabilized means the completion of all soil disturbing activities at the site by the permit registrant, and the establishment of a permanent vegetative cover, or equivalent permanent stabilization measures (such as riprap, gabions or geotextiles) to prevent erosion.***
n. *Hazardous Materials* ***means the materials*** defined in 40 CFR part 302 Designation, Reportable Quantities, and Notification.
o. ***Local Government means any county, city, town, or service district.***
p. ***National Pollutant Discharge Elimination System or NPDES means the national program under Section 402 of the Clean Water Act for regulation of point source discharges of pollutants to waters of the United States.***
q. ***Non-Stormwater Pollution Controls means general site and materials management measures that directly or indirectly aid in minimizing the discharge of sediment and other construction related pollutants from the construction site.***
r. ***Permit Registrant means the owner or operator of the construction activity regulated by this permit who receives notice of registration under this general permit. Owners or operators may be individuals or other legal entities.***
s. ***Pollutant as defined in 40 CFR §122.2 means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, domestic sewage sludge (biosolids), munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, soil, cellar dirt and industrial, municipal, and agricultural waste discharge into water. It does not mean sewage from vessels within the meaning of section 312 of the FWPCA, nor does it include dredged or fill material discharged in accordance with a permit issued under section 404 of the FWPCA.***
t. ***Pollution or water pollution as defined by ORS 468B.005(3) means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof.***
u. ***Runoff Controls means BMPs that are designed to control the peak volume and flow rate and to prevent scour due to concentrated flows.***
v. ***Sediment means solid unconsolidated rock and mineral fragments that come from the weathering of rocks and are transported by water, air, or ice and form layers on the Earth's surface. Sediments can also result from chemical precipitation or secretion by organisms.***

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w. ***Site means the area where the construction activity is physically located or conducted.***

x. ***Source Control BMPs means physical, structural or mechanical devices or facilities that are intended to prevent pollutants from entering stormwater. A few examples of source control BMPs are erosion control practices, maintenance of stormwater facilities, constructing roofs over storage and working areas, and directing wash water and similar discharges to the sanitary sewer or a dead end sump.***

y. ***Stormwater Conveyance means a sewer, ditch, or swale that is designed to carry stormwater; a stormwater conveyance may also be referred to as a storm drain or storm sewer.***

z. *Stormwater* ***as defined by 40 CFR §122.26(b)(13) means*** stormwater runoff, snow melt runoff, and surface runoff ***and drainage.***

aa. ***Surface Runoff means that portion of stormwater that does not infiltrate into the ground or evaporate, but instead flows onto adjacent land or watercourses or is routed to stormwater conveyance systems.***

bb. ***Surface Water means all water naturally open to the atmosphere (e.g., rivers, lakes, reservoirs, ponds, streams, impoundments, oceans, estuaries, springs, etc.).***

cc. ***Total Daily Maximum Load or TMDL means a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet state water quality standards. It is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. Percentages of the TMDL are allocated by the department to the various pollutant sources. The TMDL calculations must include a "margin of safety" to ensure that the waterbody can be protected in case there are unforeseen events or unknown sources of the pollutant. The calculation must also account for seasonable variation in water quality.***

dd. *Turbidity* ***means*** the optical ***condition of waters caused by suspended or dissolved particles or colloids that scatter and absorb light rays instead of transmitting light in straight lines through the water column. Turbidity may be expressed as nephelometric turbidity units (NTUs) measured with a calibrated turbidity meter.***

ee. ***Underground Injection Control means any system, structure, or activity that is created to place fluid below the ground or sub-surface (e.g., sumps, infiltration galleries, drywells, trench drains, drill holes, etc.)***

ff. ***Water or waters of the state as defined by ORS 468B.005(8) means lakes, bays, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Pacific Ocean within the territorial limits of the State of Oregon and all other bodies of surface or underground waters, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters which do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction.***

~~d. All disturbed areas of the site must be stabilized.~~

~~e. Submittal of DEQ Notice of Termination Form.~~

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SCHEDULE F
NPDES GENERAL CONDITIONS

(Note: Updated With Current EPA NPDES Standard Conditions.)

SECTION A. STANDARD CONDITIONS

1. Duty to Comply
   The permit registrant must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Oregon Revised Statutes (ORS) 468B.025, and 40 Code of Federal Regulations (CFR) §122.41(a), and is grounds for enforcement action; for permit termination, revocation or reissuance, or modification; or for denial of a permit renewal application.

2. Penalties for Water Pollution and Permit Condition Violations
   ORS 468.140 allows the department to impose civil penalties up to $10,000 per day for violation of a term, condition, or requirement of a permit. Additionally 40 CFR §122.41 (A) provides that any person who violates any permit condition, term, or requirement may be subject to a federal civil penalty not to exceed $25,000 per day for each violation.

~~SCHEDULE B~~
~~MINIMUM MONITORING REQUIREMENTS~~

~~All Sites~~

Under ORS 468.943 and 40 CFR §122.41(a), unlawful water pollution, if committed by a person with criminal negligence, is punishable by a fine of up to $25,000 imprisonment for not more than one year, or both. Each day on which a violation occurs or continues is a separately punishable offense.

Under ORS 468.946, a person who knowingly discharges, places, or causes to be placed any waste into the waters of the state or in a location where the waste is likely to escape into the waters of the state is subject to a Class B felony punishable by a fine not to exceed $200,000 and up to 10 years in prison. Additionally, under 40 CFR §122.41(a) any person who knowingly discharges, places, or causes to be placed any waste into the waters of the state or in a location where the waste is likely to escape into the waters of the state is subject to a federal civil penalty not to exceed $100,000, and up to 6 years in prison.

~~1. A person with knowledge and experience in construction storm water controls and management practices shall conduct the inspections. The ESCP shall identify the person(s) and/or title of the personnel that will conduct the inspections and provide a contact phone number for such person(s).~~

~~Active Sites~~

~~2. Frequency of inspections shall be daily during storm water runoff or snowmelt runoff and at least once every seven (7) calendar days and within 24 hours after any storm event of greater than 0.5 inches of rain per 24-hour period.~~

~~Inactive Sites~~

3. Duty to Mitigate
   The permit registrant must take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment. In addition, upon request of the department, the permit registrant must correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

4. Duty to Reapply
   If the permit registrant wishes to continue an activity regulated by this permit after the expiration date of this permit, the permit registrant must apply for and have the permit renewed. The application must be submitted at least 180 days

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before the expiration date of this permit. The department may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

5. Permit Actions
This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:
a. Violation of any term, condition, or requirement of this permit, a rule, or a statute
b. Obtaining this permit by misrepresentation or failure to disclose fully all material facts
c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge
d. The permit registrant is identified as a Designated Management Agency or allocated a wasteload under a Total Maximum Daily Load (TMDL)
e. New information or regulations
f. Modification of compliance schedules
g. Requirements of permit re-opener conditions
h. Correction of technical mistakes made in determining permit conditions
i. Determination that the permitted activity endangers human health or the environment
j. Other causes as specified in 40 CFR §§122.62, 122.64, and 124.5

~~3. During inactive periods of greater than seven (7) consecutive calendar days, inspections shall only be required once every two (2) weeks.~~
The filing of a request by the permit registrant for a permit modification, revocation or reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Toxic Pollutants
The permit registrant must comply with any applicable effluent standards or prohibitions established under Oregon Administrative Rules (OAR) 340-041-0033 for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

~~4. Prior to discontinuing activities at the site, any exposed area shall be stabilized to prevent erosion. Stabilization may occur by applying appropriate cover (mulch, erosion control blanket, soil tackifier, etc.) or establishing adequate vegetative cover.~~

7. Property Rights
The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, nor does it authorize any injury to persons of property or invasion of any other private rights, nor any infringement of federal, tribal, state, or local laws or regulations.

~~5. When a site is inaccessible due to adverse weather conditions, inspections shall not be required. Adverse weather condition shall be recorded on the inspection sheet.~~

8. Permit References
Except for effluent standards or prohibitions established under Section 307(a) of the Clean Water Act and OAR 340-041-0033for toxic pollutants, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.

~~6. Prior to leaving an inactive site or in anticipation of site inaccessibility, existing erosion and sediment control measures shall be inspected to ensure that they are in working order. Any necessary maintenance or repair shall be made prior to leaving the site.~~

9. Permit Fees
The permit registrant must pay the fees required by OAR 340-045-0070 to 0075.

~~**Written Records**~~

~~7. All visual inspections must document the following information:~~

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

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The permit registrant must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permit registrant to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permit registrant only when the operation is necessary to achieve compliance with the conditions of the permit.

~~a. Inspection date, inspector's name, weather conditions, and rainfall amount for past 24 hours (inches). (Rainfall information can be obtained from the nearest weather recording station.)~~

2. Duty to Halt or Reduce Activity

For industrial or commercial facilities, upon reduction, loss, or failure of the treatment facility, the permit registrant must, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It is not a defense for a permit registrant in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

~~b. List observations of all BMPs: erosion and sediment controls, chemical and waste controls, locations where vehicles enter and exit the site, status of areas that employ temporary or final stabilization control, soil stockpile area, and nonstormwater controls.~~

3. Bypass of Treatment Facilities

a. Definitions

(1) "Bypass" means intentional diversion of waste streams from any portion of the treatment facility. The term "bypass" does not apply if the diversion does not cause effluent limitations to be exceeded, provided the diversion is to allow essential maintenance to assure efficient operation or the diversion is due to nonuse of nonessential treatment units or processes at the treatment facility.

(2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities or treatment processes that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

~~At representative discharge location(s) from the construction site conduct observation and document the quality of the discharge for any turbidity, color, sheen, or floating materials. If possible, in the receiving stream, observe and record color and turbidity or clarity upstream and downstream within 30 feet of the discharge from the site. For example, a sheen or floating material could be noted as present/absent, if observation is yes, it could indicate concern about a possible spill and/or leakage from vehicles or materials storage. For turbidity and color an observation would describe any apparent color and the clarity of the discharge, and any apparent difference in comparison with the receiving stream~~b. Prohibition of bypass.

(1) Bypass is prohibited unless:

(a) Bypass was necessary to prevent loss of life, personal injury, or severe property damage;

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventative maintenance; and

(c) The permit registrant submitted notices and requests as required under General Condition B.3.c.

(2) The department may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, when the department determines that it will meet the three conditions listed above in General Condition B.3.b.(1).

~~d. If significant amounts of sediment are leaving the property, briefly explain the corrective measures taken to reduce the discharge and/or clean it up and describe efforts to prevent future releases. The ESCP shall be amended accordingly.~~

c. Notice and request for bypass.

(1) Anticipated bypass. If the permit registrant knows in advance of the need for a bypass, a written notice must be submitted to the department at least ten days before the date of the bypass.

(2) Unanticipated bypass. The permit registrant must submit notice of an unanticipated bypass as required in General Condition D.5.

~~If~~ 4. Upset

a ~~site is inaccessible due to inclement weather the inspection shall include observations at a relevant discharge point or downstream location, if practical.~~. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permit registrant. An upset does not include noncompliance to the extent caused by operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

~~8. All inspection records for an active site shall be kept on-site or be maintained with the permittee, and shall made available to the Department,~~ Agent~~, or local municipality upon request.~~

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of General Condition B.4.c are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance is not final administrative action subject to judicial review.

~~9. A written record of inspections for an inactive site shall be maintained with the permittee and made available to the Department,~~ Agent~~, or local municipality upon request.~~

c. Conditions necessary for a demonstration of upset. A permit registrant who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permit registrant can identify the causes(s) of the upset;

(2) The permitted facility was at the time being properly operated;

(3) The permit registrant submitted notice of the upset as required in General Condition D.5, hereof (24-hour notice); and

(4) The permit registrant complied with any remedial measures required under General Condition A.3 hereof.

~~10. Retention of all inspection records shall be for a period of one year from project completion.~~

d. Burden of proof. In any enforcement proceeding the permit registrant seeking to establish the occurrence of an upset has the burden of proof.

~~SCHEDULE C~~
~~COMPLIANCE SCHEDULE~~

~~1. Registration of Underground Injection Systems (40 CFR 144 and OAR 340-044). The permittee shall submit to DEQ a registration form if construction activities include disposal of storm water or other wastewater discharges to an injection system. These types of disposal systems are classified under the Underground Injection Control Program as a Class V well, require registration, and must meet Division 44 standards.~~

5. Treatment of Single Operational Upset

For purposes of this permit, A Single Operational Upset that leads to simultaneous violations of more than one pollutant parameter will be treated as a single violation. A single operational upset is an exceptional incident that causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one Clean Water Act effluent discharge pollutant parameter. A single operational upset does not include Clean Water Act violations involving discharge without a NPDES permit or noncompliance to the extent caused by improperly designed or inadequate treatment facilities. Each day of a single operational upset is a violation.

6. Overflows from Stormwater Conveyance Systems (privately owned)

a. Definitions

(1) "Overflow" means the diversion and discharge of waste streams from any portion of the wastewater conveyance system through a designed overflow device or structure, other than discharges to the wastewater treatment facility.

(2) "Severe property damage" means substantial physical damage to property, damage to the conveyance system which causes it to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of an overflow.
(3) "Uncontrolled overflow" means the diversion of waste streams other than through a designed overflow device or structure.

~~a. A new permittee shall register any applicable underground treatment systems **prior to** the construction of a new facility.~~

b. Prohibition of overflows. Overflows are prohibited unless:
(1) Overflows were unavoidable to prevent an uncontrolled overflow, loss of life, personal injury, or severe property damage;
(2) There were no feasible alternatives to the overflows, such as the use of auxiliary conveyance systems, or maximization of conveyance system storage; and
(3) The overflows are the result of an upset as defined in General Condition B.4 and meeting all requirements of this condition.

~~b. For facilities covered by the previous 1200-C permit, the registration form is due within **thirty (30) days** after receipt of this new 1200-C permit.~~

c. Uncontrolled overflows are prohibited where wastewater is likely to escape or be carried into the waters of the State by any means.

~~**SCHEDULE D**~~
~~SPECIAL CONDITIONS~~

~~1. Issuance of this permit does not relieve the permittee from all other permitting and licensing requirements. Prior to beginning construction activities, all other necessary approvals shall be obtained.~~

~~2. The permit will remain in effect after the expiration date or until another permit is issued if the permittee has paid all fees and has filed a renewal application.~~

d. Reporting required. Unless otherwise specified in writing by the department, all overflows and uncontrolled overflows must be reported orally to the department within 24 hours from the time the permit registrant becomes aware of the overflow. Reporting procedures are described in more detail in General Condition D.5.

7. Public Notification of Effluent Violation or Overflow
If effluent limitations specified in this permit are exceeded or an overflow occurs, upon request by the department, the permit registrant must take such steps as are necessary to alert the public about the extent and nature of the discharge. Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.

8. Removed Substances
Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must be disposed of in such a manner as to prevent any pollutant from such materials from entering waters of the state, causing nuisance conditions, or creating a public health hazard.

~~3. Any permittee that does not want to be covered or limited by this general permit may make application for an individual NPDES permit in accordance with the procedures in OAR 340-45-030.~~

~~4. Permit Specific Definitions:~~

SECTION C. MONITORING AND RECORDS

1. Representative Sampling
Sampling and measurements taken as required herein must be representative of the volume and nature of the monitored discharge. All samples must be taken at the monitoring points specified in this permit, and shall be taken, unless

otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points may not be changed without notification to and the approval from the department.

~~*Best Management Practices (BMPs)* Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, erosion and sediment control, source control, and operating procedures and practices to control: site runoff, spillage or leaks, and waste disposal.~~

2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices must be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices must be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected must be capable of measuring flows with a maximum deviation of less than ± 10 percent from true discharge rates throughout the range of expected discharge volumes.

~~*Dewatering* The removal and disposal of surface water or groundwater for purposes of preparing a site for construction.~~

3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR part 136, unless other test procedures have been specified in this permit.

~~*Erosion* The movement of soil particles resulting from the tracking, flow or pressure from storm water or wind.~~

4. Penalties of Tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit may, upon conviction, be punished by a fine of not more than $10,000 per violation, imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, punishment is a fine not more than $20,000 per day of violation, or by imprisonment of not more than four years, or both.

~~*Grade* Construction activity that causes the disturbance of the earth. This shall include but not be limited to any excavating, filling, stockpiling of earth materials, grubbing, root mat or topsoil disturbance, or any combination of them.~~

5. Reporting of Monitoring Results

Monitoring results must be summarized each month on a Discharge Monitoring Report form approved by the department. The reports must be submitted monthly and are to be mailed, delivered or otherwise transmitted by the 15th day of the following month unless specifically approved otherwise in Schedule B of this permit.

~~*Hazardous Materials* As defined in 40 CFR 302 Designation, Reportable Quantities, and Notification. Available on the web at http://www.epa.gov.~~

~~*Phasing* Clearing a parcel of land in distinct phases, with the stabilization of each phase before clearing of the next phase; including soil stockpiling.~~

~~*Stabilization* The completion of all soil disturbance activities at the site and the establishment of a permanent vegetative cover, or equivalent permanent stabilization measures (such as riprap, gabions, geotextiles, or bioengineering methods) that will prevent erosion.~~

6. Additional Monitoring by the Permit registrant

If the permit registrant monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 part CFR part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report. Such increased frequency must also be indicated. For a pollutant parameter that may be sampled more than once per day (e.g., Total Chlorine Residual), only the average daily value must be recorded unless otherwise specified in this permit.

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~~*Start of Construction* The first land-disturbing activity associated with a development, including land preparation such as clearing, grading, excavation, and filling; installation of streets and walkways; erection of temporary forms; and installation of accessory buildings such as garages.~~

7. Averaging of Measurements

Calculations for all limitations that require averaging of measurements must utilize an arithmetic mean, except for bacteria which shall be averaged as specified in this permit.

~~*Storm Water* Storm water runoff, snow melt runoff, and surface runoff associated with a storm event.~~

8. Retention of Records

The permit registrant must retain records of all monitoring information, including: all calibration, maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the department at any time.

~~*Turbidity* An expression of the optical property of~~ 9. Records Contents

Records of monitoring information must include:

a ~~sample which causes light to be scattered and absorbed rather than transmitted in a straight line through the sample. It is caused by the presence of suspended matter in a liquid.~~. The date, exact place, time, and methods of sampling or measurements;

~~**SCHEDULE F**~~

~~NPDES GENERAL CONDITIONS~~

~~**SECTION A. STANDARD CONDITIONS**~~

b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of such analyses.

10. Inspection and Entry

The permit registrant must allow the department or an authorized representative upon the presentation of credentials to:

a. Enter upon the permit registrant's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and
d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

SECTION D. REPORTING REQUIREMENTS

1. ~~Duty to Comply~~ Planned Changes

~~The permitteepermit registrant must comply with all conditionsOAR chapter 340, division 52, "Review of this permit. Any permit noncompliance constitutes a violation of Oregon Revised Statutes (ORS) 468B.025Plans and is grounds for enforcement action; for permit termination, suspension, or modification; or for denial of a permit renewal application.~~

~~2. Penalties for Water PollutionSpecifications" and Permit Condition Violations40 CFR §122.41(l)(1). Except where exempted under OAR chapter 340, division 52, no construction, installation, or modification involving disposal systems, treatment works, sewerage systems, or common sewers may be commenced until the plans and specifications are submitted to and approved by the department. The permit registrant must give notice to the department as soon as possible of any planned physical alternations or additions to the permitted facility.~~

~~Oregon Law (ORS 468.140) allows the Director to impose civil penalties up to $10,000 per day for violation of a term, condition, or requirement of a permit.~~

~~Under ORS 468.943, unlawful water pollution, if committed by a person with criminal negligence, is punishable by a fine of up to $25,000 or by imprisonment for not more than one year, or by both. Each day on which a violation occurs or continues is a separately punishable offense.~~

2. Anticipated Noncompliance
The permit registrant must give advance notice to the department of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

~~Under ORS 468.946, a person who knowingly discharges, places or causes to be placed any waste into the waters of the state or in a location where the waste is likely to escape into the waters of the state, is subject to a Class B felony punishable by a fine not to exceed $200,000 and up to 10 years in prison.~~

3. Transfers
This permit may be transferred to a new permit registrant provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and the rules of the Commission. No permit may be transferred to a third party without prior written approval from the department. The department may require modification, revocation, and reissuance of the permit to change the name of the permit registrant and incorporate such other requirements as may be necessary. The permit registrant must notify the department when a transfer of property interest takes place.

~~3. Duty to Mitigate~~
~~The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. In addition, upon request of the Department, the permittee shall correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.~~

~~4. Duty to Reapply~~
~~If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and have the permit renewed. The application shall be submitted at least 180 days before the expiration date of this permit.~~

4. Compliance Schedule
Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. Any reports of noncompliance must include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

5. Twenty-Four Hour Reporting
The permit registrant must report any noncompliance that may endanger health or the environment. Any information must be provided orally (by telephone) within 24 hours, unless otherwise specified in this permit, from the time the permit registrant becomes aware of the circumstances. During normal business hours, the department's Regional office must be called. Outside of normal business hours, the department must be contacted at 1-800-452-0311 (Oregon Emergency Response System).

~~The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.~~

~~5. Permit Actions~~
~~This permit may be modified, suspended, revoked and reissued, or terminated for cause including, but not limited to, the following:~~
A written submission must also be provided within 5 days of the time the permit registrant becomes aware of the circumstances. Pursuant to ORS 468.959 (3) (a), if the permit registrant is establishing an affirmative defense of upset or bypass to any offense under ORS 468.922 to 468.946, delivered written notice must be made to the department or other agency with regulatory jurisdiction within 4 (four) calendar days of the time the permit registrant becomes aware of the circumstances. The written submission must contain:
a. A description of the noncompliance and its cause;
b. The period of noncompliance, including exact dates and times;
c. The estimated time noncompliance is expected to continue if it has not been corrected;
d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and
e. Public notification steps taken, pursuant to General Condition B.6

The following must be included as information that must be reported within 24 hours under this paragraph:

a. Any unanticipated bypass that exceeds any effluent limitation in this permit.
b. Any upset that exceeds any effluent limitation in this permit.
c. Violation of maximum daily discharge limitation for any of the pollutants listed by the department in this permit.
d. Any noncompliance that may endanger human health or the environment.

~~The department may waive the written report on~~ a~~. Violation of any term, condition, or requirement of this permit, a rule, or a statute;~~
~~b. Obtaining this permit~~ case~~ by misrepresentation or failure to disclose fully all material facts; or~~
~~c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge~~ case basis if the oral report has been received within 24 hours.

~~The filing of a request by the permittee for a permit modification or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.~~

6. Other Noncompliance

The permit registrant must report all instances of noncompliance not reported under General Condition D.4 or D.5, at the time monitoring reports are submitted. The reports must contain:

a. A description of the noncompliance and its cause;
b. The period of noncompliance, including exact dates and times;
c. The estimated time noncompliance is expected to continue if it has not been corrected; and
d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

~~6. Toxic Pollutants~~

~~The permittee shall comply with any applicable effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.~~

7. Duty to Provide Information

The permit registrant must furnish to the department within a reasonable time any information that the department may request to determine compliance with this permit. The permit registrant must also furnish to the department, upon request, copies of records required to be kept by this permit.

~~7. Property Rights~~

~~The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.~~

Other Information: When the permit registrant becomes aware that it has failed to submit any relevant facts or has submitted incorrect information in a permit application or any report to the department, it must promptly submit such facts or information.

8. ~~Permit References~~Signatory Requirements

~~Except for effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.~~

~~SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS~~

All applications, reports or information submitted to the department must be signed and certified in accordance with 40 CFR §122.22.

9. Falsification of Information

Under ORS 468.953, any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, is subject to a Class C felony punishable by a fine not to exceed $100,000 per violation and up to 5 years in prison. Additionally, according to 40 CFR §122.41(k)(2), any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a federal civil penalty not to exceed $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

1~~. Proper Operation and Maintenance~~0. Changes to Discharges of Toxic Pollutant

~~The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with~~

~~the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.~~

The permit registrant must notify the department as soon as it knows or have reason to believe of the following:

a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:

(1) One hundred micrograms per liter (100 µg/l);

(2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or

(4) The level established by the department in accordance with 40 CFR §122.44(f).

~~2. Duty to Halt~~b. That any activity has occurred or ~~Reduce Activity~~

~~For industrial~~will occur that would result in any discharge, on a non-routine or ~~commercial facilities, upon reduction, loss, or failure~~infrequent basis, of a toxic pollutant that is not limited in the ~~treatment facility~~,permit, if that discharge will exceed the ~~permittee shall, to~~ highest of the ~~extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.~~following "notification levels":

(1) Five hundred micrograms per liter (500 µg/l);

(2) One milligram per liter (1 mg/l) for antimony;

(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or

(4) The level established by the department in accordance with 40 CFR §122.44(f).

~~3. Bypass of Treatment Facilities~~

~~a. Definitions~~

~~(1) "Bypass" means intentional diversion of waste streams from any portion of the treatment facility. The term "bypass" does not include nonuse of singular or multiple units or processes of a treatment works when the nonuse is insignificant to the quality and/or quantity of the effluent produced by the treatment works. The term "bypass" does not apply if the diversion does not cause effluent limitations to be exceeded, provided the diversion is to allow essential maintenance to assure efficient operation.~~

~~(2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities or treatment processes which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.~~

~~b. Prohibition of bypass.~~

~~(1) Bypass is prohibited unless:~~

~~(a) Bypass was necessary to prevent loss of life, personal injury, or severe property damage;~~

~~(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and~~

~~(c) The permittee submitted notices and requests as required under General Condition B.3.c.~~

~~(2) The Director may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, when the Director determines that it will meet the three conditions listed above in General Condition B.3.b.(1).~~

~~c. Notice and request for bypass.~~

~~(1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior written notice, if possible at least ten days before the date of the bypass.~~

~~(2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in General Condition D.5.~~

4. Upset
   a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

   b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of General Condition B.4.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

   c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
      (1) An upset occurred and that the permittee can identify the causes(s) of the upset;
      (2) The permitted facility was at the time being properly operated;
      (3) The permittee submitted notice of the upset as required in General Condition D.5, hereof (24 hour notice); and
      (4) The permittee complied with any remedial measures required under General Condition A.3 hereof.

   d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

5. Treatment of Single Operational Event
   For purposes of this permit, A Single Operational Event which leads to simultaneous violations of more than one pollutant parameter shall be treated as a single violation. A single operational event is an exceptional incident which causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one Clean Water Act effluent discharge pollutant parameter. A single operational event does not include Clean Water Act violations involving discharge without a NPDES permit or noncompliance to the extent caused by improperly designed or inadequate treatment facilities. Each day of a single operational event is a violation.

6. Overflows from Wastewater Conveyance Systems and Associated Pump Stations
   a. Definitions
      (1) "Overflow" means the diversion and discharge of waste streams from any portion of the wastewater conveyance system including pump stations, through a designed overflow device or structure, other than discharges to the wastewater treatment facility.
      (2) "Severe property damage" means substantial physical damage to property, damage to the conveyance system or pump station which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of an overflow.
      (3) "Uncontrolled overflow" means the diversion of waste streams other than through a designed overflow device or structure, for example to overflowing manholes or overflowing into residences, commercial establishments, or industries that may be connected to a conveyance system.

   b. Prohibition of overflows. Overflows are prohibited unless:
      (1) Overflows were unavoidable to prevent an uncontrolled overflow, loss of life, personal injury, or severe property damage;
      (2) There were no feasible alternatives to the overflows, such as the use of auxiliary pumping or conveyance systems, or maximization of conveyance system storage; and
      (3) The overflows are the result of an upset as defined in General Condition B.4. and meeting all requirements of this condition.

   c. Uncontrolled overflows are prohibited where wastewater is likely to escape or be carried into the waters of the State by any means.

   d. Reporting required. Unless otherwise specified in writing by the Department, all overflows and uncontrolled overflows must be reported orally to the Department within 24 hours from the time the permittee becomes aware of the overflow. Reporting procedures are described in more detail in General Condition D.5.

7. Public Notification of Effluent Violation or Overflow
   If effluent limitations specified in this permit are exceeded or an overflow occurs, upon request by the Department, the permittee shall take such steps as are necessary to alert the public about the extent and nature of the discharge. Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.

8. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in such a manner as to prevent any pollutant from such materials from entering public waters, causing nuisance conditions, or creating a public health hazard.

SECTION C. MONITORING AND RECORDS

1. Inspection and Entry

The permittee shall allow the Director, or an authorized representative upon the presentation of credentials to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and
d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

SECTION D. REPORTING REQUIREMENTS

1. Planned Changes

The permittee shall comply with Oregon Administrative Rules (OAR) 340, Division 52, "Review of Plans and Specifications". Except where exempted under OAR 340-52, no construction, installation, or modification involving disposal systems, treatment works, sewerage systems, or common sewers shall be commenced until the plans and specifications are submitted to and approved by the Department. The permittee shall give notice to the Department as soon as possible of any planned physical alternations or additions to the permitted facility.

2. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers

This permit may be transferred to a new permittee provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and the rules of the Commission. No permit shall be transferred to a third party without prior written approval from the Director. The permittee shall notify the Department when a transfer of property interest takes place.

4. Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

5. Twenty-Four Hour Reporting

The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally (by telephone) within 24 hours, unless otherwise specified in this permit, from the time the permittee becomes aware of the circumstances. During normal business hours, the Department's Regional office shall be called. Outside of normal business hours, the Department shall be contacted at 1-800-452-0311 (Oregon Emergency Response System).

A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. If the permittee is establishing an affirmative defense of upset or bypass to any offense under ORS 468.922 to 468.946, and in which case if the original reporting notice was oral, delivered written notice must be made to the Department or other agency with regulatory jurisdiction within 4 (four) calendar days. The written submission shall contain:

a. A description of the noncompliance and its cause;
b. The period of noncompliance, including exact dates and times;
c. The estimated time noncompliance is expected to continue if it has not been corrected;
d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and
e. Public notification steps taken, pursuant to General Condition B.7.

The following shall be included as information which must be reported within 24 hours under this paragraph:

a. Any unanticipated bypass which exceeds any effluent limitation in this permit.
b. Any upset which exceeds any effluent limitation in this permit.
c. Violation of maximum daily discharge limitation for any of the pollutants listed by the Director in this permit.

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The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

6. Other Noncompliance
The permittee shall report all instances of noncompliance not reported under General Condition D.4 or D.5, at the time monitoring reports are submitted. The reports shall contain:
a. A description of the noncompliance and its cause;
b. The period of noncompliance, including exact dates and times;
c. The estimated time noncompliance is expected to continue if it has not been corrected; and
d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

7. Duty to Provide Information
The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

Other Information: When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it shall promptly submit such facts or information.

8. Signatory Requirements
All applications, reports or information submitted to the Department shall be signed and certified in accordance with 40 CFR 122.22.

9. Falsification of Reports
Under ORS 468.953, any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, is subject to a Class C felony punishable by a fine not to exceed $100,000 per violation and up to 5 years in prison.

10. Changes to Indirect Dischargers - **[Applicable to Publicly Owned Treatment Works (POTW) only]**
The permittee must provide adequate notice to the Department of the following:
a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the Clean Water Act if it were directly discharging those pollutants and;
b. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
c. For the purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

11. Changes to Discharges of Toxic Pollutant - **[Applicable to existing manufacturing, commercial, mining, and silvicultural dischargers only]**
The permittee must notify the Department as soon as they know or have reason to believe of the following:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:
(1) One hundred micrograms per liter (100 µg/l);
(2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
(3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
(4) The level established by the Department in accordance with 40 CFR 122.44(f).

b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
(1) Five hundred micrograms per liter (500 µg/l);
(2) One milligram per liter (1 mg/l) for antimony;
(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
(4) The level established by the Department in accordance with 40 CFR 122.44(f).

SECTION E. DEFINITIONS
1. BOD means five-day biochemical oxygen demand.
2. TSS means total suspended solids.

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1. ~~3.~~ Technology based permit effluent limitations means technology-based treatment requirements as defined in 40 CFR §125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR 340-041.
2. mg/l means milligrams per liter.
~~4. kg means kilograms.~~
~~5. m^3/d means cubic meters per day.~~
~~6. MGD means million gallons per day.~~
~~7. Composite sample means a sample formed by collecting and mixing discrete samples taken periodically and based on time or flow.~~
~~8. FC means fecal coliform bacteria.~~
~~9. Technology based permit effluent limitations means technology-based treatment requirements as defined in 40 CFR 125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR 340-41.~~
~~10. CBOD means five day carbonaceous biochemical oxygen demand.~~
3. ~~11.~~ Grab sample means an individual discrete sample collected over a period of time not to exceed 15 minutes.
~~12. Quarter means January through March, April through June, July through September, or October through December.~~
4. ~~13.~~ Month means calendar month.
~~14.~~ Week means a calendar week of Sunday through Saturday.
~~15. Total residual chlorine means combined chlorine forms plus free residual chlorine.~~
~~16. The term "bacteria" includes but is not limited to fecal coliform bacteria, total coliform bacteria, and E. coli bacteria.~~
~~17. POTW means a publicly owned treatment works.~~

5. ~~SWM-JEC-00100.doc~~

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Attachment B

Summary of Public Comment and Agency Response

Comment period and public hearings

The public comment period opened on August 22, 2005, and closed at 5:00 p.m. on September 30, 2005. Three public hearings were conducted by the department during the public comment period as follows:

Date	Location	Number of attendees
September 22, 2005	Eugene	2
September 23, 2005	Portland	11
September 26, 2005	Medford	4

Overall, 17 people attended the hearings, no one provided oral comments. The department received written comments from 18 individuals or organizations by the close of the comment period.

Organization of comments and responses

Summaries of individual comments have been organized in the categories provided below with department responses. The persons who provided each comment are referenced by number. A list of commentors and their reference numbers follows the summary of comments and responses.

PUBLIC RESPONSE CATEGORIES

1. Permit Processing
2. Public Review and Approval: Permit Application, and Erosion and Sediment Control Plan (ESCP)
3. Permit Compliance Standards, Benchmarks and Limits
4. TMDLs and 303(d) Requirements
5. Erosion and Sediment Control Plan Content and Best Management Practice (BMP) Requirements
6. Monitoring Requirements
7. Reporting Requirements
8. Land Use Requirements
9. General Conditions
10. Reasonable Potential Analysis and Antidegradation
11. Other General Comments

PUBLIC COMMENTS AND DEPARTMENT RESPONSES

1. Permit Processing

a. Adopting a new permit so close to the end of the old permit term could delay construction projects. (6)

Response: Although renewing the 1200-C permit at the end of the permit term is not ideal, the department has amended the permit to ensure both existing permitted projects and new construction projects will proceed in a timely manner. To address projects covered under the expiring permit, the department will amend the permit and not require an Erosion and Sediment Control Plan (ESCP) be resubmitted to the department or Agent except as required in Schedule C. For the estimated 1% of projects state-wide that discharge into waterbodies that are listed for turbidity or sedimentation on the most recently EPA-approved Oregon 303(d) list, or that have an established TMDL for turbidity or sedimentation, the recommended permit will include a condition that an Action Plan, addressing how the 303(d)/TMDL requirements will be met, must be submitted to the department or Agent by October 1, 2006. This should give existing projects that extend into the start of the rainy season in 2006, sufficient time to either finish or submit the Action Plan.

b. Existing permittees should be granted an administrative extension without being required to complete a renewal application. (12)

Response: The department disagrees. Oregon NPDES regulations require permit registrants to submit an application to renew coverage under a NPDES permit.

c. DEQ needs to clarify the requirements for permit renewal so that an existing permittee can decide whether to renew their existing permit (good until December 2006) or apply for coverage under the new permit. (17)

Response: The department has revised the permit renewal language in the recommended permit for clarity in the following ways: Clearly stating that existing permit registrants must submit a complete permit renewal application to the department prior to the permit expiration date of December 31, 2005 to ensure uninterrupted permit coverage under this permit for construction activities continuing beyond December 31, 2005 and for those permit registrants that do not submit a renewal application by the previous 1200-C expiration date must submit a new application for coverage under this permit and meet all conditions of the permit. Also, as provided in Response in 1.a.., sources registered under the existing permit are not required to resubmit their Erosion and Sediment Control Plan (ESCP) to the department or Agent unless their projects discharge into waterbodies that are listed for turbidity or sedimentation on the most recently EPA-approved Oregon 303(d) list, or that have an established TMDL for turbidity or sedimentation, they must meet the requirements in Schedule C.

d. DEQ should consider adopting by reference the terms in the existing permit and apply them to permitted construction activities that will end before December 31, 2006. (18)

Response: See Response to comment 1.c.

e. Make it clear that for projects that extend beyond 2006, applications must be submitted in accordance to Condition 2 of the permit registration section. (18)

Response: See Response to comment 1.c.

f. The various processing and public review timeframes are confusing. DEQ needs to develop a flow chart and guidance to identify process requirements and timelines for both administratively extending current 1200-C permittees and new 1200-C (2005) permittees in conjunction with all the applicable public review requirements. For example, how will permittees that need to extend their permit beyond December 31, 2005 continue work while applying for a permit that has not been approved? Will DEQ waive the 45-day review time frame requirement for construction activities that are intended to begin in January 2006? (6, 9)

Response: The 1200-C permit has been amended so that construction sites that disturb up to 5 acres will not be subject to public review of the application or the ESCP. For projects that disturb 5 or more acres a 14-day public notice and review period on new permit applications and the ESCP is required but is being delayed until June 1, 2006. For those projects that receive coverage before this date, no public review of their application and ESCP will have been required. In addition, requirements for an informational hearing and public notice for ESCP revisions will not apply to any site. The department will be preparing a state-wide permit application and ESCP preparation guidance document that will clarify new and existing source registration and public review requirements.

g. Under "PERMIT REGISTRATION" condition 2 is misleading. Although the ESCP may be approved by default after 45 days, soil disturbance cannot begin until the applicant receives written approval from DEQ or its agent. (18)

Response: The permit has been amended to clarify that soil disturbance activity can only begin after the applicant receives written notice that the permit application and ESCP has been approved by the department or Agent.

h. The 180 day permit renewal time frame does not apply to General Permits. (6, 16, 18)

Response: Oregon rules require a longer renewal time frame than EPA's NPDES rules. The 180 day time frame in Oregon rules apples to all (general and individual) NPDES permits, whereas EPA's NPDES rules require 180 days for all NPDES permits *except* construction permits, which require 90 days.

i. DEQ needs to reference local government procedures in the permit. (7)

Response: The department agrees. The expiring and permit recommended for adoption both have the following condition in Schedule A as follows:

"The permit registrant must ensure that the ESCP contains the following elements:

a. Local Government Requirements. Include any procedures necessary to meet applicable local government erosion and sediment control or stormwater management requirements."

j. The 45 day application approval timeframe exceeds EPA's Construction General Permit application approval requirements. DEQ should remove the requirements for ESCP review and approval. (17)

Response: The department will amend the application processing timeline from 45 days to 30 days to minimize construction delays. The department does not consider that the 7 day application processing timeframe of EPA's Construction General Permit provides adequate review and approval of specified BMPs, which is necessary to demonstrate that discharges form the site will not exceed water quality standards. In response to your last comment, the department is recommending that for projects that disturb 5 or more acres a 14-day public notice and review period on new permit applications and the ESCP is required but is being delayed until June 1, 2006. For those projects that receive coverage before this date, no public review of their application and ESCP will have been required. The department does not agree with removing the requirement for department or Agent approval of the ESCP.

2. Public Review and Approval: Permit Application, and Erosion and Sediment Control Plan (ESCP)

a. Under Permit Registration, Section 5. Public Review, add two additional sentences: "The purpose of the review is to gain public insight on specific site conditions, the general categories of BMP types, and the location of BMPs on the site and the applicability of coverage by a general permit", and "DEQ reserves the right to determine what modification if any will be required based on public comment". (7)

Response: The department will make clear in a state-wide permit application and ESCP preparation guidance document the registration and public review requirements. The department will make clear in this guidance document and in any public notice that for those projects that require public notice and comment, see Response in 1.f. above, that the department will only accept and consider comments on whether the applicant is a proper registrant under the General NPDES Permit and whether the ESCP is adequate. The department agrees that comments related to local land use decisions are outside the jurisdiction of the department.

b. DEQ needs to provide an outline of timing for public meetings requested within the 14-day public notice period. (7)

Response: The department will recommend that the final permit not include requirements for informational meetings requested within the 14-day public review period.

c. DEQ should remove the requirement for public review because the Seventh Circuit court decision stipulating that only permits and permit applications undergo public review. (17)

Response: DEQ has considered the decision of the Seventh and Ninth Circuit courts, and believes that the law is unsettled regarding requirements for public review of stormwater permitting actions. The permit recommended for adoption requires public review and comment for projects that disturb 5 or more acres. For these sites, the department recommends a 14-day public notice and review period on new permit applications and ESCP. Currently, construction projects that disturb five (5) or more acres address about 40% of the permit applications, but over

80% of the total land disturbed by permitted construction activity. This permit does not include a provision for an informational hearing or public notice for ESCP revisions.

d. The proposed public review requirements including the 30 day public review and 14 day public ESCP change review impairs effective adaptive management to quickly implement improved controls. Overall, the public review requirements will overwhelm DEQ and DEQ agent resources and impair other water quality programs, will delay permit issuance and construction projects, and have economic consequences, and are not clearly dictated by state and federal law. The department should consider alternatives to these requirements including:

- The 30 day review should be replaced a requirement to make changes as soon as practicable
- The 14 day review should only apply to changes that relax or remove controls or to large projects (20+ acres or take > 1 year to complete) that have a greater potential to impair water quality
- A thorough review of the ESCP and permit application by DEQ to protect water quality standards in lieu of public review
- The permit should make clear that all public review take place within the 45 day approval time frame
- Retain the existing 30-day public notice requirement and conduct the 14 day public notice within the 30 days instead of proposing a 45 day public preview period (1, 6, 11, 12, 14, 15, 16, 17, 18)

Response: The public review and comment provisions in the permit recommended for adoption apply only to projects that disturb 5 or more acres. For these sites, the department proposes a 14-day public notice and review period on new permit applications and the ESCP. The public review requirements will not take effect until June 1, 2006.

e. DEQ should waive the 45-day/30-day public notice requirements for builders who purchases finished lots from a developer who already has the 1200-C general permit, provided the builder does not relax controls (specific, proposed language included). (16)

Response: If the original permit is obtained for a large parcel of property that is then sold in parts to various builders, the ESCP should be revised. The builder purchasing part of the larger development must apply for coverage under a separate 1200-C permit and would be responsible for compliance as applied to their property.

f. DEQ should not consider a second opportunity for public comments pertaining to the adequacy of the general permit for the construction project because comments on the general permit were already considered when the permit was adopted by the EQC. Public comments should be limited to whether the proposed project qualifies for the general permit and whether the ESPC meets the general permit requirements. (11, 18)

Response: See Response to comment 2.d.

g. The public review process will give environmentalists an opportunity to stall construction projects (1)

Response: See Response to comment 2.d.

h. The 14 day public comment provision is unlawfully short and failure to provide for a public hearing based on any request regarding the ESCP is unlawful. (4)
Response: The public comment provisions in both the permit proposed for public comment and in the permit recommended for adoption do not violate any legal constraints contained in Oregon statutes, rules, or court findings.

i. The detail required in the ESCP is not achievable before the 45 day review period because of the requirement for other agency approvals and potential changes to the plan. (6)

Response: The department has amended and clarified the permit to address processing timeframe concerns. The application and ESCP review requirements will be approved by either the department or Agents, not both. Although the review timeframe in the permit that will be recommended for adoption has been shortened to 30 days, the public review requirements now apply only to construction sites that disturb 5 or more acres, which will reduce the projected number of public reviews by 60 percent.

j. Add language in the Evaluation Report to discourage the public from making comments on a specific BMP because of the possibility of BMP substitution. (7)

Response: See Response in 2.a. above. In addition, the department believes public notice and review has the potential to result in environmental benefits as citizens can provide information on site conditions and considerations that are not known by the department.

k. Delete or clarify the requirement to implement additional BMPs within 24 hours. It is inconsistent with the requirement to submit ESCP revisions at least 30 days prior to implementation of proposed changes. Some corrective measures require more than 24 hours to implement. (6, 9, 18)

Response: The department has amended the permit to clearly state that immediate corrective actions or additional effective BMPs are to be implemented within 24 hours after initial detection, and that approval of needed revisions to the ESCP in the form of an Action Plan is not required. The corrective action provisions require the permit registrant to take immediate actions and then later submit the Action Plan to document the actions taken.

The permit has been amended to address situations where immediate response is not necessary. For those events, the permit registrant must submit the Action Plan to the department for approval within 10 calendar days of the discharge.

l. Limit the 30 day notification requirements only where ESCPs revisions remove or relax controls, not where additional or equivalent controls are proposed. (6, 7, 16)

Response: The permit recommended for adoption does not include requirements for public review of revisions to the ESCP.

m. ESCP revisions to implement more effective controls should not be considered removal or relaxation of controls requiring public review. (18)

Response: See Response to comment 2.l. above.

n. DEQ or its agent should only require that an ESCP be revised if it is inconsistent with the requirement of the permit or is causing or contributing to a violation of water quality standards. (18)

Response: The department has amended the permit to more clearly define when revisions to the ESCP are required with an Action Plan, which is considered an addendum to the ESCP. Instead of submitting a revised ESCP in its entirety, submitting an Action Plan is sufficient to clearly identify any necessary changes (such as type or design) to the BMPs identified in the ESCP, their location, maintenance required, and any other revisions necessary to prevent and control erosion and sediment runoff.

o. Requiring the submittal of revisions 30 days in advance of implementation would be impractical, inconsistent with other permit requirements (24 hour corrective action requirement) and adversely affect water quality because the changes can not be made quickly to respond to changing site conditions. Include language that ESCP must be submitted as soon as practicable and implemented prior to DEQ approval provided the revisions are consistent with other requirements of the permit. (18)

Response: See Response to comment 2.k. above.

p. The 14-day ESCP revision public review period is difficult for DEQ and DEQ agents to provide and will not be environmentally protective. (9)

Response: See Response to comment 2.l. above.

q. A revised ESCP should only be required if the revisions reduce the overall runoff control. (8)

Response: See Response to comment 2.k. above.

r. Submitted revisions to the ESCP are deemed approved if DEQ does not respond in 20 days within the 30 day revision review timeframe. What are the other 10 days for? (8)

Response: The department recommends eliminating public review for revisions to ESCPs. However, the department needs to maintain a record of these changes to ensure the agency possesses a current, approved ESCP. Therefore, the recommended permit requires all ESCP revisions be described in an "Action Plan" that must be submitted to the department for approval 10 days prior to planned implementation of the revisions (unless immediate corrective actions are necessary, as described above). If no response is received from the department within 10 days, the revisions are deemed approved. The Action Plan is a simpler alternative to re-submitting the entire ESCP with the proposed revisions incorporated. The Action Plan is considered an addendum to the ESCP. as required in condition A.4.c.

s. Require that ESCP revisions only be submitted with the required quarterly reports. (17)

Response: In response to comments, the department recommends eliminating the requirement for quarterly reports. The permit also includes a clearer definition of how and when a revision to

the ESCP is needed, and the timeframe for submittal. The permit recommended for adoption states that the permit registrant must submit revisions to the initial ESCP in the form of an Action Plan to the department or Agent at least 10 days prior to implementing the revisions or sooner as required when corrective actions are needed. Approval of the Action Plan by the department prior to implementation of corrective actions is not required. In addition, if the permit registrant does not receive a response on the Action Plan from the department or Agent within 10 days of the Action Plan receipt, the proposed revisions are deemed approved.

t. Remove the requirement for information meetings. The meetings are redundant to 14 day review requirement, provide an opportunity for those that oppose land use to delay or stop projects, and are place undue burden on DEQ and DEQ's agents. (9)

Response: The permit recommended for adoption does not include the requirement for informational meetings. See Response to comment 2.d.

u. It is unclear how DEQ will be able to accommodate information meetings and coordinate with local agents in conjunction with decisions to deny or extend permit coverage. (6)

Response: The permit recommended for adoption does not include the requirement for informational meetings. See Response to comment 2.d.

v. DEQ should conduct information meetings only if 10 or more entities request the meeting, not 10 or more individuals. (17)

Response: The permit recommended for adoption does not include the requirement for informational meetings. See Response to comment 2.d.

3. Permit Compliance Standards, Benchmarks and Limits

a. The condition that states the permittee "may not cause or contribute to a violation of instream water quality standards" is ambiguous. The condition does not inform the permittee how compliance with those standards will be determined. The condition is susceptible to multiple interpretations, and provides an open-ended opportunity for enforcement. If the permittee complies with the ESCP and the permit they should be deemed in compliance with applicable water quality standards, and not be subject to enforcement based on interpretation of how water quality standards are applied. (11, 17, 18)

Response: Although the explicit prohibition on causing a violation of instream water quality standards remains in the proposed permit, the following additional language has been included: "If the permit registrant develops, implements, and revises its ESCP in compliance with Schedule A of this permit, the department will assume that the discharges authorized by this permit will not cause a violation of water quality standards, unless the department obtains evidence to the contrary." In addition, the proposed permit now includes a list of potential actions the department will require if a standards violation were confirmed. In general, the department will likely rely on an adaptive management approach that requires the permit registrant to assess the performance of their best management practices (BMPs) and the

adequacy of their ESCP, and then make the necessary improvements to ensure water quality standards are met.

This new language is intended to provide more certainty to the permit registrants regarding the department's expectations on how to comply with this permit condition. However, the department cannot provide an absolute guarantee that the discharges from all permit registrants will meet instream standards if they are properly implementing their approved ESCP because water-quality based effluent limits have not been developed for the permit. Moreover, the site and receiving stream characteristics of the 1,500 permit registrants vary widely, and thus, conducting the necessary water quality analyses to make blanket assurances in the permit about standards compliance is not feasible.

b. Revise the permit to require that the permit limits be technology based because applying water quality based effluent limits is difficult. If the requirements of the ESCP and the permit requirements are met, the activity is in compliance with the federal Clean Water Act. (6, 9)

Response: If the permit were to rely on technology-based limits, the department would need to prescribe specific BMPs and other stormwater pollution controls. Given the broad diversity of site characteristics and limitations, the department does not believe that a prescriptive approach applied uniformly to all 1,500 permit registrants provides the most effective environmental protection. The current approach of providing flexibility in the development of an ESCP, within an established framework, allows each permit registrant to tailor the BMPs to the needs and opportunities at a specific construction site.

c. Either allow the discharge of all MS-4 authorized non-stormwater discharges or remove all unlikely discharges from the list provided in Schedule A, Section 3b. (7)

Response: The list of allowable non-stormwater discharges has been modified to include additional uncontaminated waters that may be generated at construction sites. This list is consistent with the one contained in EPA's Construction General Permit.

d. Delete or modify Schedule A 3.c. that requires corrective action for all visible discharges. Visible discharges are much higher than the 160 NTU benchmark and the requirement does not consider background conditions or unrelated construction activities. (11, 18)

Response: Condition A.3.b of the permit has been modified to require immediate corrective actions if "significant amounts" of sediment or turbidity are detected, rather than when any "visible" discharge is identified. This modification links condition A.3.b more directly to condition A.3.a, which defines and prohibits the discharge of "significant amounts of sediment." Requiring immediate corrective actions to address such significant discharges is necessary and appropriate. However, the department agrees that immediate corrective measures for discharges of any amount of sediment that may be visible at minimal concentrations are not necessary. Visible discharges that do not meet the "significant amounts" definition are to be documented (as per condition B.3) as part of the visual monitoring procedures, and revisions to the ESCP may occur if the presence of the sediment can be linked to a BMP deficiency.

e. Taking corrective action in response to visible turbidity is inconsistent with the permittee's authorization to discharge stormwater provided all ESCP controls are implemented to minimize

sediment transport. EPA and other states allow for an acceptable level of turbidity. The term "visibly detected" needs to be further defined to provide for the existence of some suspended sediments but also require that the permittee be able to see through the runoff. Also, there is no way to know that the construction site is responsible for causing the turbidity 30 feet downstream. (17)

Response: Condition A.3.b of the permit has been modified to require immediate corrective actions if "significant amounts" of sediment or turbidity are detected, rather than when any "visible" discharge is detected. In addition, the recommended permit in Schedule A.3. has provided a better definition of the conditions that comprise "significant amounts of sediment".

f. Require that corrective actions be accounted for in inspection records rather than requiring a modification of the ESCP. (12)

Response: The department believes that corrective actions should be accounted for in both inspection records and in an Action Plan submitted to the department if the corrective actions result in changes to the ESCP or the methods for implementing the ESCP (e.g., increased inspection frequency). An Action Plan is considered an addendum to the ESCP. Typically, the immediate corrective actions involve the implementation of new BMPs or changes in the way BMPs are installed or maintained. Such changes constitute revisions to the ESCP, and should be documented and submitted to the department. The proposed permit has been modified (condition A.3.b) to clarify these expectations.

g. The 1200-C permit does not require highest and best practicable treatment requirements. (4)

Response: The "highest and best practicable treatment" practices at one construction site may not be the highest and best practices at another site. Given the variability in site characteristics, constraints, and opportunities, the department does not believe a uniform set of prescriptive erosion and sediment control measures for all sites will yield the best environmental outcome at each site. In addition, "treatment" of construction site runoff may often be necessary, but the primary emphasis should be on implementing and maintaining erosion prevention measures. Preventing the detachment of the soil particles is a more effective and efficient approach to protecting surface waters.

h. The 1200-C permit does not protect resident biological communities from construction related stormwater runoff. (4)

Response: The department believes that, in general, if permit registrants develop, implement, and revise their ESCPs in accordance with Schedule A of the permit, violations of in-stream water quality standards will not occur. These standards are protective of all beneficial uses, including resident biological organisms.

i. The proposed permit creates a blanket authorization for "limited duration exceedances of 10% above background" of turbidity criteria. The permit should retain the 10% over background turbidity limit and add requirements for site specific pollutants. (3)

Response: As provided in the permit evaluation report, the department considers the proposed limited duration exceedances appropriate for episodic stormwater discharges and protective of

water quality as long as the discharges do no exceed the benchmarks and other conditions of the 1200-C permit. In addition, the proposed permit now explicitly states that permit registrants cannot cause violations of instream water quality standards, which apply to turbidity and all other regulated pollutants.

j. DEQ is incorrect by stating that the expiring permit does not contain benchmarks or effluent limits; the department's turbidity standard is a numeric standard. (3)

Response: Benchmarks and effluent limits are imposed at the discharge point(s) for the permit registrant's site, while the turbidity standard and other water quality criteria are in-stream compliance standards. Therefore, the department does not consider the reference to the in-stream turbidity criterion in the expiring permit to be an effluent limit.

k. The dilution factor (DF) of 5 is not consistent with the DF of 2 in the 1200-Cols permit. DEQ should collect monitoring data to determine if a DF of 5 is appropriate. (7)

Response: The dilution factor of 5 is consistent with the factor used to determine benchmarks for the 1200-Z industrial general permit. As with those registered under the 1200-Z permit, a significant number of permitted 1200-C sites do not discharge directly to surface waters; rather, stormwater is often discharged to conveyance systems, where it commingles with stormwater from many other sources prior to entering surface waters. The higher dilution factor used to determine the 160 NTU benchmark is reflective of this situation (note: the 303[d]/TMDL requirements in the proposed permit apply to direct discharges to affected waterbodies, as well as those discharges that eventually reach these waterbodies through conveyance systems). A lower dilution factor was used in the development of the 1200-COLS because most of the affected permit registrants discharge directly to the Columbia Slough, rather than being commingled with other runoff prior to entering the Slough.

l. An increase of 30 NTUs over background for 8 hours within 7 days in the proposed permit is in conflict with DEQ's draft turbidity rule requirements. (7)

Response: The Evaluation Report explains how an increase of 30 NTUs over background for 8 hours within 7 days is consistent with the department's draft turbidity rule that has a proposed average protection threshold of 3 NTUs over a 30 day period.

m. Remove the definitions for "significant amounts of sediment" because they cannot be objectively applied or established at levels that can be met with appropriate control practices. (18)

Response: The department has defined the site conditions that would result in the discharge of "significant amounts of sediment." Although a numerically measurable definition is not provided, the site conditions described in the permit are readily identifiable through visual observations.

n. Revise the definitions for "significant amounts of sediment", and revise the visible turbidity detection distance considering that turbidity is visible at 5-7 NTUs. Change the 30-feet downstream compliance distance to 50-feet to be consistent with DEQ's proposed turbidity standard. (6, 7, 9, 11)

Response: As noted in a response to a previous comment, the requirement to take corrective actions (condition A.3.b) when sediment is "visibly detected" has been modified to require such actions be taken when "significant amounts" of sediment have been observed. However, the department believes the definition of "significant amounts of sediment" is adequate and understandable. With regard to the distance downstream where observed significant amounts of sediment would require corrective action (condition A.3.b), the department has changed this distance from 30 feet to 50 feet in the proposed permit.

o. Include landscape watering as allowed in condition A.3.b.for authorized discharges. (18)

Response: Landscape watering has been added to the list of authorized non-stormwater discharges in condition A.3.d. The department added this particular type of discharge, along with others, to ensure consistency with the allowable discharges included in EPA's Construction General Permit.

p. Pre-existing or natural rills and river lets should not be considered evidence of a significant sediment discharge. (12)

Response: The proposed permit does not specifically designate pre-existing natural rills and rivulets as evidence of a significant sediment discharge.

4. TMDLs and 303(d) Requirements

a. Comments to **remove** the turbidity benchmark requirements include:

1. The required benchmark goes beyond EPA's Construction General Permit that does not require limits or benchmarks, the requirement only exists for certain industrial sectors.
2. Water quality would be better protected with less costly and effectively designed control measures – BMPs.
3. It is not needed if BMPs are being implemented, and it discourages effective adaptive management controls.
4. 160 NTUs is not achievable and should not replace existing 10% above background turbidity criteria as an enforceable standard.
5. Just because a TMDL has been developed for a water body, it does not mean that additional controls on stormwater discharges are needed or appropriate. Also, additional requirements in advance of a TMDL are premature. (2, 3, 10, 17, 18)

Response: The following responses are provided for each of the above listed comments:

1. Oregon's TMDL requirements apply to many of the department's water quality programs including NPDES permits. The renewal of this permit will include provisions to meet the TMDL rule for those construction projects located with a waterbody that is listed for sedimentation or turbidity. States can implement more stringent rules and permits than EPA.
2. The turbidity monitoring requirement is optional for construction projects that discharge to 303(d)/TMDL waterbodies listed for turbidity or sedimentation. The department will amend the permit as recommended by revising the ESCP sections of the permit to more

clearly define the categories and types of BMPs available to control sediment and turbidity from construction sites.

3. The conversion from benchmarks to limits has be removed from the final version of the permit. Therefore, 160 NTUs will be a trigger to encourage adaptive management.
4. The 160 NTU condition is a benchmark for discharges leaving permitted sites, and assumes that the site runoff will combine with off-site stormwater discharges prior to entering surface waters of the state. The proposed permit contains no site discharge limits for any pollutants, and the department believes the resources expended on verifying compliance with numeric limits by both the permit registrant and the department would be more effectively spent on implementing best management practices.
5. The department must comply with TMDL requirements and ensure that for waterbodies that are already not meeting water quality standards for turbidity and sedimentation, additional construction site stormwater run-off will not contribute to a violation of instream water quality standards. Therefore additional BMPs are often needed to treat the stormwater prior to discharge to surface waters of the state or to conveyance systems that discharge to surface waters.

b. Comments to remove the provision to **convert** the turbidity benchmarks to limits include:

- A four week "after construction begins" timeframe is not sufficient because it does not allow enough time for adaptive management to determine if new or more effective BMPs are necessary
- If the benchmark becomes a limit, the permittee will not have enough time to implement new and more effective BMPs to avoid enforcement of the new limit
- Benchmark to limits conversions are contrary to the intent of the federal Clean Water Act and the approach endorsed by EPA
- There is no basis for converting benchmark values that are generically applied to construction sites to enforceable limits. DEQ and third parties can take action to enforce requirements or require the permittee to initiate additional measures if benchmarks are exceeded.
- Exceeding a benchmark should trigger an evaluation of additional controls and revisions to the ESCP
- If the provision to convert benchmarks to limits is adopted, DEQ should allow limits to convert back to benchmarks. (6, 11, 12, 18)

Response: The department removed the requirement that a benchmark convert to a limit but retained the benchmark compliance option and the benchmark level of 160 NTUs in the permit recommended for adoption. For construction projects that discharge to 303(d)/TMDL waterbodies listed for turbidity or sedimentation, the department believes that establishing a benchmark promotes adaptive management and will assist in determining the effectiveness of best management practices. Further, the department believes the methodology it used to develop the 160 NTU benchmark is sound, and it has not received data or alternative methodologies from commentors that would cause a re-evaluation of the methodology or the number. However, the conversion of the benchmark to a limit is problematic for short-term activities like construction sites because the time frame for making adaptive management changes prior to the conversion becomes compressed to a few weeks. In such a circumstance, the permit registrant does not realistically have enough time to assess the problem implement corrective actions and measure the results. In addition, the administrative burden on department staff to constantly track the benchmark or limit status of all affected sites could become significant.

c. Use TMDL limits when available on TMDL streams instead of the 160 NTU benchmark. (7)

Response: At this time no TMDL wasteload or load allocations have been set for construction stormwater discharges. However, in those waterbodies that have sedimentation or turbidity listed on the 303 (d) list or TMDLs established, construction projects are a potential source of sedimentation and turbidity and controls must be in place to prevent violation of instream water quality standards.

d. Under Schedule A.2, use the term "current" when describing the date on the 303(d) list instead of "2002". When referring to the TMDL, use "EPA approved TMDL". (5, 18)

Response: The department amended this language in the permit recommended for adoption.

e. DEQ must provide written notice to those that plan to discharge to a TMDL or 303(d) list stream. (18)

Response: In the department's updated permit application guidance document, a website address to the most recently EPA-approved 303 (d) list and TMDLs will be provided.

f. The same standards that apply to 303(d) and TMDL streams should apply to all discharges from construction sites. (2, 3)

Response: The permit recommended for adoption retains the proposed TMDL and 303(d) listed requirements for impaired waters. The permit includes other protection requirements for all other waters of the state, including the provision that discharges cannot violate Oregon water quality standards.

g. The permit must address other construction related pollutant parameters to include nutrients, pH, DDT, metals, etc., and consider the Three Basin Rule basin-specific requirements. (2, 4)

Response: With regard to the Three Basin Rule, OAR 340-041-0350(6)(a) provides a specific exemption from Three Basin Rule requirements for "stormwater construction activities" (NPDES 1200-C and 1200-CA general permits). The department believes that the pollutant parameters the commenter references will be substantially minimized by the best management practices (BMPs) implemented by the permit registrant as per the ESCP and performance requirements in Schedule A of the permit. Given that these BMPs are designed to prevent sediments and sediment-laden runoff from reaching surface waters, and other pollutant parameters (e.g., metals and nutrients) attached to these sediments, the BMPs in the approved ESCP are expected to sufficiently control pollutant loads for those other parameters.

h. Visual inspection is sufficient to monitor turbidity to identify BMP performance instead of expensive monitoring. (10)

Response: The department agrees that visual monitoring is sufficient to determine compliance with permit requirements including the need for corrective actions except for construction sites that discharge to waterbodies that have sedimentation or turbidity listed on the 303 (d) list or

TMDLs. For those waterbodies, the monitoring requirement is one of two options, and more accurately demonstrates whether discharges violate water quality standards for these impaired waters.

5. Erosion and Sediment Control Plan Content, and Best Management Practice (BMP) Requirements

a. Under Condition A.5. add the word "applicable" to the sentence: "Failure to implement any applicable portion of the ESCP constitutes violation..." (18)

Response The permit recommended for adoption retained the condition as is because failure to implement *all* of the ESCP constitutes a violation of the permit, not just a portion.

b. How will a contractor know that their inspector is qualified to follow the ESCP requirements? Are there courses in Oregon or DEQ standards to address this? DEQ needs to define inspector training requirements more clearly, develop an inspector training program, or use EPA Construction General Permit reference for "qualified personnel". Instead of "training in" the inspector should be "generally familiar with" the specified areas of knowledge. (6, 9, 12, 17, 18)
Response: Inspections must be conducted by a person knowledgeable in the principles and practice of erosion and sediment controls, who possesses the skills to assess conditions at the construction site that could impact stormwater quality, who is knowledgeable in the correct installation of the erosion and sediment controls, and who is able to assess the effectiveness of any sediment and erosion control measures selected to control the quality of stormwater discharges from the construction activity.

c. The ESCP should allow for substituted, equivalent measures to control pollutant runoff without a full permit modification. (6,7)

Response: The permit recommended for adoption will not include a re-submittal of the ESCP. See Response to comment 2.s.

d. The permit should provide more detail to clarify the application of BMPs, and should go beyond protection expectations in the absence of TMDLs. (8)

Response: The department will be preparing a state-wide ESCP Preparation Guidance that will provide guidance on the selection and application of BMPs. In addition, the department has developed an **Statewide Erosion and Sediment Control Manual** and related **Inspector Guidance Booklet** in April of 2005, available on the department's website: http://www.deq.state.or.us/wq/wqpermit/ESCManual.htm#ESCM. This manual provides a description of erosion and sediment control BMPs that can be used in an ESCP and that was used in reformatting the ESCP elements section of the recommended permit.

e. The BMP list should be revised; suggestions include removing ponds and wetlands during the construction period, and adding erosion protection BMPs such as mats, tackifiers, and vegetative buffers. (6, 7)

Response: The department amended the required list of treatment BMPs outlined in Schedule A, Water Quality Requirements for TMDL and 303(d) Listed Waterbodies in Option #2, as suggested, by removing the ponds and wetlands BMPs and adding to the list erosion control mats (rolled or blown) BMPs, tackifiers used in combination with perimeter control BMPs, and establishing vegetated buffers sized at 50 feet plus 25 feet per 5 degrees of slope.

f. Clarify the sentence "BMPs must be significantly identified on the ESCP as addressing the condition of the permit" because it does not make sense. (7)

Response: The sentence in Schedule A.2.ii. of the August 22, 2005 public draft proposed permit referenced in your comment has the word "specifically" instead of the word "significantly" and reads as follows: "The selected BMP(s) must be specifically identified in the Erosion and Sediment Control Plan as addressing this condition of the permit."

g. The ESCP should provide a general outline of required control measures, which would leave more flexibility in applying BMPs. (6)

Response: The department revised the ESCP section in the permit to more clearly define the categories and types of BMPs available to control sediment and turbidity from construction sites.

h. DEQ should include BMP selection guidance similar to what is provided for EPA's General Construction Permit or suggest that the BMPs listed are an option if other compatible BMPs are acceptable rather than requiring that the ESCP contain specific required BMPs. The guidance should also address appropriate wet weather BMPs to address greater than 5% slope stability, etc. (17)

Response: The department revised the permit to more clearly define the categories and types of BMPs available for wet weather conditions.

i. In most circumstances, developing the required plan drawing could only be completed by a professional engineer. The detail required ensures numerous DEQ reviews and consequential 30 day waiting periods before changes can be implemented. The requirements for details of storm drain piping, detention ponds and sediment and erosion controls should be removed from the site drawings. (17)

Response: The permit recommended for adoption retained the requirements for the ESCP because this information is necessary for the department to adequately evaluate the ESCP and BMPs to determine if water quality standards will be met.

j. Remove the required ESCP details for catch basins, detention ponds, storm drain piping, identifying cut/fill areas, contours, etc. to allow for consideration of available options to substantively comply with the BMP requirement. (7)

Response: See Responses in 5.g. and 5.i. above.

k. Condition A.4.a. should require that minor BMP substitutions, that do not reduce or remove the control of stormwater runoff, be in the current plan on file and must be available on-site. (7)

Response: The permit recommended for adoption retained the requirements for the ESCP and revisions to an ESCP because this information is necessary for the department to adequately evaluate the ESCP and BMPs to determine if water quality standards will be met. In addition, the department has amended the permit to more clearly define when revisions to the ESCP are required with an Action Plan, which is considered an addendum to the ESCP. Instead of submitting a revised ESCP in its entirety, submitting an Action Plan is sufficient to clearly identify any necessary changes (such as type or design) to the BMPs identified in the ESCP, their location, maintenance required, and any other revisions necessary to prevent and control erosion and sediment runoff.

l. The ESCP BMPs should allow concrete discharge to approved in-ground or above-ground wash out facilities, should provide examples of road access stabilization techniques, and reconsider the training requirements for voluntary recycling. (7)

Response: The permit recommended for adoption retained the requirements for the ESCP and revisions to an ESCP because this information is necessary for the department to adequately evaluate the ESCP and BMPs to determine if water quality standards will be met. Some of the suggested changes in the ESCP BMPs have been made and others not. Concrete discharge to an in-ground facility and above-ground wash-out facilities will need be cleaned and disposed of properly, following the BMPs suggested in the department's **Statewide Erosion and Sediment Control Manual** and related **Inspector Guidance Booklet** in April of 2005, available on the department's website: http://www.deq.state.or.us/wq/wqpermit/ESCManual.htm#ESCM.

m. The requirement for erosion controls in the "direct path of work" should be reconsidered mass grading or demolition activities. (7)

Response: The "direct path of work" condition has been moved in Schedule A.7.c., Required BMPs, Erosion Prevention Methods section to clarify that erosion and sediment control measures need to be installed before any land disturbance and not located within "the direct path of work". This means that these measures should not be installed in any road access locations or in areas where movement of construction equipment is required.

n. The Maintenance BMP Requirements should allow for other bags or equivalent sediment barriers than "biobags", should include an additional requirement for measuring runoff volumes, and allow for off site disposal of sediment. (7, 9)

Response: The department has amended the BMP requirements of the final permit with the following language: "*Other sediment barriers (e.g., biobags), the sediment must be removed before it reaches two inches of accumulation in any area upstream of the sediment barrier(s).*"

o. The permit's allowed flushing of sediment laden runoff, even with control measures in place is not allowed in many local jurisdictions. (7)

Response: The department has amended the permit as recommended with the following language: "*Sediment must not be intentionally washed into storm sewers or drainage ways. Vacuuming or dry sweeping must be used to clean up released sediments.*"

p. If the BMPs for reducing sediment tracking are implemented, could a sediment violation occur because a large amount of sediment left the site from entrances and exits? (16)

Response: The BMPs and other permit conditions in the recommended permit for reducing sediment tracking would not allow or authorize a sediment violation as noted

q. Include the following additional language in Schedule A.6.g.iv. to clarify when a violation of this requirement has occurred: "A violation occurs if the permittee 1) fails to inspect BMPs in accordance with the permit requirements, 2) fails to identify damage to a BMP during an inspection, or 3) fails to conduct a BMP repair within a reasonable time after the need for the repair is discovered during the inspection." (16)

Response: The department has amended the permit to clarify when a violation occurs and actions required. The new language states that the department will assume a permit registrant's stormwater discharges will not violate water quality standards if they develop, implement and revise their ESCP in compliance with permit conditions, unless evidence is obtained to the contrary. This evidence would be based on in-stream water quality monitoring data obtained by the department during a compliance investigation. For instance, samples taken upstream of the site's discharge point could be compared with samples collected downstream of the site to document a standards violation. This condition of the permit also specifies the actions the department may require the permit registrant to take if a determination is made that the registrant has caused a violation of water quality standards. The permit registrant must do one or more of the following:

- Develop and implement an Action Plan, which is considered an addendum to the ESCP, describing ESCP modifications that are necessary to prevent and control erosion and sedimentation discharges to meet water quality standards;
- Submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is meeting water quality standards; or
- Curtail stormwater pollutant discharges to the extent possible and submit an individual permit application.

r. Amend Schedule A.6.g.ix as follows in italics to clarify what it means to stockpile: "At the end of the each workday the soil stockpiles must be stabilized, covered*, or other BMPs must be implemented to prevent such discharges to surface waters*". (16)

Response: The department will be preparing a state-wide ESCP Preparation Guidance that will provide guidance on stockpile erosion, sediment control BMPs and other ESCP required BMPs as additional reference to comply with Condition A.6.

s. The requirement that permittees must include procedures for correct installation and use of all erosion and sediment control measures is redundant and unnecessary and should be removed because the level of detail provided under the description of each control measure is more than adequate. (17)

Response: The permit recommended for adoption retains the requirements and BMPS because these measures are determined adequate and necessary for construction projects to meet water quality standards.

t. Amend Schedule A.7.b.i as follows in italics: "Significant amounts of sediment that leave the site must be cleaned up within 24 hours *from the time the permittee becomes aware of the sediment* and placed back on the site and stabilized or disposed of properly. In addition, the source(s) of the sediment must be *reasonably* controlled to prevent continued discharge within 24 hours *from the time the permittee becomes aware that significant amounts of sediment have left the site."* (16)

Response: The permit recommended for adoption retains the requirements and BMPs because these measures are determined adequate and necessary for construction projects to meet water quality standards.

u. Amend Schedule A.7.b.i to add *"or as soon as practicable"* after the term *"within 24 hours"*. (18)

Response: The permit recommended for adoption retains the requirements and BMPs because these measures are determined adequate and necessary for construction projects to meet water quality standards.

v. Amend Schedule A.7.b.ii by replacing the term *"captured and treated"* with *"controlled"*. (18)

Response: The department will amend the final permit with the following language: "*Sediment must not be intentionally washed into storm sewers or drainage ways. Vacuuming or dry sweeping must be used to clean up released sediments."*

w. "Significant amounts" (of sediment) is vague. Clearly define so the permittee knows when to take corrective action per Schedule b.3, and use the EPA CGP guidance that states that sediment must be removed at a frequency to minimize off-site impacts. (17, 18)

The department has amended the Performance Requirements section of the final permit to clearly define when and what actions are required by the permit registrant if significant amounts of sediment or turbidity are visibly detected in: 1) the discharge to a conveyance system leading to surface waters, 2) the discharge to surface waters 50 feet downstream, or 3) the discharge in surface waters at any location where more than one-half of the width of the receiving surface waters is affected. The permit registrant must immediately, but no later than 24 hours after initial detection, take corrective actions or implement additional effective BMPs until the significant amounts of sediment or turbidity are no longer visually detectable. In addition, the permit registrant must document in inspection records and describe in an Action Plan, which is considered to be an addendum to the ESCP, the corrective actions taken to cease the discharge, if such actions require a change to the ESCP or a change in the method(s) of implementing the ESCP, (e.g., increased inspection frequency). Submit the Action Plan to the department within 10 calendar days of the discharge. Approval of the Action Plan by the department prior to implementation of corrective actions is not required. In addition the Action Plan must be kept onsite.

x. For inactive sites, when must stabilization begin - on the first day or the thirteenth day after construction has ceased? Do these additional stabilization requirements apply if all BMPs remain in place. What does "significant portion of the site" mean? (16)

Response: The permit recommended for adoption retains the requirements for stabilization of inactive sites because these conditions can provide adequate control of sediment and turbidity, unless other measures are necessary as required by the permit.

y. The requirement for temporary covering on sites that are inactive 15 days should be extended to 30 days in dry weather. (8)

Response: The permit recommended for adoption retains the requirements for stabilization of inactive sites because these conditions can provide adequate control of sediment and turbidity, unless other measures are necessary as required by the permit.

z. Add a statement in Schedule A. 6.e.iii: "all areas in the site will be disturbed unless otherwise noted". (16)

Response: The permit recommended for adoption retains the requirements for the Site Map as part of the ESCP because the information/descriptions are necessary for the department to evaluate and approve the ESCP.

a.a. Include language in Schedule A.6.f: "Provide an implementation schedule describing the general timeframe and the anticipated sequence for implementing the BMPs identified in the ESCP". (16)

Response: The permit recommended for adoption retains the requirements for an implementation schedule because this information is necessary for the department to adequately evaluate the ESCP and BMPs to determine if water quality standards will be met.

b.b. Remove the requirement for detailed ESCP implementation schedule altogether because it is unclear how this information would demonstrate the effectiveness of the BMPs or require identifying sequencing of BMP activities only as per EPA's Construction General Permit requirements. (11, 17, 18)

Response: The permit recommended for adoption retains the requirements for an implementation schedule because this information is necessary for the department to adequately evaluate the ESCP and BMPs to determine if water quality standards will be met.

6. Monitoring Requirements

a. The monitoring requirements for turbidity should be deleted because there should be no benchmarks or limits required for turbidity in the permit. (18)

Response: Turbidity monitoring is required as an option to applying additional BMPs to ensure stormwater discharging to waterbodies listed for turbidity or sedimentation do not exceed water quality standards. The permit recommended for adoption retains the 160 NTU benchmark as an option to additional BMPs in the final permit. Also see Response 4.b.

b. Under Schedule B.1, use the term "current" when describing the date on the 303(d) list instead of "2002". When referring to the TMDL, use "EPA approved TMDL". (18)
Response: The permit recommended for adoption has been amended to incorporate the comment.

c. Monitoring should be done by DEQ to compensate for the expense. (1)

Response: The department will be providing one-on-one technical assistance to those permit holders to help them implement the new monitoring requirements, especially in advance of completing the following new guidance documents and fact sheets to better communicate permit requirements:

1. Develop statewide ESCP guidance (available December 30, 2005), including a Plan Approval Checklist, Guidelines for Performing Visual Inspections and an Action Plan template (see Section 5, page 7).
2. Update permit application guidance (available December 30, 2005).
3. Turbidity Sampling Guidance (available April 1, 2006), including a form for logging monitoring results which must be kept on-site.
4. To supplement the written guidance, the department will be providing one-on-one technical assistance to those permit holders to help them implement the new monitoring requirements.

d. Monitoring should be a requirement in all water bodies for all projects with required sampling four times per season. (4)

Response: The department will retain the proposed visual monitoring requirement for all construction projects, except for construction projects that discharge to 303(d)/TMDL waterbodies listed for turbidity or sedimentation. The department considers visual monitoring to be sufficient to determine compliance with permit requirements, including the need for corrective actions in combination with BMP implementation.

e. Remove the turbidity monitoring requirements because monitoring is not required by EPA's Construction General Permit requirements, and discourages the use of cost effective and innovative control measures. (17)

Response: See Response to 6.a. above.

f. Revise sampling requirements from 3 per rain event to consider other option to include:

- Monitor when runoff first commences and once again during the work shift if the runoff continues
- Monitor when runoff first commences and every 6 hours thereafter if the runoff continues
- Require monitoring only during worst case, not minimum, rain event
- Monitor 3 times each week when practical and when stormwater runoff is detectable

(7, 17)

Response: The permit recommended for adoption includes the following monitoring requirements in order to simplify this condition:

Parameter	Minimum Frequency	Monitoring Points	Type of Sample[1]	Test Method[2]
Turbidity (NTU)	At a minimum one stormwater sample that represents the flow and characteristics of the stormwater discharge must be collected at each monitoring point on a weekly basis when stormwater runoff is detectable.	All stormwater discharge points indicated on the site map see A.6.d.xiii, p. 7.	Grab	Field turbidimeter

[1] Occurring during regular working hours at the construction site.

[2] The permit registrant must use sampling procedures, testing methods and turbidity meter calibration methods approved by the department.

g. Visual inspections should only be required during representative or worst case conditions, and should ensure that the control measures are effective, not just working. (8)

Response: See Response in 6.f. above.

h. DEQ needs to clarify inspection requirements for portions of the site that become inactive. (17)

Response: The department has added the following condition to the permit to clarify the inspection requirements for portions of the site that become inactive:
"*Additional BMP Requirements during Inactive Periods*

a. *If all construction activities cease at the site for thirty (30) days or more, the entire site must be stabilized using vegetation or a heavy mulch layer, temporary seeding, or another method that does not require germination to control erosion.*
b. *On any significant portion of the site, if construction activities cease for fifteen (15) days or more, temporary covering with straw or compost mulch or other covering (that is tackified to prevent soil or wind erosion) must occur until work resumes."*

i. Amend the requirement to monitor at each monitoring point because monitoring outfalls from areas identified on the site plan that have not been disturbed is burdensome and unnecessary. (18)

Response: The permit recommended for adoption has been amended to incorporate the comment.

j. Schedule B.2.b. needs to refer to "temporary" erosion and sediment control measures. (9)

Response: The permit recommended for adoption retains the proposed permit condition for visual monitoring of all erosion and sediment control measures since some of the measures used during construction will eventually become permanent measures after construction is completed.

k. Better define the terms "rain event" and "visual inspection". (7)

Response: In Schedule B, Minimum Monitoring Requirements, of the permit the department has replaced the term "rain-event" with "when stormwater runoff occurs" to define when daily visual monitoring must occur. The definition of visual inspection requirements has also been somewhat modified for clarity.

l. Consider using the geometric mean or the median of the entire dataset instead of the geometric mean of the median to make it easy on contractors. (7)

Response: The permit recommended for adoption has been amended to remove this averaging method that applied when a benchmark converted to a limit because the benchmark to limit requirement has been removed from the permit.

m. Monitoring on water quality limited streams is excessive and beyond DEQ's resource to ensure compliance. (6)

Response: See Response to 6.a. above.

n. Consider language found in federal permits to stop construction activities until ground disturbing activity is brought under control. (7)

Response: The department has amended the ESCP preparation section of the permit to more closely correspond to EPA's General Construction Permit, but short of requiring all construction activities to stop. However in that portion of the project where erosion and sediment controls are failing, the permit registrant is required to fix, upgrade or provide other BMPs or actions such as stopping ground disturbing activities.

7. Reporting Requirements

a. The reporting and recordkeeping requirements for turbidity data should be deleted because there should be no benchmarks or limits required for turbidity in the permit. (18)

Response: The permit recommended for adoption does not include the requirement for permittees to submit a quarterly report of any ESCP amendments but is retaining the optional turbidity monitoring requirement, and the requirement that monitoring records be maintained on-site.

b. The recordkeeping requirements in B.3.a.iii ("...within 50 feet of discharge...") are inconsistent with the corrective action requirements in A.3.c. ("...30 feet downstream of the discharge..."). Also, define "significant amounts of sediment" in this schedule and elsewhere in the permit because it is too vague. (18)

Response: The permit recommended for adoption has been amended so that a 50 foot corrective action distance is consistent with the recordkeeping requirement. The proposed permit does describe what "significant amounts of sediment" means in Schedule A.3, which has been reworded for clarity in the final permit.

c. Revise the permit by adding that the monitoring reports must be available in the vehicle of the permit holder since some projects do not have an on-site field office. (16)

Response: The final permit will retain the language "All inspection records and monitoring results must be kept on-site…". These records can be kept in a vehicle as long as the vehicle is at the site of the construction activity.

d. The reporting requirements are unnecessary, and compliance will be difficult for construction personnel. This requirement will create an administrative burden for DEQ without an improvement in water quality. Will DEQ review the quarterly monitoring reports in a timely manner? Require only that records be maintained on-site. (6, 9, 11, 18)

Response: The department agrees with the submitted comments and is not recommending quarterly monitoring requirements in the final permit. The department is retaining the requirements that records must be available on-site, and must be retained for 3 years after project completion to provide a sufficient compliance record of the project.

e. DEQ needs to provide the monitoring and inspection report forms. (16)

Response: The department will develop standard forms for turbidity monitoring. The department has existing guidance for construction site sediment and erosion control that is available hardcopy or on the department's web site that includes a generic inspection report that can be modified as needed for each specific site.

8. Land Use Requirements

a. Permit silent on federal land use planning conflict with state/local land use, that being federal supremacy on federal lands vs. statewide land use planning measures required under state planning law. LCDC has not compiled a list of federal activities that the state can regulate and therefore has no authority under its long term land us planning statute (ORS 197.390). Remove requirement for LUCS on federal projects. (13)

Response: The department must retain the condition in the permit that the activity complies with state land use law.

9. General Conditions

a. Schedule F- General Conditions are for industrial permits, not stormwater permits. (6, 9)

Response: The General Conditions provided in Schedule F apply to all industrial NPDES permits which include General Permits for stormwater, and are consistent with the federal requirement provided in 40 CFR 122.41 that apply to all NPDES permits.

b. Under Section C. 10 *Inspection and Entry*, clarify who is an "authorized representative of the department". Does that include local agents or EPA, and can they require changes to the ESCP when inspecting the site? (16)

Response: Local agents are authorized representatives of the department. The permit specifies that the process for changing the ESCP requires approval of the department or Agent, not EPA. In general, although the department has federal delegation to implement the NPDES permitting program, EPA has federal authority to enter and inspect NPDES permitted sites or facilities in accordance with the provisions in Section C.10 of the permit.

c. Add language at the end of Schedule F. Section D.3., for automatic DEQ approval of a requested transfer of the permit if DEQ does not respond in writing within 30 days from the date of the request. (16)

Response: The permit recommended for adoption retains the proposed Schedule F conditions, and does not include the additional language. The conditions outlined in Schedule F are standard conditions that apply to all industrial NPDES permits as approved by EPA. Section D.3 incorporates the substantive requirements provided in Oregon Administrative Rule 340-045-0045 that specifies the requirements for transferring an NPDES or WPCF permit, in conjunction with the EPA approval process.

d. There are inconsistencies between Schedule F and other permit requirements that should be corrected including:

- Public notice requirements regarding the extent and nature of the discharge if effluent limitations are exceeded
- Flow measurement and monitoring reporting requirements
- Measurement averaging (arithmetic vs. geometric mean) requirements

(17)

Response: NPDES permits include terms and conditions to control source-specific discharges. Many times, these conditions are only applicable to the specific permit and cannot be captured in General Conditions that apply to all NPDES permits. To address this, Condition D.1 specifies that Schedules A through D apply when inconsistent with Schedule F.

10. Reasonable Potential Analysis and Antidegradation

a. The Evaluation Report did not include a Reasonable Potential Analysis for all pollutant parameters associated with construction, specifically turbidity, nutrients (phosphorus), temperature, and pH. (4, 7)

Response: The proposed permit does not authorize violations of state water quality standards. Therefore, there is no reasonable potential to violate these standards and no need to conduct a reasonable potential analysis. If the department determines that a violation of standards has

occurred, the proposed permit describes the requirements the department would impose to ensure standards are met, including corrective action plans and revocation of the general permit. Also, for those waterbodies the department has determined have limited assimilative capacity for sedimentation and turbidity, the proposed permit includes additional requirements to further minimize the likelihood of a water quality standards violation.

b. The Evaluation Report did not include an assessment on impacts to beneficial uses. (4)

Response: See Response in 10.a. above.

c. The proposed 1200-C permit did not include an anti-degradation analysis, or limits and monitoring requirements that require compliance with water quality standards. (4)

Response: The pollutant loads from permitted construction sites are not permanent. The number of permit applications for new construction activity each year is balanced by the cessation of construction activity at sites receiving permit coverage in previous years. Therefore, the only scenario in which a net increase in pollutant loads would occur is if there was an increase in the number of new permitted construction sites on an annual basis throughout the term of the permit. However, the department assumes the number of new applications submitted each year to be relatively stable over the next five years. This assumption is reinforced by recent reports that the demand for housing is leveling off.

The proposed permit prohibits any violations of in-stream water quality standards. The ESCP and performance requirements in the permit are designed to ensure water quality standards will be met. The department does not believe that including numeric discharge limits and associated monitoring for all permitted sites is necessary or will result in greater environmental benefits. To accurately characterize stormwater discharges for the purpose of meeting limits, expensive and complex monitoring would be required. Such emphasis on runoff monitoring will likely divert the focus and resources of both the permit registrant and the department away from BMP design, installation, maintenance and inspection activities, which the department believes are the most effective environmental protection investments.

11. Other General Comments

a. The proposed permit creates an "impermissible self-regulatory scheme" and ensures violation of the federal Clean Water Act. (4)

Response: The permit includes applicable and appropriate terms and conditions to ensure that discharges allowed under the permit will not violate the requirements of the federal Clean Water Act.

b. As provided by DEQ in written materials and public meetings, the proposed permit does not meet the Northwest Environmental Defense Center (NEDC) settlement agreement by failing to provide for a 35 day public comment period, and sampling at least four times per season. (4)

Response: The department considered applicable elements of the NEDC settlement in the proposed and final 1200-C NPDES permit. The permit recommended for adoption is a result of all public comment and is not subject to the terms of the NEDC settlement agreement.

c. DEQ needs to clarify the applicability requirements of the 1200-C (2005) to be consistent with EPA's Construction General Permit that applies to sites that are less than 1 acre but are part of a larger area of 1 acre or more. (17)

Response: The department will include language in the final permit to make it applicable to activities that disturb less than an acre if part of a larger common plan of development that will disturb one acre or more.

d. Waivers for construction sites of 1-5 acres should be allowed and be consistent with EPA provisions provided in 40 CFR 122.26(b)(15)(i), and using EPA guidance for calculating erosion factors. (17, 18)

Response: The permit recommended for adoption does not contain permit requirement waivers due to the difficulty and resource requirements of doing an accurate calculation to determine that the erosivity factor for a site is less than five. Neither the department nor EPA have developed an easy method to calculate this factor. Also, waivers will not be allowed because there is no EPA approved Total Maximum Daily Load analysis to apply the waiver for non-impaired waters.

e. DEQ should delete the term "no potential for discharge", and adopt the termination policy modeled after the EPA Construction General Permit to develop required pre-termination actions. DEQ should not act on a request to terminate until all compliance issues are resolved and should consider a mechanism to ensure erosion and sediment control at the site after the permit is terminated. (8, 17)

Response: The final permit will be modified so that one of the conditions states that there will be "...no *reasonable* potential to discharge a significant amount of construction related sediment..." before the permit is terminated. The department will consider EPA Construction General Permit related documents to incorporate into future permit guidance.

f. The permit should contain criteria for terminating the permit when the homebuilder sells the lot after constructing a home. (16)

Response: The permit applies to the original site described in the ESCP. If a portion of the site described in the ESCP is sold, the permit still applies to the total original site unless the builder or developer revises the ESCP and site plan according to the requirements in the permit. The department will address this situation in future guidance.

g. The requirements in Schedule D.3.a. do not reflect that permitted sites are sold and subdivided yet the developer is still responsible for property they no longer own. The permit needs to allow permit termination when local programs can assume jurisdiction. (9)

Response: See response to comment 11.f.

h. The permit does not address the situation where several homebuilders operate separate lots but storm drains into a common areas maintained by the developer. Each homebuilder should not be responsible for other homebuilders or for the ESCP or application of the common development. Consider a definition for "*common plan of development*" considering that projects are built in phases over a long period of time. (16)

Response: If the original permit is obtained for a large parcel of property that is then sold in parts to various builders, the ESCP should be revised (see Response to comment 11.f., above). The builder purchasing part of the larger development must apply for coverage under a separate 1200-C permit and would be responsible for compliance as applied to their property.

i. Clarify whether cover and soil stabilization under the 1200-C is required for construction projects during the dry season (June - September). (12)

Response: NPDES permits contain requirements to control pollutant discharges as long as the permittee holds the permit. The stabilization requirements apply to year-round stormwater related events, and also to potential erosion caused by the wind that are not necessarily associated with wet weather periods.

j. Guidance needs to be developed so DEQ and DEQ agents administer the permit consistently, and to address various construction scenarios that are interpretive such as the application of the permit to hybrid construction/agricultural facilities and, permit terms like "establishment of vegetation". (9)

Response: The department plans to develop processing and implementation guidance that will address how the permit will be applied and interpreted to apply to various general site anomalies so that plan review and permit assignment is consistent state-wide and as applied by Agents.

k. DEQ agents may decline to issue the 1200-C on behalf of DEQ if changes to the permit are not made to implement it efficiently at the local level. (6, 9)

Response: The department is confident that the requirements in the final permit will not be confusing or a burden for department agents to administer. The department plans to develop guidance with the help of department agents to address administration and interpretation issues after the new permit is adopted.

l. Changing the word "shall" to "must" appears to relax the permit terms. (5)

Response: On the advise of legal counsel, proposed substitutions of the words "must" and "will" for "shall" are retained in the permit recommended for adoption. The substitutions are included to provide clarity and do not relax permit terms.

m. Does DEQ have a tracking or staffing concern regarding compliance with the definition for *"Final Stabilization* because of time required for grass growth before permit sign-off, as an example? (7)

Response: The permittee is responsible to fully stabilize the site before the permit can be terminated, as required under Schedule D 4.l. The department does not intend to do post-

termination inspections, however, non-compliance with this provision in the permit is subject to enforcement, even after the permit is terminated.

n. The definition for *"Outfall"* should require that applicants are responsible for discharges to conveyance systems. (7)

Response: The department agrees that including discharges to conveyance systems within the definition for outfall is difficult, and will delete the definition and the use of the word in the permit to avoid ambiguity.

o. The definition for "*pollution"* should be reworded to address only the pollutants that are common at construction sites. (7)

Response: The word "pollution" is strictly defined in Oregon Revised Statutes and Oregon Administrative Rules. The department consistently uses regulatory definitions if they exist.

p. The definition for *"Rain Event"* is open to interpretation, and could be eliminated. Suggest that DEQ use City of Portland Environmental Services' revised monitoring statements. (7)

Response: The department agrees that the use of the term "rain event" is difficult to quantify and define and has deleted the definition and the use of the word in the permit recommended for adoption to avoid ambiguity.

q. Change the definition of "*Rain Event*" to "*Qualified Rain Event*": a rain event that occurs during normal business hours of the construction project, when personnel are on-site and are able to perform the monitoring. (16)

Response: As provided above, the department will delete the definition of "rain event" including any supplemental language that does not clarify its meaning.

r. The permit should include a definition for *"Visual"*. (8)

Response: The department believes that the term visual is a common unambiguous term that does not need to be included in the permit definitions section. However, the department will develop a fact sheet providing guidance on performing visual inspections.

s. *"Available and reasonable methods"* is open to interpretation in the Performance Requirements section in Schedule A. (9)

Response: The department agrees with the comment and will amend the sentence to read "...available and reasonable methods to include the methods provided listed in Schedule A 7...".

t. Amend "SOURCES COVERED BY THIS PERMIT" on the cover page:

- to apply only to activities that *discharge* to surface waters *of the state.* EPA has no authority to regulate *potential* discharges, and DEQ's authority applies only to waters of the state.
- to recognize that Oregon Administrative rules do no require registration "under *this* permit", construction discharge activities can also be regulated by an individual permit

- to clarify that the permit may involve in-stream and riparian work associated with stormwater discharges
- to reflect that the DEQ 401 certification program is not a regulatory program. (18)

Response: The permit recommended for adoption has been amended to include "surface waters of the state" and add that owners responsible for this activity may also obtain an individual NPDES permit. The department believes that the language referencing other state and federal programs is accurate and will retain that language in the final permit.

u. Amend "PERMITTED ACTIVITIES" on the cover page to clarify that this permit applies to non-stormwater discharges per Schedule A.3. (18)

Response: The department agrees with the comment and will make the change.

List of Commentors and Reference Numbers

Ref #	Name	Organization	Address	City	State/Zip
1	Erik Hellenthal	Citizen	10190 North Umpqua Highway	Roseburg	OR 97470
2	George Nibler	Citizen	195 Indian Creek Road	Boise	ID 83716
3	Ryan Scholz	Citizen	3340 SW Seymour Street	Portland	OR 97239
4	Mark Riskedahl	Northwest Environmental Defense, and Center and Columbia Riverkeeper	10015 SW Terwilliger Blvd.	Portland	OR 97219
5	Doug Quirk	Oregon Clean Water Action Project	212 Pearl Street # 1	Eugene	OR 97401
6	Janet Gillespie	Oregon Association of Clean Water Agencies	537 SE Ash, #12	Portland	OR 97214
7	Dawn Hottenroth	City of Portland, Bureau of Environmental Services	1120 SW Fifth Avenue, Room 100	Portland	OR 97204
8	Lynne Kennedy	City of Gresham, Department of Environmental Services	1333 NW Eastman Parkway	Gresham	OR 97030-3813
9	Eric Rouse	Clackamas County, Water and Environment Services	9101 SE Sunnybrook Blvd., #441	Clackamas	OR 97015
10	Kathy Lehtola	Washington County, Department of Land Use and Transportation	155 North First Avenue, Suite 350, MS 16	Hillsboro	OR 97124-3072
11	Cheryl Koshuta	Port of Portland, Environmental Affairs	121 NW Everett St. Box 3529	Portland	OR 97208
12	Clare Mendelsohn	U.S. Department of the Air Force, Air Force Western Region Office	333 Market Street, Suite 625	San Francisco	CA 94105-2196
13	Doug Clarke	U.S. Department of the Army, Corps of Engineers, Portland District	P.O. Box 2946	Portland	OR 97208-2946
14	Ralph Dunham	Stuntzner Engineering and Forestry	P.O. Box 118	Coos Bay	OR 97420
15	Susanna Noordhoff	Stuntzner Engineering and Forestry	P.O. Box 118	Coos Bay	OR 97420
16	Matthew Knifton	Thompson and Knight, Attorney representing Centex Homes	98 San Jacinto Boulevard, Suite 1900	Austin	TX 78701
17	Jon Chandler	Oregon Home Builders Association	375 Taylor Street, NE	Salem	OR 97303
18	Michael Campbell	Stoel Rives, Attorney representing the Oregon Industrial Stormwater Group (ISG)	900 SW Fifth Avenue, Suite 2600	Portland	OR 97204

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Attachment C

Presiding Officers' Report on Public Hearings

State of Oregon
Department of Environmental Quality **Memorandum**

To: Environmental Quality Commission Date: November 15, 2005

From: Kevin Masterson, Water Quality Division

Subject: Presiding Officers' Report for Rulemaking Hearings in September 2005

Title of Proposal: Amendment of Rules to Renew NPDES 1200-C General Permit

Overview of Public Hearing Dates, Times and Locations

Date and Time	September 22, 2005 at 1:30 P.M.	September 23, 2005 at 1:30 P.M.	September 26, 2005 at 1:30 P.M.
Location	City of Eugene City Council Chambers 777 Pearl Street Eugene, OR	DEQ Headquarters Room 3A 811 SW 6th Ave. Portland, OR	City of Medford City Council Chambers 411 W. 8th Medford, OR

Summary of Public Hearings

EUGENE HEARING: Kevin Masterson, Department of Environmental Quality (DEQ) Water Quality Division, was the presiding officer. After Don Yon from DEQ gave an overview presentation of the draft NPDES 1200-C Permit rulemaking proposal and DEQ staff answered questions from the audience, the formal rulemaking hearing was convened at 2:10 P.M. The hearing was closed shortly thereafter. Two (2) persons attended the hearing. No one provided oral or written comment.

PORTLAND HEARING: Kevin Masterson, DEQ Water Quality Division, was the presiding officer. After Don Yon from DEQ gave an overview presentation of the draft NPDES 1200-C Permit rulemaking proposal and DEQ staff answered questions from the audience, the formal rulemaking hearing was convened at 2:55 P.M. The hearing was then closed shortly thereafter. Eleven (11) persons attended the hearing. No one provided oral or written comment.

MEDFORD HEARING: Kevin Masterson, DEQ Water Quality Division, was the presiding officer. After Don Yon from DEQ gave an overview presentation of the draft NPDES 1200-C Permit rulemaking proposal and DEQ staff answered questions from the audience, the formal rulemaking hearing was convened at 2:20 P.M. The hearing was then closed shortly thereafter. Four (4) persons attended the hearing. No one provided oral or written comment.

Attachment D

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal
for
1200-C (2005) NPDES General Permit Issuance

Relationship to Federal Requirements

Answers to the following questions identify how the proposed rulemaking relates to federal requirements and potential justification for differing from federal requirements. The questions are required by OAR 340-011-0029.

1. **Are there federal requirements that are applicable to this situation? If so, exactly what are they?**

   Yes. The Department is proposing to issue a new 1200-C (2005) National Pollutant Discharge Elimination System (NDPES) General Permit for point sources discharges from construction site activity. Title 40 of the Code of Federal Regulation, Parts 122-125, 130, 131, and 133 for the administration and implementation of the NPDES permit program are applicable to this situation.

2. **Are the applicable federal requirements performance based, technology based, or both with the most stringent controlling?**

   The requirements are both performance-based and technology-based with the most stringent controlling.

3. **Do the applicable federal requirements specifically address the issues that are of concern in Oregon? Was data or information that would reasonably reflect Oregon's concern and situation considered in the federal process that established the federal requirements?**

   Yes, the applicable federal requirements address issues of concern in Oregon. Data and information used to establish the federal requirement can be reasonably assumed to reflect the situation in Oregon. Controlling pollution discharges to surface water in Oregon have the same importance and consequence as water pollution control requirements in all other states.

4. **Will the proposed requirement improve the ability of the regulated community to comply in a more cost effective way by clarifying confusing or potentially conflicting requirements (within or cross-media), increasing certainty, or preventing or reducing the need for costly retrofit to meet more stringent requirements later?**

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The proposed permit provides certainty by limiting discharges from operations subject to the permit through a turbidity benchmark and Best Management Practices (Best Management Practices) in order to ensure there is no reasonable potential to exceed the standard.

The proposed permit,1200-C (2005)is more stringent than the 1200-C permit it replaces, so costs of compliance are likely to be the same or greater. The Department believes this greater stringency is required by federal law as it is likely to be interpreted by the federal Ninth Circuit Court of Appeals. The proposed permit does continue, however, to allow registrants to select or develop their own Best Management Practices or treatment systems designed to meet their specific needs, and to modify these practices or systems to adjust to new information or changing circumstances. Consequently, a permit registrant has the opportunity to use the most cost effective means to comply with permit requirements.

The Department does not believe that either the existing permit or the proposed permit is confusing or includes conflicting requirements.

In addition, the need for costly retrofits to comply with the proposed permit has been reduced or prevented. Most construction projects registered under the existing permit are short term in nature and the Department proposes to administratively extend the existing permit to allow most registrants to complete work on existing construction projects under their currently approved erosion and sediment control management plans.

5. **Is there a timing issue which might justify changing the time frame for implementation of federal requirements?**

The existing 1200-C General Permit is due to expire December 31, 2005. The new 1200-C (2005) permit must be available for new construction projects by that date.

6. **Will the proposed requirement assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth?**

Yes. The Environmental Quality Commission's antidegradation policy combined with the limited 5 year term of the permit are the primary mechanisms in the water quality permitting program for addressing uncertainty and accommodating future growth. The Department believes that because of the increased stringency of the permit, total pollutant loads from permit registrant's project will not increase even assuming normal variation in weather and reasonable growth.

7. **Does the proposed requirement establish or maintain reasonable equity in the requirements for various sources? (level the playing field)**

Yes. The similar management plan-based controls and benchmark for evaluating the effectiveness of plans exists for all stormwater permit registrants. Where significant differences do exist, they are either specifically authorized by the federal Clean Water Act (CWA) Municipal Separate

Stormwater Systems or by the Department by proposing modification under subsequent permit renewals (1200-Z and 1200-COL). Stormwater permit registrants are treated somewhat differently from most permit registrants covered by NPDES industrial wastewater permits or NPDES sewage treatment permits. This disparate treatment is authorized by the federal CWA and the U.S. Environmental Protection Agency (EPA)'s implementing regulations. It is justified because stormwater discharges generally are more variable in nature and difficult to monitor and manage.

8. **Would others face increased costs if a more stringent rule is not enacted?**

   For discharges to water quality limited waters, pollutant loads must be reduced to the extent necessary to comply with water quality standards. If the pollutant load from stormwater discharges is not reduced, additional reductions would be required from other types of dischargers.

9. **Does the proposed requirement include procedural requirements, reporting or monitoring requirements that are different from applicable federal requirements? If so, Why? What is the "compelling reason" for different procedural, reporting or monitoring requirements?**

   The federal CWA and implementing EPA regulations establish only general directives for development of stormwater permits. Each authorized state, or EPA states without authorization, must develop permit terms, including those relating to procedures, reporting, and monitoring that are tailored to the state's own laws, unique conditions, and federally approved water quality standards. The proposed permit does include some provisions that are different from those in EPA developed federal permits applicable to those states that have not been authorized to implement the NPDES program. This federal permit is the subject of pending litigation, however, and the Department believes that the more stringent requirements in the proposed permit are required by federal law as it is likely to be interpreted by the US Ninth Circuit Court of Appeals.

10. **Is demonstrated technology available to comply with the proposed requirement?**

    Yes. Technology is currently available to control turbidity discharges from operations subject to these permits.

11. **Will the proposed requirement contribute to the prevention of pollution or address a potential problem and represent a more cost effective environmental gain?**

    The proposed permit is expected to reduce discharges from construction activities that could add turbidity to water quality limited waters. As previously provided, pollutant loads to these waters must be reduced to the extent necessary to comply with federally approved water quality standards. If the pollutant load from stormwater discharges is not reduced, additional reductions would be required from other types of dischargers. The proposed permit will provide for a more cost effective environmental gain by reducing discharges from construction activities and providing flexibility for the permit registrant to select Best Management Practices that are cost effective and are tailored to the needs of the site while ensuring compliance.

Attachment E

DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal
OAR 340-045

1200-C (2005) NPDES General Permit

Statement of Need and Fiscal and Economic Impact

Title of Proposed Rulemaking
Issuance of new 1200-C **(2005)** NPDES General Permit

Need for the Rule
In Oregon, General National Pollutant Discharge and Elimination System (NPDES) permits are developed to cover minor discharges that have similar processes and will not adversely impact waters of the state if they meet the conditions of the permit. Stormwater runoff from construction activities is regulated by General NPDES Permits. All construction activities disturbing one acre or more of land are currently regulated using the NPDES 1200-C General Permit that was issued in February 2001 and expires on December 31, 2005. Currently, about 1,260 construction projects are covered under this permit.

The Department is proposing a new permit called the 1200-C (2005) to cover new projects beginning after the existing 1200-C permit expires. The Department may not register new dischargers to an expired permit. Therefore, it is important that this permit be issued in a timely manner. Failure to issue the 1200-C (2005) permit by December 31, 2005 would force new construction activities (not previously registered) to be suspended or delayed until the permit is issued.

Documents Relied Upon for Rulemaking
Cost calculations are based on information identified at the following sources: Best Management Practices (BMPs) costs from the Environmental Protection Agency's Construction Site Stormwater Runoff website; Best Management Practices from Stormwater Management Inc. website; rain event statistics from the National Weather Service website; erosion and sediment control policies from the California Environmental Agency, State Water Resources Control Board; and Oregon Administrative Rules Chapter 340, Division 45.

These documents can be reviewed at the Department's office at 811 SW 6th Avenue, Portland. Please contact Don Yon at (503)229-6580 or 1-800-452-4011, x6580 toll-free, inside Oregon for times when the documents are available for review.

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Overview of Fiscal and Economic Impact

Various scenarios of the financial impacts from the proposed revisions can be found in the table in Attachment I at the end of this document.

Potential applicants for this permit include individuals, private developers/contractors and local governments whose services include some form of construction activities. The new 1200-C (2005) permit will be issued to individuals and companies anticipating construction activities. The activity threshold for the permit is the disturbance of one acre or more of land. The primary goal of the permit is to prevent or minimize run-off erosion and retain sediment on-site during construction. There are 1260 projects currently covered by the existing 1200-C permit and an even larger number are expected to be covered by the 1200-C (2005) as more construction projects are initiated over time.

The Department has the authority to issue a NPDES General Permit for a category of waste discharge when an NPDES Individual Permit may not be necessary to protect the environment. The Department issues the general permit for sources with similar operations, activities, and waste effluent. The general permit offers a lower cost alternative to an individual permit and includes standard compliance requirements for all regulated entities, such as appropriate and adequate monitoring requirements, effluent limitations and operating conditions.

This proposed rulemaking will not increase permit fees, but costs for compliance with new conditions in the permit will increase because of additional monitoring requirements, pollution prevention planning, information collection, and reporting than the current permit requires.

The Department is proposing new conditions in the permit that are intended to further define the actions necessary to prevent and control construction site discharges from entering waters of the state. These revisions are also intended to address recent court decisions related to public review of applications and required Erosion and Sediment Control Plans (ESCP) for NPDES General Permit assignments by the Department. The revisions require additional compliance activities of the permit registrant.

The cost of compliance with new permit requirements may vary considerably. Some factors that will determine the cost for compliance include the type of construction activity, the level of employee expertise available to conduct monitoring and other compliance tasks, the costs for training employees, the potential need to hire external contractors or consultants to perform some compliance tasks, and the market driven nature of contractor/consultant costs.

The level of permit compliance related costs is dependent on whether the construction activity occurs in an area that discharges to streams listed as "water quality impaired" for sedimentation or turbidity under the federal Clean Water Act Section 303(d), or streams for which the Department has developed a Total Maximum Daily Load (TMDL) for sedimentation or turbidity. Of the currently 1,260 construction projects now covered under this permit, only 1%, or about 12 projects statewide, are located within waterbodies listed for sedimentation or turbidity based on the Department's 2002 303(d) list. In addition, the Department is not proposing the addition of any

new stream segments for sedimentation or turbidity impairments to the proposed 2004 303(d) list, which is updated every two years based on new water quality data.

For those construction sites not discharging to a sedimentation or turbidity limited waterbody, the additional permit requirements are minimal. These permit registrants with projects located in non water quality-limited areas, are required to submit to the Department quarterly reports on stormwater run-off activity and results of self-inspections, as well as comply with a small number of new plan development requirements.

For those construction sites that will discharge to a sedimentation or turbidity limited stream, the additional permit requirements are more substantial. These permit registrants must either: (Option 1) monitor stormwater run-off (using turbidity meters) and meet a numeric benchmark, or (Option 2) choose to install additional Best Management Practices designed to treat sediment and turbidity in stormwater.

The fiscal impact of this rule amendment is described on the following pages. A lower and upper cost range were determined for both construction sites located within either a water quality-limited (for sedimentation or turbidity) or a non water quality-limited location. The low end cost for a short duration project located near a non water quality-limited river or stream is $6,224 per acre of disturbance. The high end cost for a longer construction project impacting a sedimentation or turbidity limited waterbody is $38,804 per acre of disturbance. Additional details are found in the table in Attachment I.

General Public

The general public may be indirectly affected by the proposal. Businesses could pass the additional compliance costs to consumers in the form of marginally higher prices for goods and services. The potential price impact for most consumers is expected to be minimal given that the majority of projects will be located within a non water quality-limited waterbody. The average expected cost of development of a 6,000 square foot parcel and the construction of a 1,200 square foot detached single family dwelling is approximately $617. The general public will benefit from maintaining water quality for all beneficial uses.

Small Business

The impact of the proposed rule and permit on small businesses is variable. The proposed permit does allow flexibility for the permit registrant to select Best Management Practices tailored to the needs of the site.

In addition, the Department has emphasized technical assistance for small projects (1 to 5 acres of disturbance) since the new federal stormwater regulations for small construction sites became effective in December 2002. The Department plans to continue this implementation strategy for the proposed new permit.

Permit compliance costs for a small development company that has only small projects (one acre) on non water quality-limited construction sites would have the least cost of $6,224 per acre. That cost could increase to $9,004 per acre for a similar size (one acre) and length construction project

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located on a water quality-limited construction site (if the permit registrant chooses the monitoring and numeric benchmark compliance Option 1). It is assumed a small business would not likely be involved with larger construction projects located on water quality-limited construction sites.

Large Business

Large businesses would also have construction activities permitted through the 1200-C (2005) permit. It was assumed a larger business would be more likely to be involved in longer term construction projects, larger acreage projects (up to 20 acres), and projects possibly located on water quality-limited construction sites. The calculated cost for such a project is between $4,110 (Option 1) and $11,283 (Option 2) per acre of disturbance. That would be $2,732 per acre for a similar project located on a non-limited construction site.

Local Governments

Nine municipalities currently administer the 1200-C permit, under agreements with the Department, and will likely continue to administer the 1200-C (2005) for construction activities. These municipalities will have additional requirements as part of their technical review of the application and Erosion and Sediment Control Plans (ESCP) and both technical assistance and compliance inspections.

DEQ

Administering the proposed permit will require more work by DEQ's Water Quality program staff than under the current permit as a result of facilitating public notice for applications, reviewing more complex plans and reports, conducting inspections and ensuring adequate enforcement of the permit. At the same time, the number of projects being covered under this permit is increasing. More contractors and land developers are becoming aware of the Federal requirement (which just recently became effective on December 1, 2002) to obtain a 1200-C permit for projects disturbing one (1) acre or more of land.

Other State Agencies

Only state agencies whose activities that disturb land larger than one acre will be affected. Many of these state agencies (e.g., Oregon Department of Transportation, Oregon Department of Aviation, etc.) are covered by the 1200-CA permit rather than the 1200-C and the new 1200-C (2005) permit. For the few agencies that do have coverage under the current 1200-C and the proposed 1200-C (2005) permits, the fiscal impact could range from marginal to substantial depending on the multiple variables of those projects.

Assumptions

To derive the costs for proposed monitoring, reporting, and plan development requirements for new permit registrants, the Department estimated the average hourly wages for a permit registrant's employees to perform these activities. We used lower hourly cost estimates for routine monitoring activities and higher estimates for activities that are considered to be more technical in nature or which are required to be performed by an individual with professional credentials. Due to the individual nature of each operation, these estimates are examples and might not exactly represent costs for any one specific permit.

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We estimate an average project will last 9 to 24 months. All applicants will pay an initial application payment. Some projects will be required to pay additional annual compliance determination fees if their duration exceeds the coverage of the initial fee.

We expect an individual with technical skills costing approximately $50/hour will complete the permit application and prepare quarterly reports. Both the existing and new permit require that the Erosion and Sediment Control Plans (ESCP) be prepared by an Oregon Registered Professional Engineer, Oregon Registered Landscape Architect, or Certified Professional in Erosion and Sediment Control for construction activities disturbing 20 or more acres. Therefore, we estimate that an individual with these credentials—costing $50-$100/hour—will be required to develop these plans.

We expect visual monitoring and operation of the turbidity meter can be performed by an individual costing approximately $40/hour. For projects that impact 303(d) or TMDL water quality limited waterbodies for sedimentation and turbidity, we expect the implementation of additional treatment Best Management Practices could be performed by a combination of manual laborers, equipment operators and technical staff costing an average of $40/hour. Most of the Best Management Practices are considered "structural" Best Management Practices that are required to be designed or certified by an Oregon Registered Professional Engineer. Thus, the hourly rate for design of the Best Management Practices would be higher than the implementation rates.

We estimate that plan preparation, plan implementation and reporting will take three times longer for projects that impact water quality limited water bodies than for projects that do not.

The capital outlay estimate for the standard Best Management Practices are based on a sediment fence costing $8.00 per linear foot ($6.00 for installation and $2.00 for materials) and site entrance and exit pollution controls ("in/out control") at $1,000 per access. The lower limit is based on a length of sediment fence sufficient to cover 1 side of a square acre (~$208 feet). The upper limit is based on 933 feet of sediment fence (one side of a 20-acre square). The estimate for additional Best Management Practices is based on settling ponds costing $1,100 per acre of drainage in combination with bioswales costing $560 per linear foot.

For the sake of estimating costs, we defined a rain event as a day on which rainfall measured >0.25 inches in a 24 hour period. We estimated—using National Weather Service data for Portland (Attachment II)—that there will be an average of approximately 51 rain events in a 365-day period. The actual number of runoff events will depend on numerous factors, including geographic location in the state, topographic characteristics of the project site, soil characteristics of the site, and other factors.

Housing Cost Impact Statement

The proposed rulemaking could have a financial impact on the cost of development of a 6,000 square foot parcel (7.26 home sites per acre) and the construction of a 1,200 square foot detached single family dwelling. This rule could result in a cost of $376 per home constructed on a large (20 acre), non water quality-limited construction site. The incremental cost would rise to $5,345

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per home constructed on a small (one-acre), water quality-limited construction site. If the development were being done by a small business or homeowner, the total additional compliance costs of the permit would likely be included in the cost of the home.

If the home was one of many homes being built within one large development, the additional compliance costs of the construction permit would only have a marginal impact per home unit built.

Administrative Rule Advisory Committee

A formal advisory committee was not convened while establishing these proposed amendments. Instead, stakeholders were invited to provide input at thirteen "scoping and pre-public comment" meetings. Those meetings were well attended and the many comments, questions, and ideas of those attending related to the fiscal impacts on residential, commercial and industrial construction of the proposed permit conditions were considered and often included in these proposed amendments.

Prepared by	Printed name	Date

Approved by DEQ Budget Office	Printed name	Date

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Attachment I -- Estimated Project Costs for 1200-C(2005) Stormwater Permit

	Required Item or Action	Assumptions	Non-Limited by 303(d) or TMDL		Limited by 303(d) or TMDL	
			Lower	Upper	Lower	Upper
Existing 1200-C Requirements	**Permit Application Payment (Filing-$60, Application-$280, Annual Compliance-$330)**	• Fees do not increase during permit period	$670	$670	$670	$670
	Additional Annual Compliance Fee Payment	• When project period is between one and two years	$0	$330	$0	$330
	Completing application	• Varies based on project size and complexity • 2 – 4 hours @ $50/hr	$100	$200	$100	$200
	Plan preparation	• Varies based on project size/complexity Not limited: 4-16 hours Limited: 12-48 hours • Labor: $50-$100/hr	$200	$1,600	$600	$4,800
	Plan implementation (employee education; record keeping; implementation of best management practices)	• Variable based on project size and current practices • Hours @ $40: Non-limited 2-10 Limited: 6-30	$80	$400	$240	$1,200
		• Capital Outlay: 1. Standard sediment fence = side of square with project area (208-933 linear-feet) @ $8/linear-ft 2. In/Out control, 1-4 access points @ $1,000/access 3. Mulch @ $0-$500/acre	$2,664	$21,464	$2,664	$21,464
	Maintenance & Repair	• 5-20 hrs/month @ $40/hr	$1,800	$19,200	$1,800	$19,200
	Visual monitoring, when runoff occurs during rain event (Note 1,2,3)	• Varies depending on size/complexity, & duration of project • Runoff events: 28-46 for 9-month project; 102 for 24-months • 3 visual checks/event • 10 min (1-acre) to 45 min (20-acre) per check @ $40/hr	$560	$9,180	$560	$9,180
	Subtotal for Existing Requirements *Memo: Cost per acre*		**$6,074** *$6,074*	**$53,044** *$2,652*	**$6,634** *$6,634*	**$57,044** *$2,852*
New 1200-C(2005) Requirements	**Quarterly Reporting (Note 2)**	• Varies depending on size/complexity, & duration of project • 1-4 hours/qtr @$50/hr	$150	$1,600	$150	$1,600
	Option I for 303(d) or TMDL limited areas: Turbidity monitoring during rain events that produces measurable runoff (Note 1,2,3)	• Capital outlay for approved turbidity meter: $800-$2,000/meter	N/A	N/A	$800	$2,000
		• Runoff events: 28-46 for 9-month project; 102 for 24-months • 3 samples/event • 20 min (1-acre) to 90 min (20-acre) per sample @ $40/hr	N/A	N/A	$1,120	$18,360
		• Expanded quarterly training & reporting: 2-8 hours/quarter @ $50/hr	N/A	N/A	$300	$3,200
	Subtotal of New Requirements: Quarterly Reporting + Option 1 (for Limited) *Memo: Cost per acre*		**$150** *$150*	**$1,600** *$80*	**$2,370** *$2,370*	**$25,160** *$1,258*
	Option II for 303(d) or TMDL limited areas: additional best management practices installation and operation (Note 2,3)	• Additional capital outlay: Settling pond ($1,100/proj-acre + bioswales ($560/linear-ft.) • Bioswale linear-ft = 1/4 of side of square with Project Area	N/A	N/A	$30,220	$152,620
		• Expanded oversight and training: 5-20 hrs/month @ $40/hr	N/A	N/A	$1,800	$14,400
	Subtotal of New Requirements: Quarterly Reporting + Option 2 (for Limited) *Memo: Cost per acre*		**$150** *$150*	**$1,600** *$80*	**$32,170** *$32,170*	**$168,620** *$8,431*
	TOTAL Non Limited ***Memo: Cost per acre***		**$6,224** *$6,224*	**$54,644** *$2,732*		
	TOTAL Limited with Option I ***Memo: Cost per acre***				**$9,004** *$9,004*	**$82,204** *$4,110*
	TOTAL Limited with Option II ***Memo: Cost per acre***				**$38,804** *$38,804*	**$225,664** *$11,283*

Notes: 1. Runoff events = days with >0.25" rain
2. Projects last for either 9 months or 24 months (3 or 8 quarters)
3. Project size: 1 acre to 20 acres

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ATTACHMENT II
PORTLAND's DAYS IN A MONTH WITH MEASURABLE RAINFALL

Period of Record...October 1940-June 1999

	Rainfall of 0.01 inch or more					Rainfall of 0.10 inch or more				
Month	Avg.	Most	Year	Least	Year	Avg.	Most	Year	Least	Year
January	17.5	30	1950	2	1985	10.8	21	1953	0	1985
February	15.5	26	1961	8	1995	11.1	22	1961	1	1993
March	17.1	25	1961	5	1965	9.8	18	1945	0	1982
April	14.3	23	1955	4	1951	7.4	17	1955	2	19561
May	11.8	21	1977	4	1947	6.5	15	1977	0	1992
June	8.5	18	1983	2	19871	4.4	12	1947	0	1987
July	4.2	12	1983	0	19841	2	7	1983	0	19941
August	5.3	14	1968	0	19981	2.8	9	1968	0	19981
September	8	17	1941	0	1993	4.6	11	1977	0	19931
October	12	23	19501	1	1987	6.9	17	1947	0	1988
November	18.5	27	1998	8	19761	12.5	22	1973	3	1976
December	18.7	27	19811	7	1985	12.1	19	19811	5	19851
ANNUAL	151.4	186	1950	112	1985	90.6	117	1948,'96	65	1985

SOURCE: National Weather Service Portland, Oregon

[1]Has occurred more than once therefore the most recent year of occurrence is listed.

	Rainfall of 0.50 inch or more					Rainfall of 1.00 inch or more				
Month	Avg.	Most	Year	Least	Year	Avg.	Most	Year	Least	Year
January	3.7	11	1953	0	19851	1.1	5	1956	0	19981
February	2.2	8	1983	0	19971	0.4	4	1949	0	19981
March	1.5	6	1997	0	19941	0.2	2	19831	0	19991
April	0.7	3	19931	0	19991	0.2	1	19961	0	19991
May	0.8			0	19951	0.1	1	19971	0	19991
June	0.7	3	1954	0	19981	0.1	1	19911	0	19991
July	0.3	2	19931	0	19981	~0.0	1	1995	0	19981
August	0.5	3	1976	0	19981	~0.0	2	1977	0	19981
September	0.9	4	1945	0	1997	0.1	1	19961	0	19981
October	1.7	7	1947	0	1998	0.2	3	1994	0	19981
November	3.1	10	1942	0	1993	0.8	3	19841	0	19931
December	4	11	1996	0	19841	1.1	5	1980	0	19971
ANNUAL	20	43	1996	6	1944	4.5	12	1996	1	19521

[1]Has occurred more than once therefore the most recent year of occurrence is listed.

SOURCE: National Weather Service Portland, Oregon

	0.1	0.5	0.25	b	a	9mos incl		18mos incl	
Month	Avg.	Avg.	Avg.						
January	10.8	3.7	7.2	0.373408353	14.11657251	31.3		77.1	
February	11.1	2.2	6.0	0.247144287	16.63596712	28.1	MIN	70.9	
March	9.8	1.5	4.8	0.213115413	15.66786352	29.5		66.3	
April	7.4	0.7	3.1	0.169624138	13.34335804	32.7		63.9	MIN
May	6.5	0.8	3.0	0.190935734	10.97410722	29.6		65.0	
June	4.4	0.7	2.2	0.217594769	6.966928213	39.9		69.4	
July	2	0.3	1.0	0.210845915	3.213713676	42.5		82.4	
August	2.8	0.5	1.5	0.232184673	4.307299177	44.6		87.5	
September	4.6	0.9	2.5	0.245185654	6.916504475	46.1	MAX	90.9	
October	6.9	1.7	4.1	0.285532124	9.79375269	45.8		91.4	MAX
November	12.5	3.1	7.4	0.286876847	17.71320271	42.7		90.3	
December	12.1	4	8.0	0.36136597	15.95756842	36.8		85.1	
ANNUAL	90.6	20	50.8						

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Attachment F

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal
for
Issuance of NPDES 1200-C (2005) General Permit

Land Use Evaluation Statement

1. Explain the purpose of the proposed rules.

DEQ is proposing to issue a new 1200-C (2005) National Pollutant Discharge Elimination System (NPDES) General Permit. The permit covers stormwater discharges from construction sites of one acre or more. The new 1200-C (2005) replaces the 1200-C permit which expires on December 31, 2005, and must be renewed through a rulemaking action as required by Oregon Administrative Rule (OAR) 340-045-0033.

2. Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program?

General Permit 1200-C (2005): **Yes X** **No___**

a. If yes, identify existing program/rule/activity:

General Permit 1200-C (2005): OAR 340-018-030 [Coordination of land use rules]
(5) Water Quality Division:
(e) Issuance of NPDES and WPCF Permits

b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?

General Permit 1200-C (2005): **Yes X** **No___ (if no, explain):**

c. If no, apply the following criteria to the proposed rules.

In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.

General Permit 1200-C (2005): Not applicable

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3. **If the proposed rules have been determined a land use program under 2. above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility.**

General Permit 1200-C (2005): Not applicable

Attachment G

State of Oregon

Department of Environmental Quality Memorandum

Draft Date: August 22, 2005
Revised: December 2, 2005

To: Administrative File – 1200-C NPDES General Permit

From: Don Yon, Water Quality Division

Subject: Evaluation Report for renewal of NPDES 1200-C General Permit for construction activities disturbing one or more acres

INTRODUCTION

BACKGROUND

The Oregon Department of Environmental Quality (department) is proposing to renew the 1200-C National Pollutant Discharge and Elimination System (NPDES) general permit. This permit covers the discharge of stormwater runoff from construction activities including clearing, grading, excavation, and stockpiling that will disturb one or more acres and may discharge to surface waters or conveyance systems leading to surface waters of the state. Also included are activities that disturb less than one acre that are part of a common plan of development or sale, if the larger common plan of development or sale will ultimately disturb one acre or more and may discharge to surface waters or conveyance systems leading to surface waters of the state. The construction activities covered are identical to those identified in 40 Code of Federal Regulations (CFR) §122.26. General permits are developed to cover minor discharges that have similar processes and will not adversely impact waters of the state if they meet the conditions of the permit.

The main goals of this permit are to prevent or minimize erosion and to retain soil and sediment onsite during construction. Most of the conditions in the expiring 1200-C permit are retained in the recommended NPDES 1200-C permit. Some of the previous conditions, however, have been reworded and rearranged for clearer interpretation. The department is proposing some new conditions in the permit that are intended to further define the actions necessary to prevent and control discharges from construction sites that have the potential to enter waters of the state.

APPLICATION PROCESS

Oregon Administrative Rules (OAR) 340-045-0015 and 0033(5) require all owners or operators responsible for these sources to register under this permit or obtain an individual permit. There are approximately 1,500 construction sites currently covered by the expiring 1200-C permit (issued February 2001). Owners or operators of these existing sites who expect their construction activities to continue beyond December 31, 2005 must submit renewal applications by December 31, 2005. If a renewal application is not submitted by this date, the owner or

operator must submit a *new* permit application for activities continuing beyond December 31, 2005. For new activities, applications must be submitted at least 30 days before beginning construction activities unless otherwise approved by the department.

SUMMARY OF KEY CHANGES

For issuance of the 1200-C permit renewal, the department is proposing the following key changes.

PUBLIC NOTICE AND REVIEW CONDITIONS

All new applications and their Erosion and Sediment Control Plans (ESCPs) received after May 31, 2006 for construction activities disturbing five or more acres will be subject to a 14-day public notice and review period. This is a new requirement and the department estimates that 40% of new permit registrants will be affected by this new requirement. This estimate is based on a review of existing permit registrants indicating that approximately 40% of permit registrants are disturbing five or more acres of land. This group of 40% accounts for over 80% of the disturbed land from construction projects covered by this permit. The effective date of June 1, 2006 for this public notice process provides the department time to develop specific internal procedures and to coordinate responsibilities with local government agents.

The department will accept and consider comments on whether the applicant is a proper registrant under the General NPDES Permit and whether the ESCP is adequate related to control erosion and sediment to meet instream water quality standards. Comments related to local land use decisions are outside the jurisdiction of the department.

Details on public notice procedures will be included in the application guidance, rather than in the permit. At this time the department plans to post on its website information on new applications identifying where (either at the department or Agent office) the application and plan can be reviewed by the public. The department will not require electronic copies of application or plans at this time but may in the future.

The department expects public review process to occur as follows:

Step 1: The department or Agent receives the application and ESCP and determines whether the proposed construction activity will disturb five (5) or more acres.

Step 2: Application review.

Step 2a: If incomplete, the plan will be sent back to permit applicant.

Step 3: For sites disturbing five (5) or more acres, the department posts on its website an announcement that the public review period (14-days) has begun and that the application and accompanying ESCP are available in the applicable department regional office or Agent's office for public review and comment.

Step 4: The department or Agent review plan (concurrent with public review).

Step 5: Require revision of plan based on substantive agency and public comments, if necessary.

Step 6: Approve ESCP and application (after end of public review period and plan revisions, if necessary).
Step 7: Send Notification of Registration letter to applicant.

ADDITIONAL REQUIREMENTS FOR DISCHARGES TO IMPAIRED WATERS

More stringent requirements for sites discharging stormwater into waterbodies that are listed for turbidity or sedimentation on the most recent EPA-approved Oregon 303(d) list or that have an established Total Maximum Daily Load (TMDL) for turbidity or sedimentation. Currently, these requirements will impact 1%of the total universe of 1200-C permit registrants. The previous permit stated that the department may establish additional controls for those discharging to water quality limited streams or require application for an individual permit. The new requirements require affected permit registrants to either:

- **Option #1:** Collect and analyze samples for turbidity of stormwater runoff from the construction site as required by condition B.2. and compare the results to the benchmark value of 160 Nephelometric Turbidity Units (NTUs). The benchmark is used to determine if BMPs are effective; it is not an effluent limit. If any stormwater sample exceeds the benchmark, then the permit registrant must evaluate the functioning of BMPs and the adequacy of the ESCP and take corrective actions. If, after such actions have been implemented and sample results still exceed the 160 NTU benchmark, the requirements of Option #2 below must be followed.

- **Option #2:** In addition to the applicable BMPs) required by Condition A.7., implement one or more of the following BMPs to control and treat sediment and turbidity:
  i. Compost berms, compost blankets, or compost socks;
  ii. Erosion control mats (rolled or blown);
  iii. Tackifiers used in combination with perimeter sediment control BMPs;
  iv. Established vegetated buffers sized at 50 feet plus 25 feet per 5 degrees of slope;
  v. Water treatment by electro-coagulation, chemical flocculation, or filtration; or
  vi. Other substantially equivalent sediment or turbidity BMPs approved by the department.

WATER QUALITY STANDARDS

The expiring 1200-C permit states that the goal of the permit is to meet water quality standards.

- The department has tightened requirements by adding an explicit prohibition on causing violations of instream water quality standards. The new language states that the department will assume a permit registrant's stormwater discharges will not violate water quality standards if they develop, implement and revise their ESCP in compliance with Schedule A of the permit, unless evidence is obtained to the contrary. This evidence would be based on instream water quality monitoring data obtained by the department during a compliance investigation. For instance, samples taken upstream of the site's discharge point could be compared with samples collected downstream of the site to document a standards violation. In instances were the department determines that the permit registrant's stormwater discharges are causing a violation of water quality

standards, the department may take an enforcement action for violating the permit and will require the permit registrant to do one or more of the following:

- Develop and implement an Action Plan, which is considered an addendum to the ESCP, describing ESCP modifications that are necessary to prevent and control erosion and sedimentation discharges to meet water quality standards;
- Submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is meeting water quality standards; or
- Curtail stormwater pollutant discharges to the extent possible and submit an individual permit application.

BENCHMARKS

The turbidity benchmark is 160 NTU for 303(d) and TMDL streams listed for turbidity and sedimentation if Option 1 is selected.

EVALUATION OF PERMIT CONDITIONS

The following description of the permit discusses the requirements and conditions for renewal of the permit in comparison with the previous version.

PERMIT COVER PAGE

EXPIRING 1200-C PERMIT

The expiring permit contains two waivers from the permit requirements as follows: The permit registrant can apply for a waiver for sites one to five acres where the operator certifies that a site has a rainfall erosivity factor less than five or when an approved TMDL or equivalent analysis determines that allocations for construction activities for the pollutants of concern are not needed to protect water quality. The operator must submit a certification that the construction activity would take place during a period when the value of the rainfall erosivity factor is less than five. The expiring permit does not include any public notice and review process for new or renewal permit applications and ESCPs.

1200-C PERMIT RENEWAL

The two waivers have been removed from the permits due to the difficulty of both the permit registrant and the department in doing an accurate calculation that a site has a rainfall erosivity factor less than five or when an approved TMDL or equivalent analysis determines that allocations for construction activities for the pollutants of concern are not needed to protect water quality. Neither the department nor the U.S. Environmental Protection Agency (EPA) has developed a rainfall erosivity calculation formula nor an EPA approved TMDL analysis or an equivalent analysis for non-impaired waters. Only a few formal requests for waiver have been submitted by permit registrants due to the difficulty of meeting the waiver requirements and none of the requests have met the criteria for approval; however, the inquiries and requests have taken a significant amount of staff time.

The cover page also provides general definitions and lists schedules that contain the requirements, limitations, and conditions of the 1200-C NPDES general permit. A summary of the permit application and registration requirements follows the cover page. This summary also includes the requirement for the permit registrant to submit a complete copy of the department application form with a complete Erosion and Sediment Control Plan (ESCP) to the department requesting coverage under this permit at least 30 days prior to the planned soil disturbance activity unless otherwise approved by the department.

In addition, a new section "Permit Registration" has been added to the front section of the permit that details the necessary steps to obtain permit coverage. This section also identifies a required 14-day public review period on new permit applications for construction activities that disturb five or more acres as required in as required by condition 4 in the Permit Registration section of the recommended permit. The 14-day public review period begins after the department or Agent has determined that the permit application is complete and the permit application information is made available to the public. The department currently plans to post the public notice on its website, but may use other methods of public notice if circumstances warrant.

SCHEDULE A - LIMITATIONS AND CONTROLS FOR STORMWATER DISCHARGES

EXPIRING 1200-C PERMIT

BENCHMARK AND EFFLUENT LIMITS

The expiring permit does not contain benchmarks or numeric effluent limitations. The department's current turbidity standard allows for no more than a 10%cumulative increase in turbidity above natural stream turbidity as measured relative to a control point immediately upstream of the turbidity causing activity. However, limited duration activities necessary to address an emergency or to accommodate essential dredging, construction or other legitimate activities and which cause the standard to be exceeded may be authorized provided all practicable turbidity control techniques have been applied.

In addition, the expiring permit states that if a TMDL is established for a water quality limited stream and the discharge from construction activities were determined to contribute a significant amount of pollutants of concern, then the general permit assignment could be terminated and an individual or watershed based construction stormwater discharge permit could be issued with appropriate load allocations.

PERFORMANCE LIMITATIONS, EROSION AND SEDIMENT CONTROL PLAN PREPARATION AND SUBMITTAL, EROSION AND SEDIMENT CONTROL PLAN REQUIREMENTS, MAINTENANCE REQUIREMENTS, AND REQUIRED ACTIONS PRIOR TO TERMINATION OF THE PERMIT.

This expiring permit has five distinct requirements:

1. Performance Limitations
2. Erosion and Sediment Control Plan Preparation and Submittal
3. Erosion and Sediment Control Plan Requirements

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4. Maintenance Requirements
5. Required Actions Prior to Termination of the Permit

In the ***Performance Limitations*** section there are several conditions that described clearly observable events that should be prevented from occurring. A failure to prevent these conditions from occurring could result in permit noncompliance and could involve formal enforcement actions.

In the ***Erosion and Sediment Control Plan Preparation and Submittal*** section the expiring permit requires the permit registrant to have the department or Agent approve the ESCP prior to any land disturbance at the construction site. The goal of the ESCP is to primarily prevent or minimize erosion from occurring and secondarily to have controls in place to recapture as much soil as possible that is released from disturbed land during the construction process. The ESCP also contains procedures to prevent spills and to prevent the discharge of pollutants from construction materials and equipment. The ESCP review considers the adequacy of the proposed erosion and sediment control measures to minimize erosion and keep sediment onsite. When appropriate, an onsite evaluation may be conducted as part of the review process to provide proper consideration of existing conditions and proposed control measures.

In addition, this section of the expiring permit recommends that during the period of October through May, excavation and land disturbance should be avoided or minimized. If the permit registrant chooses to continue land disturbance activities within this period, additional wet weather requirements are required in the ESCP. Specifically, additional controls are also required if slopes are greater than 5% and the soils had medium to high erosion potential.

In the permit, the department recognizes that some non-stormwater discharges could be necessary for the completion of construction activities such as, dewatering activities for uncontaminated groundwater, hydrant and potable waterline flushing (refer to the department guidance), and fire fighting activities.

The ***Erosion and Sediment Control Plan Requirements*** section sets out the required controls and additional controls and practices that would be appropriate at a particular site. Specific requirements include the elements that must be included in the ESCP, such as the site description, maps, and site plan details.

In the ***Maintenance Requirements*** section there are requirements for the ESCP to contain procedures that established specific criteria for BMP maintenance. Maintenance requirements include the following:

- Removal of trapped sediment from a filter fence before it reached one third of the above ground fence height;
- Clean or remove sediment from catch basin protection or a sediment basin when the design capacity had been reduced by fifty percent;
- Stabilization to be completed prior to any seasonal stoppage of work or during an extended period of time when the site was closed to construction;
- Appropriate toxic chemical storage and disposal;

- Appropriate application of any nutrients that would be necessary to establish vegetation; and
- Follow approved operation and maintenance procedures if a treatment system was part of the ESCP.

In the ***Required Actions Prior to Termination of the Permit*** section there are required actions to be completed prior to the termination of the permit. These conditions require the removal of all construction materials including temporary erosion and sediment controls and the establishment of vegetative cover so that no bare soil was visible. Another requirement is to submit the department Notice of Termination Form signed by the legally responsible person that certified that the site has met all of the requirements for termination of the permit.

1200-C PERMIT RENEWAL

Schedule A was revised to incorporate clearer direction on compliance with water quality standards, additional requirements for 303(d) listed streams or TMDLs for sedimentation or turbidity, and more detail on ESCP requirements (e.g., more BMPS added, when BMPs need to be implemented, etc.).

WATER QUALITY STANDARDS AS REQUIRED IN CONDITION A.1.

In the Water Quality Standards section, the department clarifies existing language and has added new language to clarify that projects must comply with instream water quality standards and how the department will determine compliance with these standards. The permit clarifies that, unless the department has evidence to the contrary, the department will assume that discharges will not cause a violation of water quality standards if the permit registrant develops, implements, and revises its ESCP in compliance with Schedule A of the permit. This evidence would be based on instream water quality monitoring data obtained by the department during a compliance investigation. For instance, samples taken upstream of the site's discharge point could be compared with samples collected downstream of the site to document a standards violation. If the department determines that a permit registrant's stormwater discharges are causing a water quality standards violation, the permit registrant will be required to do one or more of the following:

1. Develop and implement an Action Plan, which is considered an addendum to the ESCP, describing ESCP modifications that are necessary to prevent and control erosion and sedimentation discharges to meet water quality standards;
2. Submit valid and verifiable data and information that are representative of ambient conditions and indicate receiving water is meeting water quality standards; or
3. Curtail stormwater pollutant discharges to the extent possible and submit an individual permit applications.

This language replaces language in the expiring permit that states that the "ultimate goal" of the permit is to comply with instream water quality standards.

In instances where the department obtains evidence that the permit registrant has caused a water quality standards violation, the department will generally rely on an adaptive management process to ensure that standards are met. Adaptive management involves an evaluation of the

ESCP and existing BMPs by the permit registrant, and the proposal of corrective actions or ESCP modifications identified in the Action Plan designed to improve the quality of runoff discharged from the site. In fewer instances, the magnitude of the standards violations or the nature of the site's discharges are such that the department would revoke coverage under the general permit and require the registrant to apply for an individual permit.

WATER QUALITY REQUIREMENTS FOR TMDL AND 303(D) LISTED WATERBODIES AS REQUIRED IN CONDITION A.2.

The recommended permit includes new water quality requirements for projects that discharge to waterbodies with established TMDLs or 303(d) listings for turbidity or sedimentation. The department has established TMDLs for sedimentation and turbidity for some waterbodies in Oregon. Additional waterbodies are also on the department's most recent EPA-approved 303(d) list because they are water quality-limited for sedimentation and turbidity. Only 1%of the 1,500 currently permitted 1200-C construction projects are located within those waterbodies listed for sedimentation or turbidity. The department is currently updating its 303(d) list but no new turbidity or sedimentation data has been obtained or received for inclusion in the soon-to-be released 2006 303(d) list.

Given that the most significant impacts to surface waters from construction site activity occur as a result of discharges of sediment-laden water, the department believes it is necessary to place additional requirements to limit the impact to these impaired waters and ensure that instream water quality standards are met. There is a well-established and direct connection between construction site activity (without effective erosion and sediment controls) and the levels of sediment loadings in receiving waters. In promulgating its original 1990 federal stormwater regulations, the EPA stated that sediment loading rates from construction sites are typically 10 to 20 times that of agricultural lands, with runoff rates as high as 100 times that of agricultural lands and 1,000 to 2,000 times that of forest lands. Additionally, EPA asserted that over a short period of time, construction sites can contribute more sediment to streams than was previously deposited over several decades (Federal Register, Vol. 55, No.222, November 16, 1990, p. 47992). Thus, runoff from construction sites to waterbodies already impaired for sediment and turbidity can have potentially significant adverse water quality impacts.

For discharges to these TMDL/listed waterbodies, the recommended permit will ensure that stormwater discharges from construction sites will not violate water quality standards if the permit registrant achieves either:

- A water quality based turbidity protection benchmark of 160 NTUs, or
- Employs a technology based protection level through the implementation of specified treatment BMPs.

Additional discussion of these options is provided in the following sections. Regardless of the status of the receiving stream, all owners or operators registered under the recommended 1200-C permit must comply with all ESCP requirements and other permit conditions designed to minimize polluted runoff.

00120

Turbidity Benchmark

Benchmarks are target concentrations that provide permit registrants with the means to measure the success of their ESCPs. The concept of benchmarks was first developed by EPA in their NPDES Stormwater Multi-Sector General Permit, June 1995.

Turbidity is the best measurement of soil discharge because it is a combination of settleable solids, total suspended solids, colloidal suspensions and dissolved materials. The department's current turbidity standard allows no more than a 10%cumulative increase above natural stream turbidity. The standard also allows the department to grant limited duration exceedances beyond the 10%increase provided all practical turbidity control techniques have been applied. A turbidity benchmark of 160 NTUs is proposed for the 1200-C permit renewal that allows for limited duration exceedances of turbidity as long as these control techniques are applied and the overall protection levels for the receiving waterbody is maintained.

The department's evaluation of the appropriate protection level for turbidity that maintains the beneficial use of waters of the state is based on the following considerations:

- Scientific literature and other information regarding duration and magnitude of turbidity exposure and effects to aquatic life, effects to other beneficial uses, such as water supply, safety, aesthetics and recreation;
- Acclimation capability of aquatic organisms to variable conditions, giving credence to a 'relative criteria', allowing increases of human induced turbidity above an ambient condition at a control point upstream of the activity;
- Ambient turbidity conditions, protecting aquatic organisms from increases over a range of background conditions, including periods of high background turbidity, or the clear water conditions that prevail in Oregon waters; and
- Cumulative impacts, with respect to allowing each source increases above conditions already increased by upstream sources, or adding to background levels used as downstream control points for other sources.

Derivation of 160 NTU Benchmark

The derivation of the turbidity benchmarks is based upon existing stormwater data, water quality standards, and research conducted in the Pacific Northwest on the impacts of turbidity upon salmonids and aquatic life. The department considers that the current body of scientific literature demonstrates that the impact of turbidity on aquatic life is dependent upon both the magnitude and duration of turbidity increase. Seasonal storm events can generally be expected to increase stream turbidity as stream flows increase. Stream aquatic life is generally recognized to being adapted to these naturally occurring pulses in turbidity. Storm events and the runoff from construction sites implementing available BMPs are by their nature limited duration events that can increase turbidity above background levels.

The 160 NTU benchmark was developed assuming a 5:1 dilution factor. The 5:1 dilution accounts for higher receiving stream flows typically found during storm events. In addition, stormwater from construction sites often commingles with other sources of stormwater in municipal or private conveyance systems prior to discharge to surface waterbodies. Additional

control or treatment measures may be necessary in situations where the receiving stream flow is less than 5 times the estimated runoff from the permitted site.

The benchmark also includes a consideration that an increase of 30 NTU over background turbidity is protective of aquatic life and water quality. The impact of turbidity on uses is dependent in part on the turbidity concentration and duration. In developing the benchmark, the department assumed turbidity from a well controlled construction site will not result in frequent or extended periods of elevated turbidity (e.g., 8 hours during less than 7 days over a month). A 30 NTU pulse will ensure that beneficial uses will not be impaired based on existing literature summarized by (Newbombe 2003) and the department's literature review.

The background turbidity level of 8 NTU was derived as a median statewide background during wet weather conditions and is based on extensive data analysis. This background level was developed as part of the draft turbidity standard review.

The 160 NTU benchmark is described by the following formula:

Formula : $Tsw = D\Delta T + Tb$

Step 1: $Tsw = 5(30) + 8$

Step 2: $Tsw = 158$ (rounded to 160 NTUs)

Where,

Tsw =160 NTUs	Stormwater Turbidity Benchmark
D = Dilution	Factor of 5 is used which is consistent with dilution used for determining Industrial Stormwater NPDES General Permit's benchmarks such as for the 1200-Z permit.
$\Delta T = 30$ NTUs	As used in the proposed turbidity standard for the allowable incremental increase above background for discharge events of less than 8 hours-- Should represent central tendency (median, geometric mean) of samples collected over 1 month with an assumption that long term average of 3 NTUs above background will still be met. The 3 NTU above background level is considered protective by DEQ for Oregon waterbodies.
Tb = 8 NTUs	Background turbidity which is based on extensive data analysis to derive the median statewide background during wet weather conditions.

It is important to note that benchmarks are not limitations and cannot be enforced as such. If a benchmark is not achieved, the permit registrant must re-evaluate and update their ESCP within 10 days of receiving sampling results.

00122

The department believes that this approach in the recommended permit is consistent with the department's turbidity standard. This standard does allow an exceedance in excess of 10%for essential activities provided all practicable turbidity control techniques are applied with the limitations and conditions of this permit. The permit requires an ESCP be implemented which ensures that turbidity control techniques are applied. Further, as indicated above, the turbidity benchmark is believed to be protective of aquatic resources.

Best Management Practices

The recommended permit authorizes construction activities to occur with limited duration exceedances as long as the BMPs identified in the ESCP, and Action Plans which are considered addendums to the ESCP, and corrective measures are implemented and maintained to prevent erosion and sediment from entering surface waters or to conveyance systems leading to surface waters of the state. The BMPs identified in the ESCP must be designed and implemented to both limit runoff to infrequent events and to prevent the movement of sediment and turbidity offsite. Not all rain events result in runoff, but for those rain events that do result in offsite discharges, the BMPs identified in the ESCP must be implemented and are expected to meet the turbidity standard.

The permit also requires that the registrant implement additional effective BMPs immediately (at least within 24 hours of initial detection) until significant amounts of sediment or turbidity is no longer visually detectable in the discharge, or in the surface waters within 50 feet downstream of the discharge, or in surface waters at any location where more than one-half of the width of the receiving water is affected, or to conveyance systems leading to surface waters. The permit registrant must document corrective measures taken and submit corresponding ESCP revisions in the form of an Action Plan to the department as required in condition A.3.b. and condition B.3.a. and b.

The facilities covered by the 1200-C permit discharge to a variety of receiving streams. While stormwater discharges may contain a variety of pollutants, the department does not expect waterbodies to exceed water quality standards as a result of stormwater discharges from these permitted sources because their discharges are controlled through the permit requirements. Stormwater discharges are not expected to cause a measurable increase in instream temperature because significant discharges occur at a time of year when ambient stream and runoff temperatures are relatively low. The permit also requires pollution prevention practices to prevent exposure of stormwater to hazardous materials.

Proposed Sediment and Turbidity Control Options

All projects must conduct visual inspections of the stormwater discharges as part of the daily BMPs inspection program as required by condition B.1. As previously described, the implementation of at least one of two additional options are required for projects located within TMDL or 303(d) listed waterbodies for turbidity or sedimentation. The permit registrant must implement one of the two following sets of actions:

> **Option #1**: Collect and analyze samples of runoff from the construction site for turbidity per condition B.2. of the permit and compare the results to the benchmark value of 160

NTU. A benchmark is used to determine if BMPs are effective, and it is not an effluent limit. An exceedance of the benchmark triggers an adaptive management process, whereby the permit registrant must evaluate the implementation and maintenance of its stormwater pollution prevention and control practices, as well as its ESCP and any required Action Plan, to determine what corrective measures need to be initiated to reduce turbidity levels. These corrective measures could include repairs and improvements to the existing erosion and sediment control practices, or the implementation of additional BMPs or a modified set of BMPs. If runoff from the site still exceeds the turbidity benchmark after implementing these corrective actions, the permit registrant must implement one or more of the turbidity and sediment treatment measures listed in Option #2 (discussed below).

Option #2: In addition to implementing the ESCP containing the required BMPs in condition A.7., implement one or more of the following BMPs to control sediment and turbidity. The ESCP must include one or more of the following BMPs and be approved by the department prior to implementation:

i. Compost berms, compost blankets, or compost socks;
ii. Erosion control mats (rolled or blown);
iii. Tackifiers used in combination with perimeter sediment control BMPs;
iv. Established vegetated buffers sized at 50 feet plus 25 feet per 5 degrees of slope;
v. Water treatment by electro-coagulation, chemical flocculation, or filtration; or
vi. Other substantially equivalent sediment or turbidity BMPs approved by the department.

The specific BMPs listed in Option 2 are effective in significantly reducing levels of turbidity and total suspended sediments in stormwater flows discharged to surface waters. Some of these BMPs are treatment methods that involve capturing polluted stormwater runoff and using natural or synthetic materials to separate fine sediments from stormwater, thus allowing the water fraction to be discharged without these sediments. Others on the list are erosion prevention methods used on exposed soils to ensure the soil particles do not detach and result in sediment runoff.

The department understands that a significant level of research and testing of new stormwater treatment technologies is now occurring, and therefore, the language in condition A.2.b. ("Option 2") does not preclude the use of alternative control or treatment methods to reduce turbidity and sediment. However, the permit also requires the permit registrant to explain the rationale for selecting an alternate BMPs or any BMPs listed in described in the ESCP. This rationale provides the department or Agent with key information needed to accurately assess whether the selected BMPs are sufficient or appropriate for the site.

PERFORMANCE LIMITATIONS AND EROSION AND SEDIMENT CONTROL PLAN (ESCP) REQUIREMENTS AS REQUIRED IN CONDITIONS A.3 THROUGH A. 8.

For most of this section of the recommended permit, a majority of the conditions are the same but have been re-worded and rearranged for clarity. The noteworthy revisions to the recommended permit include the following:

00124

- The types of stormwater discharges authorized by the permit are explicitly delineated. Discharges from construction site support activities are specifically authorized if certain criteria are met. as required in condition A.3.c.
- Immediate (i.e., within 24 hours) corrective actions are required if significant amounts of sediment or turbidity is visually detected in runoff from the site to stormwater conveyance systems or to surface waters. A timely response to the observed runoff of significant amounts from unanticipated site conditions or a major failure of BMPs is critical for minimizing environmental damage from construction activity. Therefore, prior approval for implementing such corrective measures is not required. However, these measures still must be documented and submitted to the department. as required in condition A.3.b.
- A process for submittal and approval of revisions to the ESCP is established in the recommended permit. Given the dynamic and temporary nature of construction site operations, substantial implementation changes to the BMPs outlined in ESCP can occur within a short time period. The department needs to maintain a record of these changes to ensure the agency possesses a current, approved ESCP. The department proposes to require all ESCP revisions be described in an "Action Plan" that must be submitted to the department for approval 10 days prior to planned implement-ation of the revisions (the exception to receiving prior approval is when immediate corrective actions are necessary, as described above). If no response is received from the department within 10 days, the revisions are deemed approved. The Action Plan is a simpler alternative to re-submitting the entire ESCP with the proposed revisions incorporated. The Action Plan is considered an addendum to the ESCP as required in condition A.4.c.
- A more detailed schedule for ESCP implementation was added to condition A.5 to clarify the necessary steps for installing BMPs.
- The ESCP must identify the person or title, contact information, and experience of the personnel employed (or contracted) by the permit registrant who will conduct site and BMPs inspections. This new requirement is added because it is important to have onsite inspections be conducted by trained and well qualified staff. A site inspection is the primary tool for ensuring that BMPs are adequately installed and maintained and that immediate corrective actions are implemented when erosion is occurring and sediment is moving off site into surface waters of the state or to conveyance systems leading to surface waters as required in condition A.6.b.
- The ESCP site maps now must include additional information regarding the type and location of catch basins, as well as any inlet protection installed at those catch basins as required in condition A.6.d. The department's inspectors determined this additional information was needed to accurately assess whether the ESCP was adequate.
- The "Required BMPs" section in condition A.7. of the recommended permit has been reorganized by category of BMPs (e.g., erosion prevention, runoff controls, sediment controls, etc.). This new organizational structure clearly conveys the importance of implementing a diverse mix of BMPs, rather than just relying on one type of BMPs. Although the permit still provides ample flexibility to the permit applicant in selecting the BMPs most appropriate for construction operation and site conditions (subject to department approval), this section of the permit requires the assessment of a range of BMPs within each category.

00125

SCHEDULE B - MINIMUM MONITORING REQUIREMENTS

EXPIRING 1200-C PERMIT

The expiring permit requires visual monitoring but does not require sampling and analysis of construction site stormwater discharges. The permit registrants are encouraged to consider monitoring to obtain information about the sources and types of pollutants, and to evaluate the effectiveness of BMPs. In addition, the expiring permit requires routine inspection of the site controls so that compliance with the permit can be evaluated by the permit registrant.

All inspection records for an active site and a written record of inspections for an inactive site are to be kept onsite or be maintained with the permittee, and were to be made available to the department, Agent, or local municipality upon request.

1200-C PERMIT RENEWAL

The proposed frequency of visual inspections for active sites and inactive sites will continue to be the same as in the expiring permit as required in condition B.1. In addition, the recommended permit makes clear that the inspection requirements are required for all projects. The recommended permit now includes a specific description of the scope of visual inspections rather than just outlining what inspection information must be documented. Entrance and exit locations have also been added to the list of areas requiring inspection. Sediment tracking from vehicles entering and leaving construction sites is a common problem at permitted sites and the department believes that highlighting it as an area for visual inspection will ensure better compliance.

The recommended permit also adds a section for projects located within TMDL and 303(d) listed waterbodies that are listed for turbidity and sedimentation as required in condition B.2. It requires permit registrants to comply with the following monitoring requirements: Permit registrants subject to the requirements of condition A.2.a. (Option #1) must conduct turbidity monitoring when stormwater run off is detectable using a field turbidimeter, in accordance with department approved sampling methods.

In addition, monitoring must be conducted at each stormwater discharge point indicated on the site map included in the approved ESCP and at other applicable off-site stormwater flows. Sampling must be conducted weekly when runoff is detectable. A minimum of one stormwater sample, which represents the flow and characteristics of the stormwater discharge, from each stormwater discharge point must be collected each week during regular working hours and when runoff is occurring. Assuming a site has several discharge points, collecting more than one sample at each location is often not feasible because the runoff duration time can be quite limited. Further, the department believes a weekly sampling frequency is more appropriate than requiring sampling during each rain event, or during a minimum number of rain events, because it is often difficult to determine when one rain event ends and another begins.

The recommended permit does not require visual or water quality monitoring reports be submitted to the department. However, the following monitoring data, reports and notes must be kept onsite and made available to the department within three (3) working days of a request:

- visual monitoring and, if applicable turbidity monitoring data,
- inspection reports
- corrective actions required and implementation dates, and
- the ESCP and Action Plan(s). .The recommended permit requires this documentation in condition B.3., Recordkeeping Requirements. In addition, all inspection records and monitoring results must be retained for at least three years after project completion.

SCHEDULE C – COMPLIANCE SCHEDULE

EXPIRING 1200-C PERMIT

This section of the expiring permit describes specific due dates for the permit registrants to register applicable treatment systems that were defined under the underground injection control (UIC) program within thirty days after receipt of the permit.

1200-C PERMIT RENEWAL

The UIC registration requirement in Schedule C of the expiring permit has been moved to the cover page of the recommended permit, and new requirements added to Schedule C. The new compliance schedule requirement in Schedule C relates to the implementation of the requirements for discharges to 303(d) and TMDL waterbodies (that are water quality limited for turbidity and sedimentation) described in condition A.2. of the recommended permit. These requirements are potentially substantial for affected permit registrants (1 percent), as they require investments in new erosion and sediment control measures, new monitoring equipment, or both. The acquisition and installation of the new BMPs, and the calibration and appropriate application of the new monitoring equipment will take both set-up and personnel training time.

As a result, the department believes that providing a phase-in time for existing affected permit registrants and those registering for this permit soon after its adoption is appropriate and reasonable. This phase-in time after permit adoption (October 1, 2006-approximately 9 months) will also give the department adequate time to produce and disseminate information regarding the implementation expectations regarding the condition A.2. requirements. Additionally, the department believes the interim erosion and sediment control measures implemented by permit registrants during this short time period will be sufficient to ensure water quality standards are met. Should future listings or TMDLs occur after October 1, 2006, permit registrants have 90 days after the listings or TMDLs are approved by EPA to comply with condition A.2.

SCHEDULE D - SPECIAL CONDITIONS

EXPIRING 1200-C PERMIT

This section of the expiring permit includes conditions related to issuance and renewal of permit coverage, permit registrant's responsibilities to comply with all other permitting and licensing requirements, and definitions.

1200-C PERMIT RENEWAL

The changes to this section are as follows:

- A statement noting that in the event of any inconsistency between Schedules A through D and Schedule F, Schedules A through D will apply.
- The addition of required actions prior to termination of a permit, which was formerly in Schedule A of the expiring 1200-C permit.
- The addition of the following definitions: *Action Plan, Agent, Borrow Areas, Clean Water Act, department, Discharge Point, Erosion and Sediment Control BMPs, Erosion Prevention Methods, Final Stabilization, Geometric Mean, Local Government, Median, NPDES, Non-Stormwater Pollution Controls, Permit Registrant, Pollutant, Pollution, Runoff Controls, Sediment, Site, Source Control BMPs, Stormwater Conveyance, Surface Runoff, Surface Water, TMDL, Underground Injection Control, Waters of the State.*
- The deletion of the following definitions: *Grade, Phasing, Stabilization, Start of Construction.*
- The modification of the following definition: *Turbidity.*
- The references to filing a renewal application and applying for an individual permit were moved to the Permit Registration section of the recommended permit.

SCHEDULE F - GENERAL CONDITIONS

EXPIRING 1200-C PERMIT

This section includes NPDES General Conditions that applied to all types of NPDES permits.

1200-C PERMIT RENEWAL

The permit has been updated to better conform to EPA's NPDES standard conditions. Schedule F includes conditions that describe operation and maintenance, monitoring and recordkeeping, and reporting requirements as they apply to construction activity. These are conditions that have been reviewed by EPA, and are included in all Oregon NPDES General Permits.

00128

U.S. Environmental Protection Agency

Protect the Environment: Work at EPA

Vacancy Information

Hiring Organization:	Environmental Protection Agency
Announcement Number:	Reg 10-DE-2003-0102
Position:	Environmental Protection Specialist
Series/Grade:	GS-0028-09/11
Salary Range:	$40,176.00 TO $63,198.00
Promotion Potential:	GS-11
Duty Location:	1 vacancy in Portland, OR
Opening Date:	07/01/2003
Closing Date:	07/15/2003

U.S. Environmental Protection Agency
Delegated Examining Vacancy Announcement

Environmental Protection Specialist, GS-0028-9/11
Full performance level is GS-11

LOCATION US EPA Region 10
Oregon Operations Office
Portland, Oregon

TRAVEL/RELOCATION EXPENSES Travel, transportation, and relocation expenses ar
authorized and will be paid by the Federal Government.

****PLEASE READ ALL INFORMATION CAREFULLY****

WHO MAY APPLY: Applications will be accepted from all U.S. Citizens. No previous Federal experience is required. Applicants eligible under the Career Transition Assistance Program (CTAP) and the Interagency Career Transition Assistance Program (ICTAP) may apply.

(Current and former Federal employees with competitive status should apply unc
merit promotion announcement, Reg 10-MP-2003-0107, being advertised
concurrently with this announcement). Applicants must apply separately for eac
announcement to receive consideration. There is one vacancy only.

Applicants claiming CTAP/ICTAP eligibility must submit proof that they meet th
requirements of 5 CFR 330.605(a) for CTAP and 5 CFR 330.704 for ICTAP. This
includes providing a copy of the agency notice, their most recent Performance
Rating, and their most recent SF-50 noting current position, grade level, and
location. (FAX #: 206-553-4672) CTAP and ICTAP eligibles will be considered we
qualified if they earn a minimum score of 85 (prior to the assignment of veter
preference points). For more information on CTAP/ICTAP eligibility requirement
please visit http://www.opm.gov/ctap/index.htm.

HOW TO APPLY FOR THIS VACANCY ANNOUNCEMENT

EXHIBIT A3

Resume and application questions for this vacancy MUST be received on-line via EZHire@EPA web site BEFORE midnight Eastern Time on the closing date of this announcement. If you fail to submit a COMPLETE online resume, you WILL NOT be considered for this position. Paper applications WILL NOT be accepted and r for extensions WILL NOT be granted. Unless otherwise stated in this announcem all required supplemental application materials MUST be received by the closir date of the announcement (including Saturdays, Sundays, or government holidays This proof must be sent to either the contact address or fax number identifiec below and must include the announcement number for which applying. (FAX Numbe 206-553-4672) If applying online poses a hardship to any applicant, the Servicing Personnel Office listed on the announcement will provide assistance ensure that applications are submitted online by the closing date. Applicants CONTACT the Servicing Personnel Office PRIOR TO THE CLOSING DATE to speak to someone who can provide assistance for online submission. If you have accessec this announcement from an alternate web site please visit www.epa.gov/ezhire t apply for this position.

Questions regarding this announcement should be referred to the Servicing Personnel Office listed on the announcement.

POSITION INFORMATION

Type of Appointment - Permanent, Full Time
Full Performance Level -- GS-11

This position is located in:
Oregon Operations Office
Portland, Oregon

Incumbent serves as a liaison with the State of Oregon for the implementation the Clean Water Act and related programs by the Department of Environmental Quality (DEQ). This position is located in the EPA Oregon Operations Office, Portland, Oregon, reporting directly to the Oregon Operations Office Director

Duties and Responsibilities - Provides advice and assistance to state and loca governments on matters relating to the development, execution, and monitoring adequate environmental protection plans and programs. Specifically provides technical assistance to DEQ's regulated community Clean Water programs. Serves Grant Project Officer on water program grants. Oversees the development and review of related grant proposals. This specifically includes Clean Water Act Section 106 and 104(b)(3) grant and other Special Appropriation grants. Revie analyzes, and recommends modifications of plans developed by the state to implement various provisions of Federal Clean Water Act program. Reviews, analyzes and coordinates preparation of comments on proposals for new or revis environmental protection regulations and determines their impact. Conducts f inspections to identify/evaluate environmental problems on major/minor federally-owned facilities as well as at Tribal facilities. Responds to publi inquiries and presents training courses to build and maintain understanding of Clean Water Act programs. Coordinates Clean Water Act Environmental Partnersh Agreement negotiations, implementation, and evaluation between DEQ and EPA. Promotes effective communication between Region 10 and DEQ offices, including planning and conducting joint staff meetings, field visits, and management reviews.

This position may require 1-5 days travel per month.

QUALIFICATION REQUIREMENTS

SPECIALIZED EXPERIENCE: All applicants must have one year experience in or directly related to the line of work of this position and has equipped them wi

the knowledge, skill and ability to successfully perform the duties of the position. To be creditable, the specialized experience must have be at least equivalent to the next lower grade. Qualifying specialized experience for thi position includes knowledge of and experience in ecosystem management principl understanding the roles and responsibilities of various EPA programs and other Federal/State agency programs, and the ability and willingness to create and maintain effective working relationships with tribes, other government agencie industry and EPA programmatic staff. If claiming education in lieu of experie college transcripts MUST be attached (copies are acceptable).

At the GS-9 level: Master's or equivalent graduate degree or two full years progressively higher level graduate education (e.g., LL.B. or J.D., in a relev field of study) OR
one or more years of specialized experience equivalent to at least the next lc grade level in the Federal government that included evaluating and analyzing environmental protection programs, policies and/or regulations; applying analytical techniques in resolving problems of environmental protection procec or facts; and communicating information orally or in writing to management.

At the GS-11 level: Ph.D. or equivalent doctoral degree or three full years c progressively higher level graduate education in a relevant field of study OR one or more years of specialized experience equivalent to at least the next lc grade level in the Federal government that included evaluating and analyzing environmental protection programs, policies and/or regulations; applying analytical techniques in resolving problems of environmental protection procec or facts; communicating information orally or in writing to management; and providing guidance and assistance to Federal, state, and/or local governments matters of environmental protection.

Transcripts must be submitted to Human Resources by the closing date of the announcement.

In order to be considered qualified, applicants must demonstrate that they pos specialized experience in their resume and responses to questions.

Additional information can be obtained from the Office of Personnel Management web site, www.opm.gov.

Applicants will be rated on the extent and quality of experience, education, a training relevant to the duties of the position. Eligible applicants will rece a numerical rating based on their responses to the application questions for t position submitted on-line via EZHire@EPA. These responses must be substantiat by your online resume. Applicants who do not respond to the application questi may be rated ineligible.

WARNING! Your answers will be verified against information provided in your on-line resume. Be sure that your resume clearly support your responses to all questions by addressing experience and education relevant to this position. If exaggerate or falsify your experience and/or education, you may be removed frc employment consideration. You should make a fair and accurate assessment of yc qualifications.

EDUCATION REQUIREMENTS

Proof of successful completion of required course work MUST be submitted by th closing date of the announcement.

Education completed in foreign colleges or universities may be used to meet th requirements for this position if you can show that the foreign education is comparable to that received in an accredited educational institution in the Ur

States. It is the responsibility of the applicant to provide such evidence by closing date of the announcement.

TIME IN GRADE Federal employees must meet time in grade within 30 days of closing date of the announcement.

HOW TO APPLY FOR THIS VACANCY ANNOUNCEMENT

Resume and application questions for this vacancy MUST be received on-line via EZHire@EPA web site BEFORE midnight Eastern Time on the closing date of this announcement. If you fail to submit a COMPLETE online resume, you WILL NOT be considered for this position. Paper applications WILL NOT be accepted and requ for extensions WILL NOT be granted.

Unless otherwise stated in this announcement, all required supplemental application materials MUST be received by the closing date of the announcement (including Saturdays, Sundays, or government holidays). This proof must be se to either the contact address or fax number identified below and must include announcement number for which applying. (FAX Number: 206-553-4672).

If applying online poses a hardship to any applicant, the Servicing Personnel Office listed on the announcement will provide assistance to ensure that applications are submitted online by the closing date.

Applicants MUST CONTACT the Servicing Personnel Office PRIOR TO THE CLOSING DA to speak to someone who can provide assistance for online submission. If you h accessed this announcement from an alternate web site please visit www.epa.gov/ezhire to apply for this position.

Questions regarding this announcement should be referred to the Human Resource Unit, Region 10 at the address listed below.

WHERE TO SEND YOUR SUPPLEMENTAL APPLICATION MATERIALS:

Unless otherwise stated in this announcement, all required supplemental application materials must be postmarked by the closing date of the announceme This proof must be sent to the Human Resources Unit, Region10 at the address identified below and must include the announcement number for which applying. Supplemental application materials sent in U.S. Government postage paid envelc will not be considered.

MAILING ADDRESS:

US EPA, Region 10
1200 6th Avenue, OMP-162
Seattle, Washington 98101
(FAX Number: 206-553-4672)

NOTICE FOR DISPLACED EMPLOYEES REQUESTING SPECIAL SELECTION PRIORITY CONSIDERA UNDER EPA'S CAREER TRANSITION ASSISTANCE PROGRAM (CTAP) OR THE INTERAGENCY CAR TRANSITION ASSISTANCE PROGRAM (ICTAP).

Applicants claiming CTAP/ICTAP eligibility must submit proof that they meet th requirements of 5 CFR 330.605(a) for CTAP and 5 CFR 330.704 for ICTAP. This includes providing a copy of the agency notice, their most recent Performance Rating, and their most recent SF-50 noting current position, grade level, and location. (FAX #: 206-553-4672) CTAP and ICTAP eligibles will be considered we qualified if they earn a minimum score of 85 (prior to the assignment of ve preference points). For more information on CTAP/ICTAP eligibility require please visit http://www.opm.gov/ctap/index.htm.

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EPA is an equal opportunity employer. Selection for this position will be bas solely on merit without regard to race, color, religion, age, gender, national origin, political affiliation, disability, sexual orientation, marital or fami status or other differences.

This agency provides reasonable accommodations to applicants with disabilities you need a reasonable accommodation for any part of the application and hiring process, please notify the agency. The decision on granting reasonable accommodation will be on a case-by-case basis.

If applying under a special appointment authority, it is the applicant's responsibility to respond appropriately in the questionnaire as to the authori under which you wish to receive consideration.

Applicants selected for Federal employment will be required to complete a "Declaration of Federal Employment," (OF-306), prior to being appointed to determine their suitability for Federal employment and to authorize a background investigation.

The application contains information subject to the Privacy Act (P.L. 93-579, USC 552a). The information is used to determine qualifications for employment, is authorized under Title 5, USC, Section 3302 and 3361.

Applicants will not be notified of vacancy outcome, but may view the status of this vacancy at Listing of Closed Announcements: http://www.epa.gov/r10earth/jobs.html.

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eZhire EPA

Questions, Comments or Feedback can be directed to Feedback.hr@epa.gov

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SECTION 18 T.3S. R.4E. W.M.

3 4E 18

CLACKAMAS COUNTY

1"= 400'

RICHARD P. YOUNG NO. 42
GEO. CURRIN NO. 41

SEE MAP 3 4E 7

30200

CANCELLED TL'S
2300
2400
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1202
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2002
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29200

28500

N. LINE

D.L.C. NO. 42

NO. 42

HEIRLEY RD.

CO. RD. No. 363

1047.92 FT. FROM NE COR. YOUNG D.L.C.

N.E. COR. RICHARD YOUNG D.L.C. No. 42

N.W. COR. D.L.C. No. 41

1200 0.23Ac.

700 6.35Ac. 28333

601 17.00Ac. 29060

602 4.04Ac.

603 26.83Ac. 29388

500 9.08Ac.

400 8.48Ac. 29544

1203 1.84Ac. 28680

1201 4.00Ac.

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1204 28580

CLIFFVIEW ACRES

2901 1.00Ac. 28841

900 0.28Ac.

1209 5.45Ac. 28505

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1215 BLK 1

1214 HOWARD HEIGHTS 2085

1219 PARCEL II 5.00 Ac. 28936

1210 28942 5.00Ac. PARCEL 12 (500) PARTITION

PARCEL 3 (6.09Ac.)

1991-56 PLAT

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1218 5.95Ac. 28390

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1216 5.00Ac. 29010 PARCEL 1 (5.00 Ac.)

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P.S. 10015

P.S. IN FILE

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RRFF-5/MAO

E.F.U./MAO

108-23

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100 22.09Ac.

S.W. COR. GEORGE CURRIN D.L.C. No. 41

N.W. COR. HUGH CURRIN D.L.C. No. 40

N. LINE D.L.C. No. 41

S. LINE D.L.C. No. 40

E LINE D.L.C. NO. 41

W LINE D.L.C.

EFU

MAP 3 4E 17

This map was prepared for assessment purpose only.

SECTION 18 T.3S. R.4E. W.M.

CLACKAMAS COUNTY

1"= 400'

RICHARD P. YOUNG
GEO. CURRIN

SEE MAP 3 4E 7

28200

29200

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N.E. COR. RICHARD YOUNG D.L.C. No. 42

N.W. COR. D.L.C. No. 41

N.W. COR. D.L.C 42

S.W. COR. GEORGE CURRIN D.L.C. No. 41

N.W. COR. HUGH CURRIN D.L.C. No. 40

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PARTITION PLAT 1993-89

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NO. 42 D.L.C. RD.

NO. 363 RD.

HEIPLE RD.

CLIFFVIEW ACRES

HOWARD HEIGHTS 2085

SE CREST DR.

N LINE D.L.C. No. 42

E LINE NO. 41 D.L.C.

W LINE D.L.C.

N. LINE D.L.C. No. 41

S. LINE D.L.C. No. 40

P.S. IN FILE

P.S. 10075

20' Road Easement

1049.92 FT. FROM NE COR. YOUNG D.L.C.

STATE OF OREGON
COUNTY OF CLACKAMAS } SS

I Ray Erland County assessor of the State of Oregon for the County of Clackamas, do hereby certify that the foregoing copy of assessor map has been by me compared with the original, and that it is a correct transcript therefrom, and the whole of such original, as the name appears on file and of record in my office and in my care and custody.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal this 15 day of Jan, 2004

Ray Erland Assessor
Mary L. Hanks By: Deputy

29500

EXHIBIT C
RESPONDENT

00367

SCENIC RIVERS

30500 3 4E 18

JAN 14 2004 BOOK 32

108-14

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1900 4.11 Ac. 30313 See PS 11085
1901 2.46 Ac.
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1701 3.16 Ac. 30100

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N.W. COR. WM. WADE D.L.C. No. 39
S.E. COR. D.L.C. No. 42
SLY S.W. COR. D.L.C. No. 42
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SEE MAP 3 4E 19
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CLACKAMAS RIVER

108-14

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TBR/MAO

RRFF-5/M

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SEE MAP 3 4E 19

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CLACKAMAS RIVER

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S.W. COR. D.L.C. No. 42

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STATE OF OREGON
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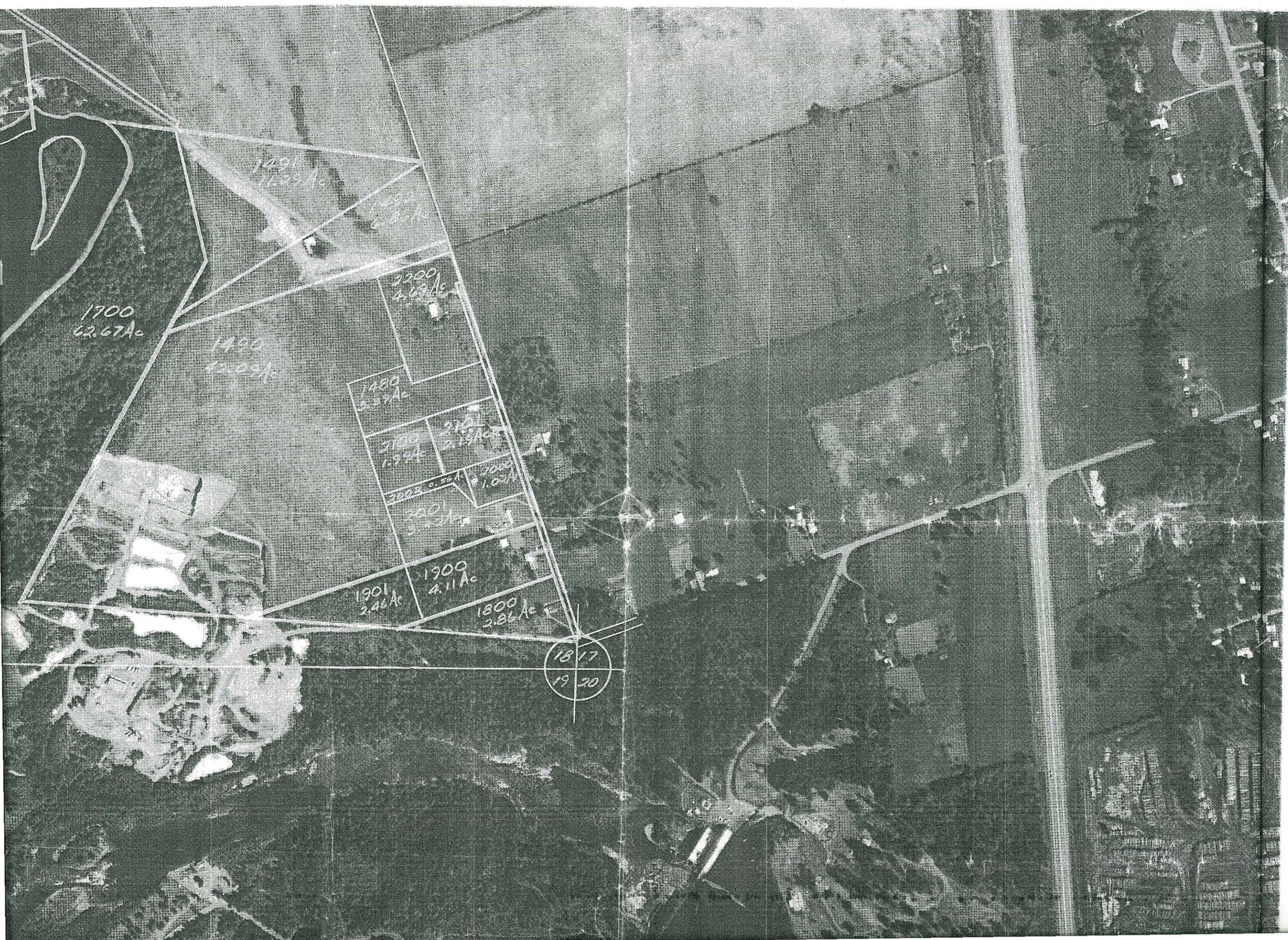
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CLACKAMAS RIVER

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T 4 S R 3 E 18

JAN 15 2002

00368

State of Oregon
Department of Environmental Quality Memorandum

Date: December 22, 2005

To: Environmental Quality Commission

From: Stephanie Hallock, Director S. Hallock

Subject: Agenda Item F, Rule Adoption: Oregon Low Emission Vehicle Rules

Department Recommendation

The Department of Environmental Quality (DEQ) recommends that the Environmental Quality Commission (EQC) adopt temporary rules to require that new light and medium-duty vehicles sold in Oregon meet California motor vehicle emission standards as presented in Attachment A. Adopting temporary rules now would preserve Oregon's opportunity to adopt California standards for the 2009 model year as requested by Governor Kulongoski.

Need for Rulemaking

This proposed rulemaking is part of a joint effort by west coast governors to address global warming and reduce greenhouse gas (GHG) emissions. Motor vehicles represent one of the largest sources of GHG emissions in Oregon. Federal emission laws (currently in force in Oregon) do not require GHG reduction. California vehicle emission standards will curb GHG emissions and provide additional reductions in smog and air toxics. Under the federal Clean Air Act, states can adopt (also referred to as "opting-in to") California vehicle emission standards in lieu of the federal standards.

Adopting California vehicle emission standards by January 1, 2006, would give manufacturers two-year notice required by law, and would allow Oregon to enforce the standards for new vehicles beginning with the 2009 model year, when GHG emission standards first take effect. Since adopting a permanent rule by January 2006 was not feasible, DEQ proposes this temporary rule, valid for 180 days, to be followed by the permanent rule slated for public comment and EQC review in early 2006. In addition, Oregon's temporary rule would allow Washington, which has adopted California vehicle emission standards contingent upon Oregon adoption of the program, to enforce California standards beginning with the 2009 model year.

If the EQC does not adopt the proposed temporary rule, or if the EQC adopts the temporary rule but does not adopt the permanent rule in early 2006, federal vehicle emission standards will continue to apply in Oregon.

Background

Federal law requires states that opt-in to California Emission Standards to do so identically, in order to prevent the need for manufacture of a "third vehicle"—a vehicle that is different from that required by federal law and California standards. However, states do have flexibility to customize *implementation* of the standards. In order to evaluate implementation options and related issues while drafting the

proposed temporary rule, DEQ drew from the following sources, which are discussed in detail below:

- 2004 Governor's Advisory Group on Global Warming
- 2005 Governor's Vehicle Emissions Workgroup
- California Code of Regulations, Title 13, sections 1900 to 2235
- Washington Department of Ecology rules adopting California Motor Vehicle Standards

Early in 2004, Governor Kulongoski appointed business, community, and public leaders to the Governor's Advisory Group on Global Warming to develop a strategy for reducing GHG in Oregon. The group's final report is available online at http://egov.oregon.gov/ENERGY/GBLWRM/Strategy.shtml. An executive summary of the report is included here as Attachment D.

The 2004 report describes specific impacts to human health and Oregon resources that are likely to occur from climate change resulting from GHG emissions. According to the report, the long-term impacts on Oregon citizens, businesses, and environment are likely to be extensive and destructive. Scientists at Oregon and Washington universities project the consequences of global warming in the Pacific Northwest to include increased coastal flooding and erosion, diminished snow pack, reduced river flows in summer, increased river flooding in winter, impacts on farm and forest productivity, increased energy costs, increased pressure on fish and wildlife and harm to human health. The report explains, "Several thousand of the earth's scientists....agree that global warming caused by greenhouse gas pollution from human activities represents a profoundly serious threat to human civilization and to even the most robust and insulated natural ecosystems."[1]

The 2004 Global Warming Advisory Group recognized that Oregon's contribution to the *global* problem of climate change is relatively small. However, greenhouse gas emissions from California, Washington, and Oregon combined make the west coast the seventh largest emitter of GHG globally. Oregon efforts to reduce GHG will add to the collective efforts of other states and nations and will provide national leadership in the prevention of climate change.

The advisory group recommended action in several major areas, including transportation.[2] In response to one high priority recommendation, in August 2005, Governor Kulongoski appointed a variety of business and citizen representatives to the Governor's Vehicle Emissions Workgroup to investigate—but not necessarily reach consensus on—approaches to implementing California Emission Standards in

[1] *Oregon Strategy for Greenhouse Gas Reductions,* Executive Summary, Attachment D, page i.
[2] See Attachment E for a full list of the group's recommended actions to reduce GHG.

Oregon.[3] The workgroup met for 4½ days over a 5-week period and reported their deliberations to Governor Kulongoski on November 2, 2005.[4] Some of the more prominent issues and stakeholder positions discussed in the report are summarized below at "Stakeholder Involvement."

In developing Oregon's proposed temporary rule, DEQ also worked with the Washington Department of Ecology, which is finalizing Washington's Cal-LEV rules, to create uniformity across the two programs. The agencies collaborated to align phase-in schedules and compliance verification methods to the extent possible, in order to create a level playing field for automakers and dealers serving Oregon, Washington, and California.

Effect of Rule

Key features of California's vehicle program and proposed Oregon customizations are discussed at length in the *Governor's Vehicle Emission Workgroup Report* (Attachment C) and are briefly described below.

California vehicle emissions standards are divided into two main sections collectively known as California Low Emission Vehicles or Cal-LEV. One set of requirements reduces GHG emissions from motor vehicles. Those rules are sometimes referred to as the Pavley amendments after California Assemblywoman Fran Pavley who originally sponsored the GHG legislation. The second section reduces emissions of traditional pollutants that are precursors to ground-level ozone (smog) and air toxics. The precursors of ozone include non-methane organic gases (NMOG) and oxides of nitrogen (NOx).[5]

When Cal-LEV's GHG requirements are fully phased in by 2016, new vehicles will be required to emit an average of 30% less carbon dioxide equivalent (CO2E), a measure of GHG emission.[6] These requirements are expected to be achieved with existing technologies that improve new vehicle efficiency. The technologies include turbo charging, cylinder deactivation, variable valve lift and timing, low-leak air conditioning, continuously variable transmissions, direct fuel injection, and electric power steering.[7]

The second set of Cal-LEV requirements will lower emissions of traditional pollutants that lead to ground-level ozone (smog). In 2020, these requirements will lower NMOG emissions from new vehicles 12% to 21% and lower NOx approximately 30% more than federal vehicle emission requirements. The rules will also reduce air toxics from new vehicles by 22% to 38%.[8]

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[3] See *Governor's Vehicle Emission Workgroup Charter,* Attachment B, for more information.
[4] See *Governor's Vehicle Emission Workgroup Report,* Attachment C, for more information.
[5] See Attachment C, pages 9 to14, for more information.
[6] See attachment C, pages 23 to 28, for more information.
[7] See attachment C, pages 80 to 82, for more information.
[8] See attachment C, pages 23 to 28, for more information.

The Cal-LEV requirements include a subsection intended to stimulate the development of new technologies for Zero Emission Vehicles (ZEV), including battery/electric and hydrogen fuel cell vehicles. California has modified the ZEV requirements several times, since they were first adopted, to respond to slower-than-expected development of true zero emission vehicle technologies. Currently, California Air Resources Board (CARB) has provided manufacturers flexibility to meet the ZEV requirements by producing Partial Zero Emission Vehicles (PZEVs) and Advanced Technology Partial Zero Emission Vehicles (ATPZEVs), both of which produce very low amounts of pollution and are technologically feasible today.[9]

As noted above, any state opting in to California vehicle standards must adopt requirements virtually identical to California's. However, opt-in states have flexibility in the way they implement the standards. In most respects, DEQ's proposed temporary rule adopts California standards by reference. However, it includes the following custom features, which will be discussed in more detail at "Key Issues" below:

- Tailored exemptions and phase-in provisions.
- Modified compliance date for fuel cell vehicles used in Oregon.
- Modified extended warranty requirements for PZEVs.[10]

Stakeholder Involvement

Discussions between key stakeholders on the Governor's Vehicle Emissions Workgroup informed DEQ development of the proposed temporary rule. Some of the more prominent issues and stakeholder positions discussed in the *Governor's Vehicle Emissions Workgroup Report* (Attachment C) are summarized below.

Benefits of Oregon Low Emission Vehicles (LEV): The Alliance of Automobile Manufacturers and the Oregon Auto Dealers Association argue that adopting Cal-LEV in Oregon will not reduce greenhouse gas emissions enough to affect global warming. The Oregon Environmental Council, Better World Club, and Northwest Automotive Trades Association argue that Oregon should adopt Cal-LEV to address greenhouse gas emissions and get the additional benefit for smog and toxics. All workgroup participants agreed that, for smog and toxics, Cal-LEV provides an incremental additional reduction beyond the federal standards; however, there was disagreement over the significance of that additional benefit.[11]

Costs: The Alliance of Automobile Manufacturers argues that California GHG rules

[9] See attachment C, pages 49 to 59, for more information.
[10] See attachment C for more information on the following: Warranties, page 39; ZEV/PZEV, page 49; Exemptions, page 60; Phase-in provisions, page 62.
[11] See attachment C, pages 29 to 32, for more information.

will increase the initial purchase price of California-compliant cars by as much as $3,000 and will not be economical for Oregon consumers. CARB estimates that the rule could increase the initial cost of a vehicle by up to $1,000 by 2016 but would produce a net savings to consumers in reduced fuel costs.[12]

Diesel Vehicle Availability: The Alliance of Automobile Manufacturers argues that passenger diesel vehicles (such as Mercedes, Volkswagen and Jeep Liberty) will not be able to meet California emissions standards. CARB, however, disagrees. Based on its discussions with auto makers, CARB argues that diesel vehicles will be able to meet the California standards in 2009[13]. On a related issue, the Oregon Environmental Council argues that the use of bio-diesel fuel in Oregon would not be jeopardized by adopting the California standards. Heavy-duty trucks, construction equipment, and other users, which are the chief market for bio-diesel, are not covered by the Cal-LEV requirements.[14] Also, diesel passenger vehicles that are covered by Cal-LEV will be able to use bio-diesel fuel.

Zero Emission Vehicles (ZEV): The workgroup discussed whether Oregon should adopt the Zero Emission Vehicle (ZEV) requirement of the Cal-LEV standards, which rely heavily on vehicle technology advancements. All participants agreed that requirements to use hydrogen fuel cell ZEVs in Oregon, beginning in 2012, should be considered with caution, due to the need to develop a hydrogen-refueling infrastructure. The Washington Legislature excluded the ZEV requirements from Washington's program, but the Washington Department of Ecology plans to ask the Legislature to restore the requirements. The Alliance of Automobile Manufacturers argues that the ZEV program should not be implemented in Oregon. However, the Oregon Environmental Council, Flexcar, and Oregon Business Association argued that current uncertainties with fuel cell vehicles should not preclude the ZEV requirements. The workgroup also discussed the pros and cons of Oregon-specific modifications to the ZEV program.[15] The proposed temporary rule includes an Oregon-specific ZEV program that would delay requirements for fuel cell vehicles until the hydrogen fueling infrastructure is available in Oregon. (See "Key Issues" below for more information.)

Extended Vehicle (PZEV) Warranty: While ZEV technology is developing, California allows manufacturers to meet the ZEV standard by substituting some partial zero emission vehicles (PZEV) and advanced technology PZEVs (ATPZEV) for true ZEV vehicles. California requires manufacturers to give purchasers of PZEVs and ATPZEVs an extended (15 year/150,000 mile) warranty on emission control systems as compared to the 8 year/80,000 mile federal warranty. The

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[12] See attachment C, pages 41 to 42, for more information.
[13] See attachment C, pages 44 to 47, for more information.
[14] See attachment C, pages 47 to 48, for more information.
[15] See attachment C, pages 55 to 59, for more information.

Northwest Auto Trades Association, representing independent auto repair facilities, argues that the extended warranty would hurt its members, because a large percentage of auto repair is related to emission control equipment, and extended warranty work would have to be done by vehicle dealers as opposed to independent repair shops. The Northwest Auto Trades Association and Oregon Auto Dealers Association argued that the PZEV warranty requirement should be removed. Several workgroup members argued that the extended warranties should be required to better ensure on-going emission reduction and as a consumer benefit.[16] The proposed temporary rule excludes the extended PZEV warranty but requires manufacturers to provide PZEV vehicles to Oregon that are as durable as those provided in California. However, the proposed rule does retain the extended 10-year warranty for batteries used in some ATPZEVs (hybrid electric vehicles) to ensure that consumers do not have to pay for replacement batteries during the warranty period.
(See "Key Issues" below for more information.)

Compliance and Enforcement: Six of eight opt-in states enforce Cal-LEV by denying vehicle registration and titling for any new vehicle that is not California compliant. Under current statutes, Oregon DMV does not have authority to deny vehicle registration for noncompliant cars.

The Alliance of Automobile Manufacturers and the Oregon Auto Dealers Association argue that the Cal-LEV program should not be adopted in Oregon without DMV authority for registration denial. Auto dealers expressed concern that they might lose sales to out-of-state dealers (supplying non-compliant vehicles), unless those vehicles would be denied Oregon registration. Other workgroup members recognized the benefits of registration denial but supported adopting the Cal-LEV standards using alternate methods of compliance verification. They argued that effective compliance verification could be achieved without registration denial through a combination of record reviews, dealer outreach, and inspections. The workgroup recommended that the Governor seek legislative authority in the future to deny vehicle titling or registration to new vehicles that do not comply with California standards.[17] The proposed rule relies on compliance verification methods other than registration denial such as records review and dealer inspections.

Resources to Support the Program: The workgroup discussed various options for funding Oregon's Cal-LEV program, including requesting general fund and imposing a fee on automakers. There was no consensus on the best funding mechanism. Several workgroup members argued that a fee on dealers would be fair because it focuses on those who sell, buy, or register new cars. Others argued that collecting a fee from 10-15 manufacturers would be more efficient than collecting from several

[16] See attachment C, pages 41 to 42, for more information.
[17] See attachment C, pages 70 to 71, for more information.
[18] See attachment C, pages 72 to 74, for more information.

hundred dealers. The Auto Alliance thought that the cost of the program should be spread across the entire population using general funds, because everyone will benefit from the regulations.[18] DEQ plans to address the issue of program funding in the permanent rule.

Public Comment

Meetings of the Governor's Vehicle Emissions Workgroup included opportunities for public comment. Those comments influenced the workgroup discussions and are summarized in the workgroup report (Attachment C). The workgroup forwarded all written comments to the Governor. There is no opportunity for formal public comment during the adoption of a temporary rule. However, the permanent Cal-LEV rulemaking in 2006 would include opportunity for public comment, including several hearings. Provisions adopted in the temporary rule may be re-shaped by public comment, before inclusion in the permanent rule.

Key Issues

Customizing Cal-LEV implementation

DEQ is proposing to adopt the Cal-LEV program essentially in its entirety. However, the following Oregon-specific customizations are being proposed:

1. Oregon ZEV: DEQ proposes to adopt the Zero Emission Vehicles (ZEV) requirement, but to delay the deadline for providing hydrogen fuel cell ZEVs in Oregon. The delayed deadline will allow DEQ and the Commission the opportunity to monitor the progress and development of a hydrogen-refueling infrastructure. If DEQ finds that the fueling infrastructure has advanced sufficiently, then DEQ rules could be revised to require manufacturers to provide Oregon's share of fuel cell vehicles. Other vehicles used within the ZEV program (including battery-electric vehicles, PZEVs, and ATPZEVs) will be required under this rulemaking as specified in the California program.

2. Extended (PZEV) Warranty): Under California provisions, manufacturers must provide low-emission PZEVs and ATPZEVs with a 15 year/150,000 mile warranty on all emissions-related components. The warranty was devised to ensure that manufacturers design emission control systems that last as long as today's more durable vehicles. DEQ proposes excluding this extended warranty but requiring that PZEVs include the same quality components as those vehicles supplied to areas where the extended warranty applies, in order to ensure that Oregon does not receive less durable vehicles. PZEV/ATPZEV vehicles will still be covered by the federal 8-year/80,000 mile warranty, as are all vehicles under California's program. The proposed rule also retains the extended 10-year warranty for batteries used in some ATPZEVs (hybrid electric vehicles) to ensure that the cost of replacement batteries is covered during the warranty period.

Elimination of the extended warranty will not affect the expected reduction of greenhouse gas emissions, but may slightly diminish the reduction of smog forming

emissions over the life of a vehicle if non-warranty emission repairs are cost-prohibitive. While loss of the extended warranty will affect consumers, PZEV/ATPZEV vehicles will still be covered by the federal 8 year/10,000 mile warranty. DEQ is concerned about the potential long-term economic impact on independent auto repair shops, especially in rural parts of the state, if an extended warranty were adopted as part of the ZEV program. This is because repair work covered under an extended warranty could only be done by franchise dealers, and so would decrease work available for independent auto repair businesses. Unlike California, Oregon currently meets all federal air quality standards, and any slight loss of emission benefit due to dropping the extended warranty will not jeopardize Oregon attainment status. DEQ believes that elimination of the extended warranty should not significantly reduce the overall emission reduction benefit from Cal-LEV.

Legal Risk of Customizing Cal-LEV

Many opt-in states have customized aspects of Cal-LEV implementation, in order to design a program that best serves their needs. The legality of such customization is less than clear. However, EPA has stated that it believes customizing implementation is permissible, so long as variations from California standards do not trigger the need for a 'third car' to meet the state standard. DEQ believes that Oregon's proposed variation from California's ZEV requirements would not require manufacture of a "third vehicle," and thus would be permissible.

Customizations made by other Cal-LEV opt-in states remain untested in court and the risk of litigation appears small. If an opt-in state's customizations were ever disallowed under the Clean Air Act, the remedy would simply be to align the state program fully with California rules or opt-out of the California program and return to the federal standards.

Corporate Average Fuel Economy Lawsuit

Under the Energy Policy and Conservation Act of 1976, Congress established Corporate Average Fuel Economy (CAFE) regulations to reduce fuel consumption and imports. The Alliance of Automobile Manufacturers claims that California's GHG limits are preempted by the CAFE standards even though they are permissible under the Clean Air Act. This case is scheduled to go to trial in 2007 and the outcome is certain to be taken to the U.S. Ninth Circuit Court of Appeals. If the challenge is ultimately successful, California will have to revise the Cal LEV program to be consistent with the court ruling. In that case, Oregon would still benefit from reduced emissions of ozone precursors and air toxics, as well as any new approaches California utilizes to reduce GHG emissions.

Implementation To successfully launch the Cal-LEV program in Oregon, staff would conduct a variety of outreach activities during the phase-in period (2006-2009), including

reviewing requirements with auto manufacturers, preparing fact sheets for dealers and the independent auto repair shops, working with Oregon DMV on procedures for tracking vehicles registrations, managing the early banking of emission credits, and developing DEQ's internal data tracking infrastructure needed to support the program. DEQ estimates that one full-time-equivalent (FTE) position would be needed to accomplish these tasks in the short term for the 2006-2009 phase-in period.

After 2009, staff would review annual reports from manufacturers to verify compliance with emission standards and ZEV sales targets, review DMV registration records to identify non-compliant vehicles, conduct dealer inspections and outreach, investigate cross-boarder sales issues, pursue enforcement actions as needed, and keep current with changes to California Cal-LEV rules. DEQ estimates that 1.5 FTE would be needed in the long term for this work. This resource estimate is consistent with other opt-in states. CARB would continue to conduct all emission certifications for new vehicle types and technologies developed for market in Cal-LEV states. Opt-in state activities would focus primarily on implementation and compliance verification.

DEQ is considering a fee on manufacturers to support the program. This fee is not included in the temporary rule but would be considered as part of the permanent rulemaking.

Next Steps

If the EQC adopts the proposed temporary rules in December, DEQ will file the rules with the Oregon Secretary of State with an effective date of January 1, 2006, and will immediately begin permanent rulemaking. At this time, DEQ intends to hold public hearings in Portland, Medford, Pendleton and Bend as part of the permanent rulemaking process. Once permanent rules are adopted, staff assigned to the program will develop data tracking systems, conduct outreach, and provide technical assistance to prepare for the 2009 model year.

The permanent rule would also include revisions to DEQ Division 12 enforcement rules to incorporate Cal-LEV enforcement provisions, and possibly other conforming changes to other existing DEQ rules.

In addition to the permanent rule, DEQ would be developing internal implementation guidance for public and dealer outreach as well as compliance verification and enforcement procedures.

Commission Authority

The Commission has authority to take this action under ORS 468.020, 468A.025, and 468A.360.

Attachments

A. Proposed Temporary Rule: Divison 257, Oregon Low Emission Vehicles.

B. *Governor's Vehicle Emissions Workgroup Charter.*

C. *Governor's Motor Vehicle Emission Workgroup Report*. Also available online at: http://www.deq.state.or.us/aq/aqplanning/CalLev/Index.htm.

D. *Governor's Greenhouse Gas Strategy Report,* Executive Summary.

E. Summary of greenhouse gas reduction strategies recommended by the governor's Advisory Group on Global Warming.

F. List of current automakers subject to Cal-LEV standards.

G. DEQ Statement of Need and Justification.

H Governor Kulongoski's letter regarding Low Emission Vehicle rules.

Available Upon Request

Oregon Strategy for Greenhouse Gas Reductions

Approved:

Section: _____
David Collier

Division: _____
Andrew Ginsburg

Report Prepared By: Dave Nordberg
Phone: (503) 229-5519

Attachment A

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 257

OREGON LOW EMISSION VEHICLES

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 257

OREGON LOW EMISSION VEHICLES

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340-257-0010
Purpose
The purpose of this division is to establish an Oregon Low Emission Vehicle program that implements California vehicle emission standards pursuant to section 177 of the federal Clean Air Act. This program establishes criteria and procedures for the manufacture, distribution and sale of new motor vehicles in Oregon as listed in OAR 340-257-0050.

Stat. Auth.: ORS 468.020, 468A.025 & 468A.360
Stats. Implemented: ORS 468.020

340-257-0020
Applicability
This division applies to and establishes requirements for automobile manufacturers, Oregon motor vehicle dealers, and all 2009 and subsequent model year passenger cars, light duty trucks, medium duty vehicles, and medium duty passenger vehicles registered, leased, rented, delivered for sale or sold in the State of Oregon, except as provided in OAR 340-257-0060 Exemptions.

Stat. Auth.: ORS 468.020, 468A.025 & 468A.360
Stats. Implemented: ORS 468.020

340-257-0030
Definitions and Abbreviations
The definitions in OAR 340-200-0020, the definitions in CCR, Title 13, sections incorporated by reference, and the definitions in this rule apply to this division. If the same term is defined in different passages, the definitions in this rule apply first, followed by definitions in CCR Title 13 sections incorporated by reference, and finally the definitions in OAR 340-200-0020.
(1) "ATPZEV" means advanced technology Partial Zero Emission Vehicle as defined in CCR, Title 13, section 1962(i).
(2) "CARB" means California Air Resources Board.
(3) "CCR" means California Code of Regulations.
(4) "Emission credits" are earned when a manufacturer's reported fleet average is less than the required fleet average. Credits are calculated according to formulas contained in CCR, Title 13, section 1961(c) and 1961.1(b).
(5) "Emission debits" are earned when a manufacturer's reported fleet average exceeds the required fleet average. Debits are calculated according to formulas contained in CCR, Title 13, section 1961(c) and 1961.1(b).
(6) "Fleet average greenhouse gas emission requirements" are generally referred to as limitations on greenhouse gas exhaust mass emission values from passenger cars, light-duty trucks and medium-duty passenger vehicles. The fleet average greenhouse gas emission requirements are set forth in CCR, Title 13, section 1961.1, and incorporated herein by reference.
(7) "Gross vehicle weight rating" or "GVWR" is the value specified by the manufacturer as the maximum design loaded weight of a single vehicle.
(8) "Independent low volume manufacturer" is defined in CCR, Title 13, section 1900 and incorporated herein by reference.
(9) "Intermediate volume manufacturer" is defined in CCR, Title 13, section 1900 and incorporated herein by reference.
(10) "Large volume manufacturer" is defined in CCR, Title 13, section 1900 and incorporated herein by reference.
(11) "Light duty truck" is any 2000 and subsequent model year motor vehicle certified to the standards in CCR, Title 13, section 1961(a)(1) rated at 8,500 pounds gross vehicle weight or less, and any other motor vehicle rated at 6,000 pounds gross vehicle weight or less, which is designed primarily for the purposes of transportation of property, is a derivative of such vehicle, or is available with special features enabling off-street or off-highway operation and use.
(12) "Medium duty passenger vehicle" (MDPV) is any medium-duty vehicle with a gross vehicle weight rating of less than 10,000 pounds that is designed primarily for the transportation of persons. The medium-duty passenger vehicle definition does not include any vehicle which
(a) Is an "incomplete truck" i.e., is a truck that does not have the primary load carrying device or container attached; or
(b) Has a seating capacity of more than 12 persons; or
(c) Is designed for more than 9 persons in seating rearward of the drivers seat; or
(d) Is equipped with an open cargo area of 72.0 inches in interior length or more. A covered box not readily accessible from the passenger compartment will be considered an open cargo area for the purpose of this definition.

(13) "Medium duty vehicle" means any pre-1995 model year heavy-duty vehicle having a manufacturer's gross vehicle weight rating of 8,500 pounds or less; any 1992 through 2006 model-year heavy-duty low-emission, ultra-low-emission, super-ultra-low-emission or zero-emission vehicle certified to the standards in section 1960.1(h)(2) having a manufacturer's gross vehicle weight rating of 14,000 pounds or less; and any 2000 and subsequent model heavy-duty low-emission, ultra-low-emission, super-ultra-low-emission or zero-emission vehicle certified to the standards in Section 1961(a)(1) or 1962 having a manufacturer's gross vehicle weight rating between 8,501 and 14,000 pounds.
(14) "Model year" is the manufacturer's annual production period which includes January 1 of a calendar year or, if the manufacturer has no annual production period, the calendar year. In the case of any vehicle manufactured in two or more stages, the time of manufacture is the date of completion of the chassis.
(15) "Non-methane organic gas" (NMOG) is the sum of non-oxygenated and oxygenated hydrocarbons contained in a gas sample as measured in accordance with the "California Non-Methane Organic Gas Test Procedures," which is incorporated herein by reference.
(16) "NMOG fleet average emissions" is a motor vehicle manufacturer's average vehicle emissions of all non-methane organic gases from passenger cars and light duty trucks in any model year subject to this regulation delivered for sale in Oregon.
(17) ``Passenger car'' is any motor vehicle designed primarily for transportation of persons and having a design capacity of twelve persons or less.
(18) ``PZEV'' means Partial Zero Emission Vehicle as defined in CCR, Title 13, section 1962(i).
(19) "Small volume manufacturer" is defined as set forth in CCR, Title 13, section 1900 and incorporated herein by reference.
(20) "ZEV" means Zero Emission Vehicle as defined in CCR Title 13, section 1962(i).

Stat. Auth.: ORS 468.020, 468A.025 & 468A.360
Stats. Implemented: ORS 468.020

340-257-0040
Requirement to Meet California vehicle emission standards.
(1) Starting with the 2009 model year and for each model year thereafter no person may lease, rent out, license, deliver for sale, or sell any vehicle unless such vehicle is certified to the California emission standards pursuant to OAR 340-257-0050, except as provided in OAR 340-257-0060, Exemptions.
(2) All motor vehicle manufacturers must comply with the fleet average emission requirements and the warranty, recall, and other applicable requirements contained in this division.
(3) All motor vehicle dealers must comply with the sales and reporting requirements contained in this division.

Stat. Auth.: ORS 468.020, 468A.025 & 468A.360
Stats. Implemented: ORS 468.020

340-257-0050
Incorporation by Reference
(1) For purposes of applying the incorporated sections of the California Code of Regulations, "California" means "Oregon" and "Air Resources Board (ARB)" or "California Air Resources Board

(CARB)" means Department of Environmental Quality or Environmental Quality Commission depending on context, unless otherwise specified in this division or the application is clearly inappropriate.
(2) Emission standards, warranty, recall and other California provisions adopted by reference. Each manufacturer of new 2009 and subsequent model year passenger cars, light duty trucks, and medium duty vehicles must comply with each applicable standard specified in California Code of Regulations (CCR), Title 13 as incorporated by reference herein:
(a) Section 1900: Definitions. California effective date1-01-06.
(b) Section 1956.8(g) and (h): Exhaust Emission Standards and Test Procedures – 1985 and Subsequent Model Heavy Duty Engines and Vehicles. California effective date 1-31-05.
(c) Section 1960.1: Exhaust Emission Standards and Test Procedures – 1981 and through 2006 Model Passenger Cars, Light-Duty and Medium-Duty Vehicles. California effective date 3-26-04.
(d) Section 1961: Exhaust Emission Standards and Test Procedures – 2004 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California effective date 1-01-06.
(e) Section 1961.1: Greenhouse Gas Exhaust Emission Standards and Test Procedures – 2009 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California effective date 01/01/06.
(f) Section 1962: Zero-Emission Vehicle Standards for 2005 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California effective date 08/14/05.
(g) Section 1962.1: Electric Vehicle Charging Requirements. California effective date 08/14/05.
(h) Section 1965: Emission Control and Smog Index Labels – 1979 and Subsequent Model Year Vehicles. California effective date 12/04/03.
(i) Section 1968.2: Malfunction and Diagnostic System Requirements – 2004 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles. California effective date 04/21/03.
(j) Section 1968.5: Enforcement of Malfunction and Diagnostic System Requirements for 2004 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines. California effective date 04/21/03.
(k) Section 1976: Standards and Test Procedures for Motor Vehicle Fuel Evaporative Emissions. California effective date 11/27/99.
(l) Section 1978: Standards and Test Procedures for Vehicle Refueling Emissions. California effective date 12-04-03.
(m) Section 2035: Purpose, Applicability and Definitions. California effective date 12/26/90.
(n) Section 2037: Defects Warranty Requirements for 1990 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles and Motor Vehicle Engines Used in Such Vehicles. California effective date 11/27/99.
(o) Section 2038: Performance Warranty Requirements for 1990 and Subsequent Model Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles and Motor Vehicle Engines Used in Such. California effective date 11/27/99.
(p) Section 2039: Emission Control System Warranty Statement. California effective date 12/26/90.
(q) Section 2040: Vehicle Owner Obligations. California effective date 12/26/90.
(r) Section 2046: Defective Catalyst. California effective date 1/16/79.
(s) Section 2109: New Vehicle Recall Provisions. California effective date 11-30-83.
(t) Section 2111: Applicability. California effective date 8/21/02.
(u) Section 2112: Definitions. California effective date 11/15/03.
(v) Appendix A to Article 2.1. California effective date 11/15/03.

(w) Section 2113: Initiation and Approval of Voluntary and Influenced Recalls. California effective date 1/26/95.
(x) Section 2114: Voluntary and Influenced Recall Plans. California effective date 11/27/99.
(z) Section 2115: Eligibility for Repair. California effective date 1/26/95.
(aa) Section 2116: Repair Label. California effective date 1/26/95.
(bb) Section 2117: Proof of Correction Certificate. California effective date 1/26/95.
(cc) Section 2118: Notification. California effective date 1/26/95.
(dd) Section 2119: Record keeping and Reporting Requirements. California effective date 11/27/99.
(ee) Section 2120: Other Requirements Not Waived. California effective date 1/26/95.
(ff) Section 2122: General Provisions. California effective date 1/26/95.
(gg) Section 2123: Initiation and Notification of Ordered Emission-Related Recalls. California effective date 1/26/95.
(hh) Section 2124: Availability of Public Hearing. California effective date 1/26/95.
(ii) Section 2125: Ordered Recall Plan. California effective date 1/26/95.
(jj) Section 2126: Approval and Implementation of Recall Plan. California effective date 1/26/95.
(kk) Section 2127: Notification of Owners. California effective date 1/26/95.
(ll) Section 2128: Repair Label. California effective date 1/26/95.
(mm) Section 2129: Proof of Correction Certificate. California effective date 1/26/95.
(nn) Section 2130: Capture Rates and Alternative Measures. California effective date 11/27/99.
(oo) Section 2131: Preliminary Tests. California effective date 1/26/95.
(pp) Section 2132: Communication with Repair Personnel. California effective date 1/26/95.
(qq) Section 2133: Record keeping and Reporting Requirements. California effective date 1/26/95.
(rr) Section 2135: Extension of Time. California effective date 1/26/95.
(ss) Section 2141: General Provisions. California effective date 12/28/00.
(tt) Section 2142: Alternative Procedures. California effective date 2/23/90.
(uu) Section 2143: Failure Levels Triggering Recall. California effective date 11/27/99.
(vv) Section 2144: Emission Warranty Information Report. California effective date 11/27/99.
(ww) Section 2145: Field Information Report. California effective date 11/27/99.
(xx) Section 2146: Emissions Information Report. California effective date 11/27/99.
(yy) Section 2147: Demonstration of Compliance with Emission Standards. California effective date 8/21/02.
(zz) Section 2148: Evaluation of Need for Recall. California effective date 11/27/99.
(aaa) Section 2149: Notification of Subsequent Action. California effective date 2/23/90.
(bbb) Section 2235: Requirements. California effective date 9/17/91.
[Publications: The publications referenced in this rule are available from the agency.]

Stat. Auth.: ORS 468.020, 468A.025 & 468A.360
Stats. Implemented: ORS 468.020

340-257-0060
Exemptions
The following vehicles are not subject to this division:
(1) Military tactical vehicles;
(2) Vehicles sold for registration and use in a state that is not subject to the California vehicle emission standards;

(3) Previously registered vehicles with more than seven thousand five hundred miles, provided that for vehicle dealers, the mileage at the time of sale is determined by the odometer statement when the dealer acquired the vehicle;
(4) Vehicles available only for rent to a final destination outside of Oregon;
(5) Vehicles purchased by a nonresident before establishing residency in the State of Oregon, regardless of the mileage on the vehicle;
(6) Vehicles purchased by Oregon residents while assigned to active military duty outside the State of Oregon;
(7) Vehicles transferred by inheritance or as a result of divorce, dissolution, or legal separation; and
(8) Emergency vehicles when a public safety agency has demonstrated to the Department's satisfaction that a vehicle that will meet said agency's needs is not otherwise reasonably available.
(9) A vehicle acquired by an Oregon resident to replace a vehicle registered to such resident that was stolen, damaged or failed beyond reasonable repair while out of state, provided that such replacement vehicle is acquired out of state when the previously-owned vehicle was either stolen, damaged, or failed beyond reasonable repair.

Stat. Auth.: ORS 468.020, 468A.025 & 468A.360
Stats. Implemented: ORS 468.020

OAR 340-257-0070
Fleet Average Non-Methane Organic Gas (NMOG) Exhaust Emission Requirements, Reporting, and Compliance.
(1) Fleet average requirement. Effective model year 2009 and each model year thereafter, each motor vehicle manufacturer's NMOG fleet average emissions from passenger cars, light duty trucks and medium duty vehicles delivered for sale in Oregon must not exceed the Fleet Average NMOG Exhaust Emission Requirement set forth in CCR, Title 13, section 1961. Compliance will be based on the number of vehicles, subject to this regulation, delivered for sale in the State of Oregon.
(2) Fleet average NMOG exhaust emission credits and debits. Effective model year 2009, each vehicle manufacturer may accrue NMOG emission credits and debits and use credits in accordance with the procedures in California Code of Regulations, Title 13, section 1961. Debits and credits accrued and used will be based on the number of vehicles, subject to this division, produced and delivered for sale by each manufacturer in the State of Oregon.
(3) Reporting.
(a) Effective model year 2009, and for each model year thereafter, each manufacturer must submit by March 1 a report to the Department that includes:
(A) Pre-model year data that projects the fleet average NMOG exhaust emissions for vehicles expected to be delivered for sale in Oregon and
(B) End-of-model year data that calculates the fleet average NMOG exhaust emissions for the model year just ended.
(b) The report must follow the procedures in CCR, Title 13, section 1961 and be in the same format used to report such information to the California Air Resources Board.
(4) Compliance with fleet average NMOG requirement. Effective model year 2012, if a report submitted by the manufacturer under subsection(3)(b) of this rule demonstrates that the manufacturer is not in compliance with the fleet average emission standard, the manufacturer must submit to the Department within 60 days a Fleet Average Remediation Report. The Fleet Average Remediation Report must:

(a) Describe how the manufacturer intends to equalize any accrued debits, as required in CCR, Title 13, section 1961, and in accordance with section(2) of this rule;

(b) Identify all vehicle models delivered for sale in Oregon, their corresponding certification standards, and the percentage of each model delivered for sale in Oregon and California in relation to total fleet sales in the respective state; and

(c) Describe how the manufacturer plans to achieve compliance with the fleet average in future model years.

(5) For model years 2009 through 2011, manufacturers must submit the Fleet Average Remediation Report, if needed, to the Department by March 1, 2012. If debits are accrued in all three years, one year of debits must be equalized by the end of the 2012 model year.

Stat. Auth.: ORS 468.020, 468A.025 & 468A.360
Stats. Implemented: ORS 468.020

340-257-0080
ZEV Sales Requirement

(1) Effective model year 2009, and each subsequent model year, each manufacturer must comply with the ZEV sales requirement contained in CCR, Title 13, section 1962, including early credit and banking provisions.

(2) An intermediate volume or large volume manufacturer of ZEVs, ATPZEVs and PZEVs may use vehicle equivalent credits in accordance with CCR, Title 13, section 1962, to offset the ZEV sales requirement required by section(1) of this rule above.

(3) Not withstanding OAR 340-257-0050, and except as provided in section(4) of this rule, the provisions of CCR, Title 13, section 1962(c)(2)(D) regarding "Counting a Type III ZEV Placed in a Section 177 State" will not end after the 2011 model year, but will continue in Oregon throughout the duration of the alternate compliance path specified in CCR, Title 13, Section 1962(b)(2)(B).

(4) Section(3) of this rule will not apply three years after the Department finds that the following conditions are met:

(a) The number of Type III ZEVs required to meet the minimum floor requirements in CCR, Title 13, section 1962 between the years 2012 and 2017 is proportioned among all states that have adopted California's vehicle emission standards, and

(b) Oregon's hydrogen refueling infrastructure is likely to be adequate to accommodate the number of Type III ZEVs needed to meet the minimum floor requirements of CCR, Title 13, section 1962(b)(2)(B)1 between 2012 and 2017.

Stat. Auth.: ORS 468.020, 468A.025 & 468A.360
Stats. Implemented: ORS 468.020

340-257-090
ZEV Credit Bank and Reporting

(1) Beginning model year 2009, each intermediate volume and large volume manufacturer of ZEVs, ATPZEVs and PZEVs may open an account in the ZEV credit bank. Except as provided in section (5) of this rule, the account must be opened no later than January 1, 2009.

(2) In order to open an account with the ZEV Credit Bank, the manufacturer must submit to the Department an account application form containing the following information for the account holder:

(a) Name,

(b) Mailing address,
(c) Telephone number,
(d) Type of business (if applicable),
(e) Authorized representative's name, title, phone number, fax number and email address, and
(f) Authorized representative's signature.

(3) Upon receiving a complete account application, the Department will issue a unique identifier for the account and notify the account applicant of the identifier.

(4) Except as provided in section (5) of this rule, annually each manufacturer must submit to the Department a Notice of Credit Generation or Notice of Credit Transfer to or from another manufacturer. Credits generated or acquired that are not reported to the Department on or before September 1 following the close of the model year in which the qualifying vehicle was produced and delivered for sale in Oregon may not be deposited into the manufacturer's account and may not be used to offset ZEV Sales Requirements.

(5) In order to generate and deposit credits for vehicles delivered for sale in Oregon during the 1999 through 2005 model years, a manufacturer must open an account with the ZEV Credit Bank and submit an appropriate Notice of Generation to the Department on or before September 1, 2006.

(6) To deposit credits into the ZEV Credit Bank, a manufacturer must submit a Notice of Credit Generation to the Department on a form provided by the Department. The Notice of Generation must include the following:

(a) For ZEVs delivered for sale in Oregon:
  (A) Manufacturer's ZEV Credit Bank account identifier,
  (B) Model year of vehicle qualifying for credit,
  (C) CARB Executive Order number,
  (D) ZEV Tier type (NEV, 0, I, II, III for California, III for Section 177 states),
  (E) Vehicle identification number, and
  (F) Date the vehicle was delivered for sale in Oregon.

(b) For ZEVs placed in service in Oregon, all information listed under subsection (6)(a) of this rule, plus the following:
  (A) Date the vehicle was placed in service, and
  (B) Whether the vehicle was placed in service with an option to purchase or lease the vehicle.

(c) For ATPZEVs and PZEVs delivered for sale in Oregon:
  (A) Vehicle certification class (ATPZEV or PZEV),
  (B) Manufacturer's ZEV Credit Bank account identification,
  (C) Model year of vehicle(s),
  (D) Date the vehicle was delivered for sale in Oregon,
  (E) For ATPZEVs, the Federal test group,
  (F) The CARB Executive Order number,
  (G) Number of vehicles delivered, and
  (H) VIN for each vehicle or the range of consecutive VINs for each group of vehicles.

(7) The number of the credits generated and deposited for each qualifying vehicle must be the number of qualifying vehicles multiplied by the applicable multiplier specified in CCR, Title 13, section 1962, except the multiplier applied to vehicles produced and delivered for sale in Oregon from January 1, 1999

to January 13, 2004 will be the highest applicable multiplier used by the CARB for the period January 1, 1999 to January 13, 2004.
(8) A vehicle equivalent credit does not constitute or convey a property right.
(9) A manufacturer with an account in the ZEV Credit Bank may acquire credits from another manufacturer with an account in the ZEV Credit Bank. However, if the credits are to be used for future compliance with the ZEV sales requirement at CCR Title 13, section 1962, the transaction must be recorded in the ZEV Credit Bank and certified by both parties to the transaction.
(10) For each acquisition of credits from another manufacturer, the manufacturer from whom the credits are acquired must supply the following information to the Department, on a form provided by the Department:

(a) Date of acquisition,
(b) Model year the credits were generated,
(c) Type of vehicle (NEV, ZEV type, ATPZEV, or PZEV), and
(d) Number of credits in grams/mile NMOG.

(11) The Department will verify all credits and, if there are any discrepancies, will notify the manufacturer and adjust the account. The Department may audit an account at any time.
(12) A manufacturer may deposit into its account in the ZEV Credit Bank a number of credits equal to its California credit balance as of January 2, 2008, multiplied by the number of new motor vehicles registered in Oregon, and divided by the number of new motor vehicles registered in California. The deposit may be made only after all credit obligations for model years 2008 and earlier have been satisfied in California.
(13) A manufacturer electing to deposit credits under section (12) of this rule, must offer for sale in Oregon in model years 2009 through 2011 any PZEV, ATPZEV or ZEV, except Type III ZEVs, that it offers for sale in California during the same period.

Stat. Auth.: ORS 468.020, 468A.025 & 468A.360
Stats. Implemented: ORS 468.020

340-257-0100
Fleet Average Greenhouse Gas Exhaust Emission Requirements, Reporting and Compliance
(1) Each manufacturer subject to the greenhouse gas provisions of this regulation must comply with emissions standards, fleet average greenhouse gas exhaust mass emission requirements for passenger car, light duty truck, medium duty passenger vehicle weight classes, and other requirements of CCR, Title 13, section 1961.1.
(2) Requirements for Large Volume Manufacturers. The fleet average greenhouse gas exhaust emission standards for passenger cars, light-duty trucks, and medium-duty passenger vehicles produced and delivered for sale in the State of Oregon by a large volume manufacturer for each 2009 and subsequent model year are established in CCR, Title 13, section 1961.1.
(3) Requirements for Small, Intermediate, and Independent Manufacturers. The fleet average greenhouse gas exhaust emission requirements for passenger cars, light-duty trucks, and medium-duty passenger vehicles delivered for sale in the State of Oregon by small volume, intermediate volume and independent low volume manufacturers are set forth in CCR, Title 13, section 1961.1, which specifies that requirements for these manufacturers are waived before the 2016 model year.
(4) Greenhouse gas emission credits and debits. Greenhouse gas credits and debits may be accrued and used based on each manufacturer's sale of vehicles in Oregon in accordance with CCR, Title 13, section 1961.1.

(5) Optional alternative compliance with greenhouse gas emission standards. Greenhouse gas vehicle test groups that are certified pursuant to CCR, Title 13, section 1961.1(a)(1)(B)2.a.i in the State of California may receive equivalent credit if delivered for sale and use in the State of Oregon.
(6) Alternative compliance credit. A manufacturer must submit to the Department the data set forth in CCR, Title 13, section 1961.1(a)(1)(B)2.a.i for Oregon-specific sale and use in order to receive the credit identified in (5) above.
(7) Reporting on greenhouse gas requirements. Effective model year 2009 and for each model year thereafter, each manufacturer must submit by March 1 a report to the Department that includes:

(a) Pre-model year data that projects the fleet average greenhouse gas emissions for vehicles expected to be delivered for sale in Oregon and

(b) End-of-model year data that calculates the fleet average greenhouse gas emissions for the model year just ended. The report must include the number of greenhouse gas vehicle test groups, delineated by model type, certified pursuant to CCR, Title 13, section 1961.1. The report must follow the procedures in CCR, Title 13, section 1961.1 and be in the same format used to report such information to the California Air Resources Board.

(8) Compliance with fleet average greenhouse gas requirements. Effective model year 2009, if the report submitted by the manufacturer under subsection(7)(b) of this rule demonstrates that the manufacturer is not in compliance with the fleet average emission standards, the manufacturer must submit to the Department within 60 days a Fleet Average Remediation Report. The Fleet Average Remediation Report must:

(a) Describe how the manufacturer intends to equalize any accrued debits, as required in CCR, Title 13, section 1961.1,

(b) Identify all vehicle models delivered for sale in Oregon, their corresponding certification standards, and the percentage of each model delivered for sale in Oregon and California in relation to total fleet sales in the respective state, and

(c) Describe how the manufacturer plans to achieve compliance with the fleet average in future model years.

Stat. Auth.: ORS 468.020, 468A.025 & 468A.360
Stats. Implemented: ORS 468.020

340-257-0110
Additional Reporting Requirements.
(1) Beginning with model year 2009, a manufacturer must submit to the Department one copy of the California Executive Order and Certificate of Conformity for certification of new motor vehicles for each engine family to be sold in the State of Oregon. Such Executive Orders must be submitted within thirty (30) days after being received from CARB. If such reports are available electronically, the manufacturer must send the record in an electronic format acceptable to the director or the director's designee. Manufacturers may discontinue submitting these reports if the Department so notifies them.
(2) Effective model year 2009, and before the beginning of each model year, upon request each manufacturer must submit to the Department a list of all models of medium duty vehicles and medium duty passenger vehicles that will be delivered to Oregon dealers.
(3) Upon the Department's request, each manufacturer must report to the Department the vehicle identification numbers (VIN) and the corresponding California or federal vehicle emission category of each passenger car, light duty truck, and medium duty passenger vehicle delivered for sale in the contiguous United States. If such reports are available electronically, the manufacturer must send the

record in an electronic format acceptable to the director or the director's designee. Manufacturers may discontinue or amend these reports if the Department so agrees.

(4) To determine compliance with this division, the Department may require any vehicle manufacturer to submit any documentation the Department deems necessary for the effective administration and enforcement of this division, including all certification materials submitted to CARB.
(5) Any person who sells a previously-titled light-duty and medium-duty motor vehicle subject to this division that is not exempt under OAR 340-257-0060 must report the sale to the Department. The report must be provided in a manner specified by the Department in coordination with the Oregon Department of Transportation, Driver and Motor Vehicles Services Division. The report must include the following information:

(a) The dealer's name and address,
(b) Vehicle description including make and model year,
(c) The vehicle identification number,
(d) Date of sale,
(e) The California or federal emission category to which the vehicle is certified, and
(f) Evidence of any applicable exemption.

Stat. Auth.: ORS 468.020, 468A.025 & 468A.360
Stats. Implemented: ORS 468.020

340-257-0120
Warranty Requirements.
(1) For all 2009 and subsequent model year vehicles subject to the provisions of this division, each manufacturer must provide, to the ultimate purchaser and each subsequent purchaser, a warranty that complies with the requirements contained in CCR, Title 13, sections 2035 through 2038, 2040, and 2046.
(2) The 15-year or 150,000-mile extended warranty specified in CCR, Title 13, section 1962(c)(2)(D) for PZEVs is not included as a requirement of this rule or OAR 340-257-0050, provided that PZEVs delivered for sale to Oregon are equipped with the same quality components as PZEVs supplied to areas where the full 15-year or 150,000-mile warranty remains in effect. The provisions of this section do not amend the requirements of CCR, Title 13, section 1962(c)(2)(D) that indicate the warranty period for a zero emission energy storage device used for traction power will be 10 years.
(3) For all 2009 and subsequent model year vehicles subject to the provisions of this division, each manufacturer must include the emission control system warranty statement that complies with the requirements in CCR, Title 13, section 2039. Manufacturers may modify this statement as necessary to inform Oregon vehicle owners of the warranty's applicability. The manufacturer must provide a telephone number that Oregon consumers can use to learn answers to warranty questions.
(4) All manufacturers must submit to the Department Failure of Emission-Related Components reports as defined in CCR, Title 13, section 2144, for vehicles subject to this regulation. For purposes of compliance with this requirement, manufacturers may submit copies of the Failure of Emission-Related Components reports that are submitted to the California Air Resources Board in lieu of submitting reports for vehicles subject to this division. Manufacturers may discontinue submitting these reports if so notified by the Department.

Stat. Auth.: ORS 468.020, 468A.025 & 468A.360
Stats. Implemented: ORS 468.020

340-257-0130
Recalls
(1) Any order issued or enforcement action taken by CARB to correct noncompliance with any section of Title 13, that results in the recall of any vehicle pursuant to CCR, Title 13, sections 2109-2135, will be *prima facie* evidence concerning vehicles registered in Oregon. If the manufacturer can demonstrate to the Department's satisfaction that the order or action is inapplicable to vehicles registered in Oregon, the Department will not pursue a recall of vehicles registered in Oregon.
(2) Any voluntary or influenced emission-related recall campaign initiated by any manufacturer pursuant to CCR, Title 13, sections 2113 - 2121 must extend to all applicable vehicles registered in Oregon. If the manufacturer can demonstrate to the Department's satisfaction that said campaign is inapplicable to vehicles registered in Oregon, the campaign will not apply in Oregon.
(3) For vehicles subject to an order of enforcement action under section(1) of this rule, each manufacturer must send to owners of vehicles registered in the State of Oregon a notice that complies with the requirements in CCR, Title 13, sections 2118 or 2127. The manufacturer must provide a telephone number that Oregon consumers can use to learn answers to questions about any recall that affect Oregon vehicles.

Stat. Auth.: ORS 468.020, 468A.025 & 468A.360
Stats. Implemented: ORS 468.020

340-257-0140
[Reserved]

340-257-0150
Inspections and Information Requests
(1) The Department may inspect new and used motor vehicles and related records for the purposes of determining compliance with the requirements of this division. The Department inspections will occur during regular business hours and on any premises owned, operated or used by any dealer or rental car agency for the purposes of determining compliance with the requirements of this division.
(2) For the purposes of determining compliance with this division, the Department may require any vehicle dealer or rental car agency to submit any documentation the Department deems necessary to the effective administration and enforcement of this division. This provision does not require creation of new records.

Stat. Auth.: ORS 468.020, 468A.025 & 468A.360
Stats. Implemented: ORS 468.020

340-257-0160
Severability
Each section of this division is severable, and if any section of this regulation is held invalid, the remainder will continue in full force and effect.

Stat. Auth.: ORS 468.020, 468A.025 & 468A.360
Stats. Implemented: ORS 468.020

Governor's Vehicle Emissions Workgroup

Charter

09/07/05

The members of the Governor's Vehicle Emissions Workgroup agree to operate under this Charter.

I. Purpose

In March of 2005, the Governor's Advisory Group on Global Warming submitted its final report to Governor Kulongoski, which recommended that the Governor convene an interim Workgroup on California's motor vehicle emission standards (California standards), which includes the LEV II and Pavley components. The Governor has established this Workgroup and has asked it to explore issues surrounding the implementation of California standards in Oregon. At the end of this process the Governor will be directing the Department of Environmental Quality to propose rules for consideration by the Environmental Quality Commission.

II. Workgroup Membership

The Workgroup will be chaired by Mark Reeve

The Chair will be responsible for:

- Keeping members focused on the issues and objectives;
- Ensuring that all members adhere to the process and ground rules;
- Representing the Workgroup to the media.

The Workgroup members are:

Mark Reeve (Chair)	Reeve Kearns
Bob Anderson	NW Auto Trades
Alan DeBoer	Town and Country Chevrolet
Steve Gutmann	Flex Car
Chris Hagerbaumer	Oregon Environmental Council
Ashley Henry	Oregon Business Association
Al Jubitz	Citizen (former head of Jubitz Truck Service)
John Porter	AAA
Mitch Rofsky	Better World
Don Taylor	City of Portland Fleet Administrator
Steven Douglas	Alliance of Automobile Manufacturers

Ex-Officio Members:

David Van'tHof	Governor's Office
Andrew Ginsburg	Department of Environmental Quality

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III. Workgroup Charge

A. The Workgroup is charged with providing information on the costs, benefits, and impacts of the following California motor vehicle emission requirements and issues:

1. Legal requirements and issues
2. Expected benefits to human health and the environment
3. Costs of new vehicles (including potential vehicle owner benefits)
4. Effect on vehicle model availability (including diesel vehicles) and the biodiesel market

B. The Workgroup is further charged with identifying the pros and cons of the implementation features associated with the California motor vehicle emission requirements. Those features or requirements are:

1. *Zero emission vehicle (ZEV) requirements*

   a. Proportional crediting
   b. Effect on the vehicle repair industry

2. *Compliance*

   a. Compliance verification for vehicle manufacturers, dealers, and owners
   b. Oregon registration of vehicles (with less than 7,500 miles)
   c. Compliance enforcement

3. *Administrative Costs*

   a. Program funding
   b. Structure and administration of a fee-funded program

4. *Education and Community Outreach*

   a. Outreach concepts to the public and dealers
   b. Types of educational materials

C. The product of this Workgroup will be a Report to the Governor that summarizes the discussions. DEQ staff will draft the report in collaboration with the Facilitator and Workgroup Chair, and the Workgroup members will review it for completeness.

IV. Public Involvement

All meetings will be open to the public and have a limited time set aside for the public to speak. Additionally, citizens who wish to submit comments are encouraged to communicate directly with a Workgroup member or to communicate by submitting written comments through the website: http://www.deq.state.or.us/aq/aqplanning/CalLev/Index.htm. All public comments received will be compiled and included as an Appendix in the Workgroup's Report to the

Governor.

V. Workgroup Meeting Schedule, Work Plan and Guidelines

A. Meeting Schedule

Item	Date
DEQ Mails Workgroup Binder to Participants	September 1, 2005
Participants Study Binder 1 on 1 Meetings w/ Facilitator	September 2-12, 2005
Workgroup Meeting (1p.m. – 5p.m.), *Portland* - Background - Discussion of Charge III.A Topics	September 12, 2005
Workgroup Meeting (8:30a.m. – 5p.m.), *Portland* - Discuss Charge III. A Topics	September 13, 2005
DEQ Mails Staff Summary of Background and Charge III.A Discussion	September 22, 2005
Workgroup Meeting (8:30a.m. – 5p.m.), *Medford* - Morning: Review Staff Summary - Afternoon: Discuss Charge III. B	October 5, 2005
Workgroup Meeting (8:30a.m. – 5p.m.), *Medford* - Complete Discussion of Charge III. B	October 6, 2005
DEQ Mails Draft Report	October 14, 2005
Workgroup Meeting (8:30a.m. – 5p.m.), *Salem* - Finalize draft report	October 24, 2005
Final Report to Governor	November 2, 2005

B. Process Overview

1. **Briefing Materials:** DEQ staff will prepare briefing materials, which will contain the features of the California standards that are within the Workgroup's charge. The Facilitator will lead the Workgroup in a discussion designed to complete its Charge.

2. **Meeting Summaries**: DEQ staff will prepare Workgroup meeting summaries. The meeting summaries will be posted on the Project website at: http://www.deq.state.or.us/aq/aqplanning/CalLev/Index.htm.

3. **Public Records and Confidentiality**: Workgroup records, such as formal documents, discussion drafts, meeting summaries, and exhibits are public records. Workgroup communications are not confidential and may be disclosed. However, the private documents of individual Workgroup members and the Facilitator generally are not considered public records if the Agency does not retain copies.

4. **Process Conclusion**: A Workgroup report will be submitted to the Governor pursuant to the schedule in Section V. A., above.

C. Ground Rules

All Workgroup members commit to the following:

1. Attend each meeting to ensure continuity throughout the process;
2. Treat everyone and his or her opinions with respect;
3. Allow one person to speak at a time;
4. Comment constructively and specifically;
5. Engage in honest, constructive, and good faith discussions in all aspects of the discussion;
6. Consult regularly with constituencies and provide their input;
7. Stay focused on the Governor's specific Charge; and
8. Not represent the views of any other member, group, or the Workgroup as a whole.

D. Information Exchange

Workgroup members will provide information as much in advance as possible of the meeting at which such information is used. The members will also share all relevant information with each other to the maximum extent possible. If a member believes the relevant information is proprietary in nature, the member will provide a general description of the information and the reason for not providing it.

VI. Communications and Media Coverage:

The Governor's office will respond to media inquiries associated with the organization, structure, process, and Charge of the Workgroup. DEQ will provide the media with technical information surrounding the implementation of California's motor vehicle emission standards. The Chair of the Workgroup will represent the Workgroup as a whole to the media.

While free to communicate with the media and others, Workgroup members recognize that the collaborative process is enhanced when they raise all of their ideas and concerns, especially those being raised for the first time, at a formal Workgroup meeting. Additionally, members recognize that the way in which positions are publicly represented may affect the ability of the Workgroup to work together. It is often advisable to simply refer others to: http://www.deq.state.or.us/aq/aqplanning/CalLev/Index.htm.

VII. Process Support

1. **Department of Environmental Quality (DEQ).** DEQ is responsible for providing staff support to the Governor's Workgroup by providing background and technical information about how California's motor vehicle emission standards have been implemented in other states and how they could be implemented in Oregon. DEQ will consult with other agencies and stakeholders, as needed, to support the Workgroup.

2. **Facilitator.** The Energy Foundation has contracted with The Institute *for* Conflict Management, Inc. (ICM or the Facilitator), with its Executive Director, Sam Imperati, JD, serving as the Facilitator for this Workgroup. Neither ICM

nor Sam Imperati is an employee of any participant. ICM's written contract is available for review.

The Facilitator will run meetings in accordance with this Charter. ICM will have attorneys working on this project, but they do not represent any person, organization, entity, or the Workgroup, and they will not provide legal advice to the Workgroup. Each participant is encouraged to seek independent legal advice. As a neutral collaborative process provider, the Facilitator will not act as an advocate on any substantive issue. However, the Facilitator may propose substantive and process suggestions for the Workgroup's consideration. Workgroup members are encouraged to communicate information or concerns directly to ICM. The Facilitator may have non-confidential, informal communications and perform facilitation activities with staff and Workgroup members, between and during meetings.

Attachment C

Oregon

ENVIRONMENTAL
QUALITY
COMMISSION

November 2, 2005

Honorable Ted Kulongoski
Governor of the State of Oregon
160 State Capitol
900 Court Street
Salem, OR 97301

Dear Governor Kulongoski:

As chair of the Governor's Vehicle Emissions Workgroup, I am pleased to submit to you the *Governor's Vehicle Emissions Report.* This report provides information and contains a summary of discussions from the 11-member workgroup that you convened in August 2005. In your charge to Workgroup, you asked us to explore issues surrounding the implementation of the California clean car standards in Oregon. Specifically, you asked us to provide information on the costs, benefits, and impacts of the standards, including legal issues, human health and the environment, and new vehicle cost and availability. The Workgroup was also charged with identifying the advantages and disadvantages of implementation features associated with the proposed standards.

The Workgroup had lengthy discussions as it identified perspectives from all of its members and a variety of public commentors. The process went very well and the Workgroup was able to explore issues in a collaborative environment. Each member deserves special thanks for their help in making the Workgroup a success. Additionally, I would like to particularly acknowledge the role that representatives from the California Air Resources Board, Washington Department of Ecology, and the Puget Sound Clean Air Agency played in our workgroup discussions. The Workgroup and I appreciated their efforts for tri-state collaboration.

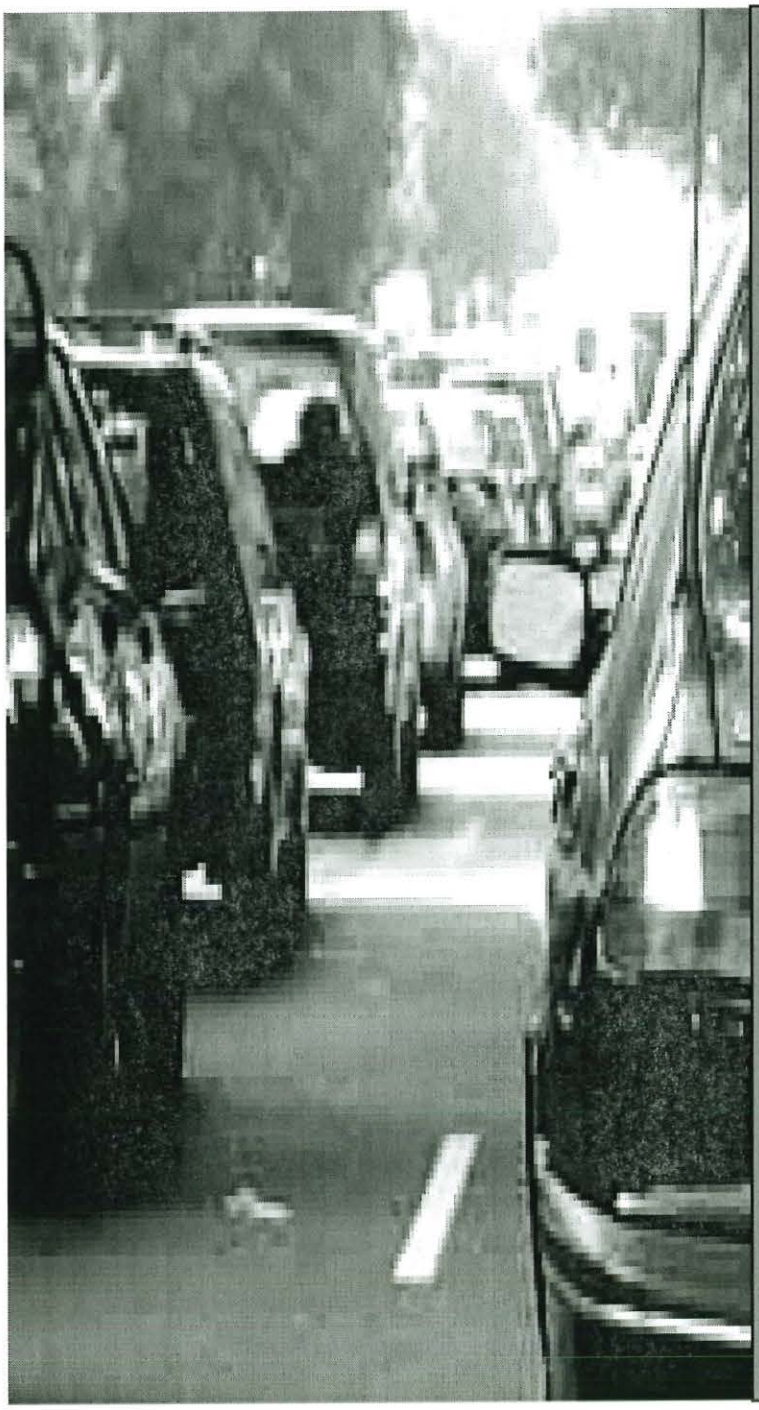
Overall, the Workgroup accomplished its mission to obtain a fuller understanding of the issues surrounding the implementation of the clean car standards and they are reflected in this report. I hope you find this information useful in your consideration of adoption of the proposed standards in Oregon.

Sincerely,

Mark Reeve, Chair
Reeve Kearns PC

811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696

cc: Workgroup Members



Governor's Vehicle Emissions Workgroup Report

November 2005

State of Oregon

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Preface

In March of 2005, the Governor's Advisory Group on Global Warming submitted its final report to Governor Kulongoski, which recommended that the Governor convene an interim Workgroup on California's motor vehicle emission standards, with the LEV II and Pavley components. The Governor established this Workgroup, made up of citizens, environmental, and business interests. Members included:

Mark Reeve (Chair)	Reeve Kearns
Bob Anderson	NW Auto Trades Association
Alan DeBoer	Oregon Auto Dealers Association
Steven Douglas	Alliance of Automobile Manufacturers
Elliott Eki	AAA
Steve Gutmann	Flexcar
Chris Hagerbaumer	Oregon Environmental Council
Ashley Henry	Oregon Business Association
Al Jubitz	Citizen, retired, Jubitz Corporation
Mitch Rofsky	Better World Club
Don Taylor	City of Portland Fleet Administrator
Ex-Officio Members:	
David Van't Hof	Governor's Office
Andy Ginsburg	Oregon Department of Environmental Quality

The Governor asked the Workgroup to explore issues surrounding the implementation of California standards in Oregon. The Workgroup was specifically charged with providing information on the costs, benefits, and impacts of the following California motor vehicle emission requirements and issues:

1. Legal requirements and issues;
2. Expected benefits to human health and the environment;
3. Costs of new vehicles (including potential vehicle owner benefits); and
4. Effect on vehicle model availability (including diesel vehicles) and the biodiesel market.

The Workgroup was further charged with identifying the pros and cons of the implementation features associated with the California motor vehicle emission requirements. Those features or requirements were:

1. Zero emission vehicle (ZEV) requirements, including the effect on the auto repair industry,
2. Compliance verification and enforcement, and
3. Administrative costs and funding.

Sam Imperati, J.D., Executive Director of the Institute *for* Conflict Management, Inc., facilitated the process. Rachel Sakata, Dave Nordberg, and David Collier of the Oregon Department of Environmental Quality staffed the Workgroup. Members met over the course of 4 ½ days in September and October 2005, and this report summarizes their discussions. The Workgroup reviewed drafts of this document and the facilitator participated in the creation of this final report.

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I. Background on California's On-Road Motor Vehicle Regulations

A. Introduction

The federal Clean Air Act (CAA) provides the framework for regulating emissions from motor vehicles. In 1970, it established nationwide air quality standards to protect public health. Recognizing the large contribution motor vehicles make to air pollution, the CAA also set the first federal vehicle emissions standards. Because California had emission standards before the federal government, the CAA authorized California to continue setting its own vehicle emissions standards. California's standards must be at least as protective of human health as the federal standards and are typically more stringent.

B. What States have Adopted California's Emissions Standards?

The CAA allows other states to opt into California's standards. In the early 1990s, Massachusetts, New York, Maine and Vermont adopted California's motor vehicle regulations. Connecticut, New Jersey, and Rhode Island are in the process of developing their opt-in programs. These states initially opted into California vehicle standards for criteria pollutants (LEV-II), and are now at various stages of adopting California new regulations on greenhouse gases (Pavley). Pennsylvania recently discovered it had a provision in its rules that adopted the LEV-II standards once the voluntary federal LEV standards (NLEV) were no longer in effect. Currently, Pennsylvania is in the process of sorting out the details of the program. The state of Washington enacted a law[1] to opt-in to California's regulations on the condition that Oregon adopts the standards as well. The Washington law has three prominent features:

1) There is no requirement for Zero Emission Vehicles,

2) Vehicles that comply with California vehicle emission standards are exempted from Washington's emissions testing (Inspection/Maintenance) program; and

3) The Washington requirement shall only take effect for years in which Oregon also requires California compliant vehicles.

C. Overview of the Motor Vehicle Emission Standards

Current federal motor emission regulations are known as the Tier 2 standards. These regulations reduce pollutants such as oxides of nitrogen (NOx), volatile organic compounds (VOCs), and carbon monoxide (CO), and are phased in between 2004 and 2009. The Tier 2 limits establish the same emission requirements for both gas and diesel-fueled vehicles. Tier 2 requirements extend beyond the previous Tier 1 standards to include the new category of Medium Duty Passenger Vehicles from 8,500 to 10,000 lbs. Gross Vehicle Weight (GVW).

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[1] State of Washington, House Bill 1397, Chapter 295, Laws of 2005, Motor Vehicle Emission Standards, 59th Legislature, 2005 Regular Session. http://www.leg.wa.gov/pub/billinfo/2005-06/Htm/Bills/Session%20Law%202005/1397-S.sl.htm **(Reference 1)**

California's vehicle emission standards are more stringent than federal standards and have two main parts. The first is the Low Emissions Vehicles (LEV) standards[2] that reduce criteria pollutants such as ground-level ozone and carbon monoxide. The second part establishes "Pavley" standards that reduce the emissions of greenhouse gases. California's current LEV-II requirements began taking effect with model year 2004 vehicles and will be completely phased-in by 2010.

The European Union (EU) is planning to propose (Fall 2005) criteria pollution emission limits for new light duty vehicles. The European vehicle rules have separate standards for diesel and gasoline cars. In this future proposal, the EU is planning to reduce emissions of particulates from diesel cars by 80%, and NOx emissions by 20% compared to the existing standards. The proposal will also require further emissions reductions of NOx and hydrocarbons (HC) from gasoline cars.[3]

Table 1 on the next page provides a general overview of the California motor vehicle program, including the types of air pollutants addressed and the types of vehicles that are affected.

[2] California Code of Regulations, Title 13, Section 1900-1961. http://www.arb.ca.gov/msprog/levprog/cleandoc/cleancompletelevregsasof8-14-04.pdf **(Reference 2)**

[3] European Union, Preliminary draft proposal for a Regulation of the European Parliament and of the Council relating to emissions of atmospheric pollutants from motor vehicles (Euro 5) http://europa.eu.int/comm/enterprise/automotive/pagesbackground/pollutant_emission/stakeholder_consultation/euro_5_draft_reg.pdf

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Table 1: California Motor Vehicle Emission Standards: Key Features

Regulatory Program	Date Standards Take Affect	Pollutants Addressed	Requirements	Types of Vehicles Affected	How Requirements May be Met by Manufacturers

Low Emissions Vehicles - Phase II (LEV-II)[4]	Basic LEV-II requirements are phased in from model year 2004 to 2010.
	
	ZEV requirements are phased in from 2005 through 2018.
		"Criteria" pollutants linked to National Ambient Air Quality Standards.
		
		• Precursors of ground level ozone
		  ○ Non-methane organic gases (NMOG). These are similar to Volatile Organic Compounds (VOC).
		  ○ Oxides of Nitrogen (NOx)
		• Carbon Monoxide (CO)
		• Particulate Matter (PM)
		
		Hazardous air pollutants (HAP) listed in the Clean Air Act; also called air toxics
			1. A statewide fleet average emission standard.
			
			2. Standards applicable to different vehicle classifications
			
			California's fleet average emission standard focuses on NMOG.
			
			(For specific standards see **Appendix A**)
				• Passenger cars
				• Light duty trucks
				• Medium duty vehicles up to 14,000 lbs.
				
				California vehicle technology classifications are:
				
				LEV-II: Low Emission Vehicle - (phase II)
				
				ULEV: Ultra-Low Emission Vehicle
				
				SULEV: Super Ultra-Low Emission vehicle
				
				ZEV: Zero Emission Vehicle
				
				PZEV: Partial Zero Emission Vehicle
				
				ATPZEV: Advanced Technology Zero Emission Vehicle
				
				(See **Appendix B**)
					Manufacturers meet the tighter standards by using a more intensive application of the same emission reduction techniques used to comply with less stringent requirements.

[4] California Code of Regulations, Title 13, Section 1961. http://www.arb.ca.gov/msprog/levprog/cleandoc/cleancompletelevregsasof8-14-04.pdf (**Reference 2**)

Regulatory Program	Date Standards Take Affect	Pollutants Addressed	Requirements	Types of Vehicles Affected	How Requirements May be Met by Manufacturers
Pavley[5]	Requirements are phased in from the 2009 model year through 2016.	Greenhouse gases to address Global Warming Focuses mostly on carbon dioxide (CO_2) but also includes methane (CH_4), nitrous oxide (N_2O), and hydrofluorocarbon (HFC) 134a reductions as well.	The purpose of the Pavley requirement is to achieve the "maximum feasible and cost effective reduction in greenhouse emissions from motor vehicles." The emissions reductions are based on grams per mile CO_2 equivalent. (CO_2E) (See **Appendix C**)	• Passenger cars • Light duty trucks up to 8500 lbs. gross vehicle weight (GVW) • Medium duty passenger vehicles to 10,000 lbs. GVW	California and other opt-in states expect that automobile manufacturers will apply technological improvements to meet Pavley requirements. This includes using a combination of existing technology, selling a greater number of advanced technology vehicles, or using alternative compliance methods. (See **Appendix D**)

[5] Final Regulation Order, Amendments to Sections 1900 and 1961, and Adoption of new Section 1961.1,Title 13, California Code of Regulations http://www.arb.ca.gov/regact/grnhsgas/fro.pdf **(Reference 3)**

D. Similarities and Differences between Federal (Tier 2) and California (LEV/Pavley) Vehicle Standards

There are many notable similarities and differences between the federal Tier 2 standards and California's standards (sometimes referred to as Cal-LEV/Pavley because they include both LEV-II and Pavley standards). For a more detailed description of both the California and federal certification requirements see **Appendix E**.

Both California and federal standards become progressively more stringent over time as vehicle technology advances, although the fleet average in each program emphasizes different pollutants. The federal standards and California's standards are similar in that they both classify vehicle types into several different groupings, then set emissions standards for each vehicle grouping (i.e., classes).

Both the California and federal programs create a range of vehicle classifications based on emission levels. Manufacturers have broad flexibility to certify vehicles to any emission category they choose, but vehicles are generally distributed among the emission categories according to their size. That is, larger vehicles are typically in the higher emission categories and smaller vehicles are in the lower emission categories.

Each program sets overall fleet average emissions limits. These standards reflect the average certified emissions of all vehicles sold each year by a manufacturer and are the primary controlling features of both programs. The fleet average emission limits allow manufacturers the flexibility to produce vehicles that emit both more and less than the fleet average as long as the mathematical average is within the fleet average limit. The programs differ in that the California fleet average limit applies to NMOG and the federal fleet average limit applies to NOx. A side benefit of reducing NMOG is that many NMOG compounds are also hazardous air pollutants (air toxics). The effect of NOx reductions on air toxic emissions has not been determined. However, NOx is a precursor to particulate matter (PM) so NOx reductions also reduce PM emissions.

In addition, the California Pavley standards set fleet average greenhouse gas emission standards for light duty vehicles. The federal Tier 2 program does not regulate greenhouse gases.

Finally, the California program requires a portion of a manufacturer's fleet to be Zero Emission Vehicles or ZEVs. No such provision exists in the federal program. The effect of the ZEV requirement is to lower total emissions about 3% (from 11% down to 8%) beyond the level achieved by the NMOG fleet average emission standard alone.

E. California's Zero Emissions Vehicle (ZEV) Requirement

In addition to setting standards for emissions limits for particular pollutants and establishing fleet average emissions standards, the California LEV rules require the use of Zero Emission Vehicles (ZEVs). ZEVs were originally conceived as battery-electric vehicles but the category broadened to include fuel-cell vehicles as well. The California Air Resources Board (CARB) set technology-forcing targets for the state's future fleet. The standards require ZEVs to comprise an increasing percentage of a manufacturer's light duty fleet, going from 10% in 2005 to 16% in 2018.

F. California's NMOG Fleet Average Emission Requirement

As mentioned earlier, California sets an overall fleet average emission limit for NMOG. The opt-in states allow manufacturers a transitional period before the NMOG fleet average emissions requirement applies. To do so, there are basic rules for NMOG fleet average debits and credits. First, if the average emissions of all a manufacturer's models delivered for sale in that state, for any model year, exceed the fleet average requirement, the manufacturer earns debits. If the manufacturer's fleet average is lower than the requirement, they earn credits. Secondly, debits must be made up or "equalized" the following year using previously earned credits and/or credits earned during the following year. Lastly, if debits are not made up the following year, the manufacturer becomes liable for penalties.

G. Role of Reformulated Gas

Reformulated gasoline (RFG) is gasoline blended to burn cleaner and reduces smog-forming and toxic pollutants in the air. RFG is required by the Clean Air Act in cities with the worst smog pollution. When the federal reformulated gasoline program was phased in, there were 17 states and the District of Columbia that used this fuel.

The State of California implements its own reformulated gasoline program because California had the most serious air quality problems in the nation. The state required the production of even lower-polluting gasoline, California RFG. This fuel reduces air pollution emissions more than federal RFG and satisfies federal RFG requirements.

Reformulated gasoline provides emission reductions with or without the LEV II program. RFG only provides reductions for criteria pollutants but not for greenhouse gases. California estimates reformulated fuel reduces hydrocarbon emissions 17%, oxides of nitrogen 11% and air toxics 40% (potency-weighted basis). Reformulated gasoline has the advantage of not depending on fleet turnover as it immediately lowers emissions from all gasoline vehicles in a fleet.

This Workgroup is not charged with reviewing the reformulated gasoline component as of California's vehicle emissions program.[6]

H. Discussion of Background Material

1. Summary of Guest Speaker Comments

Chuck Shulock (CARB): Provided an overview of the California motor vehicle emission standards. Essentially, the California regulations pertain to light and medium duty vehicles, there is a declining fleet average emission requirement for NMOG emissions, and they include a zero emission vehicle (ZEV) program. California has revised the rules a number of times to reflect the changes, such as revising the ZEV program and specifying the types of vehicles that are regulated under the vehicle classes. Under the ZEV program, revisions included establishing new classes of vehicles, such as Partial Zero Emission Vehicles (PZEVs) and an associated extended warranty of 15 years/150,000 miles to help keep cars running cleanly.

[6] Some members of the Workgroup would like to recommend to the Governor that this issue be considered by a separate workgroup that would explore the advantages and disadvantages of such a program in Oregon given our current air quality conditions.

California also adopted the greenhouse gas (GHG) emission standards. Under the GHG standards, it stipulates CARB may not ban the sale of any vehicle category. The purpose of the rules was to require the use of existing technology to meet the GHG standards. Chuck also discussed the types of emerging technologies potentially available under the GHG standards. A summary of the current lawsuits against California and their status concluded the talk.

Dennis McLerran (Puget Sound Clean Air Agency): Began with a discussion of the Washington efforts to address climate change. He talked about the Legislature's efforts to address climate change through the adoption of the California standards. The Washington Legislature considered the actual air quality benefits, effects on vehicle model availability, whether its proposed laws are pre-empted, and the potential for out-of-state dealer sales resulting in loss of WA dealer business. The Washington legislature adopted the California standards contingent upon Oregon adopting them. In addition, the legislature excluded the ZEV portion of the program and exempted California certified vehicles from their emissions testing program. Dennis cautioned that Oregon should not necessarily follow Washington's lead on their changes to the program.

Bob Saunders (Washington Department of Ecology): Bob addressed the implementation side of the California standards and gave background on the committee process used to develop Washington's rules. The main issues addressed how the requirements are phased-in, what kind of data should be reported, how the program will be implemented, and inspection and dealer requirement issues. Washington is allowing a four-year phase in process for the fleet average emission requirements, is asking for more reporting information from auto manufacturers than other states (by tracking how many federal cars are sold to dealers), and conducting dealer inspections while looking for large instances of noncompliance. Additionally, the Department of Ecology is working with the Department of Licensing (DOL) to track how many vehicles are being registered under their exemptions.

2. Summary of Public Comments

During the course of the Workgroup meetings, the public was invited to provide oral comment. The following thirty people spoke in favor of the adopting the California standards in Oregon: Jenny Holmes (Ecumenical Ministries of Oregon), Bernice Hirtzel (OSPIRG), Bill Bugbee (Washington County resident), Jim Lester (Multnomah County resident), Marylou Noble (Multnomah County resident), Jim Edelson (Oregon Interfaith Global Warming Steering Committee), Jean Fitzgerald (citizen), Jerry McIntyre (small business owner), Charles Kilo (Physicians for Social Responsibility), Eli Lamb (citizen), Martha Perez (student), Tom Barron (citizen), Barbara McLean (citizen), Paul Fox (citizen), Ruth Phinney (citizen), Alison Hill (citizen), Rick Durst (citizen), Marvin Moore (citizen), Henry Germond (citizen), Margaret Noel (League of Women Voters), Laura Etherton (OSPIRG), Gavin Clark (citizen), Sue Bartlett (citizen), Cyd Manro (citizen), Walt Mintkeski (citizen), Jonathan Dubay (citizen), Jerry Magee (citizen), Caroline Kincaid (citizen), Mark Freidberg (citizen), and Barbara Crest (NW Automotive Trades Association).

One member of the public spoke against the adoption of the California standards in Oregon: John Charles (Cascade Policy Institute).

In addition, through DEQ's website, the public had the opportunity to submit written comments. DEQ received 1,128 comments in support of adopting the California standards in Oregon and 78 comments against the adoption of the California standards. Their comments are in **Appendix K** and are at the DEQ's Headquarters in Portland for viewing in person.

3. Summary of Workgroup Comments

Workgroup members asked the Washington guests about the details of implementation, for example: (1) costs of implementing the rules and its effect on dealers; (2) how many cars currently in Washington are California compliant; (3) registration denial in Washington; (4) types of exemptions; (5) dealer inspections; and (6) the possibility of including a sign in the cars that notify the purchaser if the car is California compliant. In response, Dennis McLerran and Bob Saunders replied that they (1) do not believe it imposes costs on dealers and will not be an expensive program to implement; (2) estimate about 70% of vehicles in Washington are California-compliant (although Steve Douglas (Alliance of Automobile Manufacturers - AAM) clarified the 70% of CA-compliant vehicles does not include the CO_2 emissions reduction component because the Pavley requirements have not gone into effect); (3) have the authority to do "registration denial"; (4) have a list of exemptions in their rules, which can include military service or job transfer from out of state; (5) have worked with dealers regarding compliance and dealer inspections; and (6) decided not to go forward with including a sign in the cars notifying that the car is not California-compliant.

Workgroup members asked if there were ways to tie the VIN number to California compliance information or to add information about the car into the vehicle licensing database. Washington replied they did not look into the database issue and the VIN and compliance information cannot be tied together. For Washington, the bigger issue was how to deal with cars that are registered out of state and whether they are California compliant. Workgroup members also discussed whether the labels under the hood were tamper proof (yes) and if labels identify the amount of emissions coming from the vehicle (yes).

Steve Douglas, AAM, sought to clarify the passage about reformulated gas in the briefing paper. He pointed out reformulated gas provides a benefit and is a reason for some of the biggest emission reductions in California. Chuck Shulock, CARB, agreed but said that reformulated gas is not needed to get emissions benefits under the California standards. The group agreed to include a clarifying statement in the briefing paper. Additionally, Chris Hagerbaumer, Oregon Environmental Council (OEC), mentioned reformulated gasoline provides small GHG emissions benefits so a separate emissions standard for vehicles is needed to reduce GHG.

Al Jubitz asked if it were true that under the California standards, CO_2 levels (tons/year) would remain the same. Chuck Shulock, CARB, confirmed it and attributed it to large vehicle miles traveled (VMT) growth. The Oregon Department of Transportation's (ODOT) projection for the next ten years is 1.95% average annual VMT growth, non-compounded. VMT growth is a combination of population growth and growth in VMT per capita. Steve Douglas, AAM, commented that he does not consider CO_2 to be a pollutant in the same way that CO is a pollutant.

Andy Ginsburg, DEQ, asked if the technology to reduce CO_2 emissions is patented. Both Chuck Shulock and Steve Douglas replied that the technology itself may or may not be patented. Accessing the technology should not be a problem for manufacturers.

Alan DeBoer, OADA, asked if CO_2 emission controls directly affect gas mileage. Dave Nordberg, DEQ, responded the Pavley rules do not directly require increased fuel economy as other techniques can be used to reduce GHGs that are far more potent than CO_2. These include reducing nitrous oxide emissions through catalytic converter improvements and reducing refrigerant losses by improving air conditioning systems. Dave Nordberg, DEQ, also

indicated most industry observers expect auto manufacturers to comply with GHG requirements using techniques that will also produce significant fuel savings.

According to CARB, 97 percent of the GHG emissions from a vehicle are related to tailpipe CO_2 emissions. Steve Douglas, AAM, indicates the U.S. EPA states that the only way to reduce tailpipe CO_2 emissions is by improving fuel economy[7]. He asserts the California standards cannot be met without improving fuel economy. CARB asserts it has clear legal authority to adopt GHG standards and disagrees with EPA's conclusion, believing there are other ways to reduce CO_2 emissions, (e.g. propane, bio-fuels, hydrogen, electric, future technologies, etc).

Federally, the National Highway Traffic Safety Administration sets fleet average fuel economy for light-duty vehicles (CAFE Standards). AAM indicates these standards have the collateral effect of reducing greenhouse gases, the extent of which is debated.

[7] He cites the following portion of 68 Federal Register (September 8, 2003) at 52922-52933. "Even if GHGs were air pollutants generally subject to regulation under the CAA, Congress has not authorized the Agency [EPA] to regulate CO2 emissions from motor vehicles to the extent such standards would effectively regulate the fuel economy of passenger cars and light duty trucks. No technology currently exists or is under development that can capture and destroy or reduce emissions of CO2, unlike other emissions from motor vehicle tailpipes. At present, the only practical way to reduce tailpipe emissions of CO2 is to improve fuel economy. Congress has already created a detailed set of mandatory standards governing the fuel economy of cars and light duty trucks, and has authorized DOT--not EPA--to implement those standards..."

II. Legal Requirements and Issues for States Opting into California's Motor Vehicle Regulations

A. Federal Preemption and Exceptions

Section 209 of the federal Clean Air Act (CAA) generally prohibits states from adopting or enforcing standards relating to the control of emissions from new motor vehicles. However, California is exempted from this federal preemption and may set its own motor vehicle emissions standards if, in the aggregate, the California standards are at least as stringent as federal requirements. Congress allowed this exemption, in part, because California was the only state that regulated new-vehicle emissions before Congress required such standards in the federal CAA.

When California chooses to establish its own emission standards, it must apply to EPA for a waiver of the general preemption. EPA may deny California a waiver only in very limited circumstances. California has already received a waiver for the LEV II standards and plans to request a waiver for the Pavley standards at the end of 2005.[8]

California has requested a waiver for the ZEV requirements, and EPA is in the process of reviewing that waiver request.

B. Process for Opting in to California's Standards

Section 177 of the CAA allows most other states to adopt and enforce standards relating to motor vehicle emissions controls if such standards are "identical to the California standards for which a waiver has been granted." This is commonly referred to as "opting in." States that are eligible for adopting the California standards are commonly referred to as "opt-in states" or "section 177 states."

An opt-in state that chooses to adopt California's emission standards must adopt them at least 2 years before the beginning of the model year affected by the standards. A given model year actually begins as early as January 2 of the previous calendar year. Therefore, for the Pavley standards to go into effect in Oregon for the 2009 model year, the standards must be adopted by January 1, 2006. If Oregon adopts the standards after January 1, 2006 but before January 1, 2007, the first model year affected would be 2010.

Opt-in states can opt out of the California standards at any time. A state opting out of California's program would return to the federal standards.

C. Identicality Provision and "Third Vehicles"

Section 177 requires opt-in states to adopt standards that are "identical" to California's standards (referred to as the "Identicality provision"). The limits of the Identicality requirement, however, are not well defined. It does not require that the two sets of rules contain the exact same language; rather they cannot diverge in any substantive aspects such that a vehicle or engine manufacturer would be required to make a "third vehicle." That is, automakers currently must design one type of vehicle to meet federal regulations and another type of vehicle to meet California's standards. The state adopting California's standards must not alter California's

[8] 68 *Fed. Reg.* 19811 (April 22, 2003).

regulations such that auto manufacturers would need to design yet another automobile to meet these altered standards. Requiring manufacturers to design and produce different vehicles or engines for each state would be untenable.

According to EPA, all standards applicable to a segregatable program must be implemented in order to assure that specified vehicles required by a particular program are subject to the same emissions requirements. For example, a state could not adopt only California's NMOG standards for a LEV without adopting the NOx and CO standards. However, EPA believes that the ZEV mandate is separable from the rest of the LEV program. This interpretation remains untested in the courts.

It appears that states can adopt certain variations without violating the Identicality provision. The Second Circuit Court of Appeals has explained in broad terms that "standards relating to the control of emissions" describe regulatory measures intended to lower the level of auto emissions. For example, the tailpipe emission requirements contained in the LEV Program clearly are "standards, and such measures must be identical. However, "enforcement mechanisms," such as periodic testing and maintenance requirements and the level of penalties that can be assessed for rule violations, are regulatory devices intended to ensure that the "standards" are effective. These provisions need not be identical. Still, this distinction does not always provide a bright line.

EPA stated in 1994, that they believe the ZEV production or sales mandate is not required to ensure consistency with section 177.[9] EPA asserted that the ZEV sales mandate was not an emission standard but, instead, was an accompanying enforcement procedure because it did not limit the quantity, rate, or concentration of emissions. The federal D.C. Circuit vacated EPA's OTC rule in 1997.[10] Subsequently, EPA noticed approval of Maine's program on January 24, 2005. That program did not include any requirements for ZEVs sold. Because the emission reductions are controlled by the fleet average hydrocarbon curve and can be achieved without any specific ZEV sales mandates, EPA proposes to approve the rule.[11]

D. Prior Litigation

The auto manufacturers sued both New York and Massachusetts when they first opted in to California's standards. The most prominent claim was that the states' failure to adopt California's reformulated gasoline regulations violated the "Identicality" requirement and "third vehicle" prohibition of the CAA Section 177. After several rounds of appeals and remands, both the First and Second Federal Circuit Courts upheld the states' rules.[12]

Another key issue was whether the ZEV sales requirement was a "standard relating to the control of emissions" or merely an "enforcement mechanism." Both the First and Second

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[9] *See* 59 FED. REG. (Sept 22, 1994) at 48690-48692. Ozone Transport Commission: Low Emission Vehicle Program for Northeast Ozone Transport Region; Proposed Rule. www.deq.state.or.us/aq/aqplanning/CalLev/Index.htm (**Reference 11**)

[10] Although the D.C. Circuit Court subsequently vacated EPA's OTC rule directing the OTC states to adopt the Cal LEV standards, this issue was not before the court. *See Virginia v. EPA,* 108 F.3d 1397 (DC. Cir. 1997).

[11] See 70 Federal Register (January 24, 2005) at 3335-3339.

[12] *See Motor Vehicle Manuf. Assoc. v. New York State Dept. of Envt'l. Conservation,* 79 F.3d 1298 (2d Cir. 1996).

Circuits ruled that the ZEV sales requirement is a command that has a direct effect on the level of emissions and, therefore, is a "standard relating to the control of emissions."[13]

E. Current Lawsuits

Other legal issues may affect whether Oregon can implement the newest elements of the California vehicle emission standards, i.e., the Pavley standards, which reduce greenhouse gas emissions. These issues are discussed below.

1. Regulation of CO_2 as a Pollutant

On July 15, 2005, the District of Columbia, Federal Circuit Court of Appeals decided a case brought under section 202 of the CAA[14]. That section obligates EPA to regulate motor vehicle pollutants that cause air pollution or endanger public health and welfare. Several states (including Oregon) and nongovernmental organizations asserted that this provision requires EPA to regulate greenhouse gases from new motor vehicles. A split panel upheld EPA's decision not to regulate CO_2 as a pollutant. However, the ruling resulted in three distinct opinions, and several of the parties, including Oregon, have petitioned for a rehearing *en banc*. Because the court did not rule that EPA lacks authority to regulate CO_2 and did not address California's authority, some assert that it appears unlikely this ruling will directly affect California's request for a preemption waiver for the Pavley standards.

2. Fuel Economy Standards

The Alliance of Automobile Manufacturers, several California car dealers, and the Tulare County Farm Bureau challenged California's Pavley standards in federal district court on several grounds, including that the standards are an attempt to impose fuel economy standards for new motor vehicles and, thus, are preempted by federal law.[15] The Energy Policy and Conservation Act of 1976 established new car corporate average fuel economy (CAFE) standards, beginning with model year 1978, and it preempts state laws "related to fuel economy standards."[16] Plaintiffs contend that the Pavley standards are an attempt to regulate fuel economy by increasing vehicle fuel efficiency. California asserts, among other things, that fuel economy is not the only means of reducing CO_2, and that the Pavley requirements are authorized by the federal Clean Air Act because they are motor vehicle emission standards. The trial date is set for January 2007.

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[13] *See American Automobile Manufacturers Assoc.v. Cahill,* 152 F3d 196, 200 (2d Cir. 1998), *Ass'n. of Internat'l. Auto Mfrs. v. Mass. Dept. of Envt'l. Protection*, 208 F.3d 1, 6-7 (1st Cir. 2000).

[14] *Commonwealth of Massachusetts, et al., vs. Environmental Protection Agency,* 415 F.3d 50 (D.C. Cir 2005)

[15] *Central Valley Chrysler-Jeep, Inc. et al v. Witherspoon,* (E.D. Cal., No. CIV F-04-6663 REC LJO), filed Dec. 7, 2004.

[16] 49 U.S.C. § 32919(a).

3. California Environmental Quality Act (CEQA)

On September 2, 2005, two auto manufacturers filed a lawsuit under the California Environmental Quality Act (CEQA).[17] Plaintiffs allege that CARB failed to comply with CEQA's procedural requirements and challenge CARB's finding that the greenhouse gas rule approved by the Board will not have a significant adverse environmental impact.[18]

4. Oregon's Expenditures to Adopt California Standards

Three Oregon legislators, several automobile retailers, and the Alliance of Automobile Manufacturers filed a lawsuit against the DEQ and the Environmental Quality Commission (EQC) on September 9, 2005.[19] They challenge the Governor's line-item veto of a legislative appropriations bill, which struck the provision that neither the DEQ nor the EQC may spend money on adopting or enforcing the California standards. Oral argument is scheduled for November 7, 2005, and a ruling is expected by December 21, 2005, prior to EQC's December 22-23, 2005 meeting.

F. Impact of Pavley Lawsuits if Successful

If the federal court decides federal law preempts Pavley standards, California will need to modify its program accordingly. Any state that has already opted-in to Pavley will have to update its rules. Opt-in states would still have LEV II in place, which would continue to provide benefits by reducing ozone- forming emissions and air toxics. Further, California may be able to alter the Pavley requirements in response to an adverse ruling as they did with the ZEV requirements in response to similar challenges.

G. Discussion of Legal Issues and Requirements

In preparation for the workgroup discussion, Rachel Sakata (DEQ) briefed the workgroup on the Clean Air Act requirements that allow California to adopt motor vehicle emission standards and how other states can opt into this program.

1. Summary of Guest Speaker Comments

There were no guest speaker comments.

2. Summary of Public Comments

During the public meetings, Jim Edelson of the Oregon Interfaith Global Warming Steering Committee presented testimony that the biggest obstacle to adopting the standards is the lawsuits filed by auto manufacturers. He encouraged the auto manufacturers to drop the lawsuits.

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[17] *General Motors Corp. v. California Air Resources Board,* No. 05CE CG 02787 (Cal. Super. Ct., Fresno County, Central Div.).

[18] Another state court action concerns alleged procedural defects in the rulemaking process under both the California Administrative Procedure Act and the California Health & Safety Code. *Fresno Dodge, Inc., et al. v. California Air Resources Board et al.*, No. 04CECG03498 (Cal. Super. Ct., Fresno County, Central Div., Dec. 7, 2004).

[19] *Ferrioli et al. v. Oregon Department of Environmental Quality et al.,* No. 05C18514 (Or. Cir. Ct., Marion County).

3. Summary of Workgroup Comments

Questions were raised regarding the issue of Washington's rules and Identicality because Washington did not adopt the ZEV requirements. Dennis McLerran, Puget Sound Clean Air Agency, and Bob Saunders, WA Ecology, indicated that the Identicality issue was a gray area for them and they hope to put the ZEV requirements back in during the next Legislative session.

The workgroup discussed opting out of the program or excluding various components of the California standards, such as the ZEV program. Shelley McIntyre, Department of Justice (DOJ), representative said there are no instances of any states opting out after opting in, but it is a simple process to do so. Steve Douglas, AAM, stated several states initially adopted the LEV program without adopting the ZEV provisions. He referenced an EPA opinion that states the ZEV provision can be excluded without violating Identicality. A copy of the opinion is included as Reference 12.

The workgroup discussed ZEV and whether excluding the ZEV requirement would violate Identicality. Shelley McIntyre, DOJ, explained some states did exclude ZEV but adopted it later and the ZEV issue and Identicality remains unclear. As of October 2005, all opt-in states with the exception of Washington and Pennsylvania, have adopted the ZEV program. California explained that they were optimistic about the ZEV program when it was first introduced. However, because of the emerging ZEV technology and early uncertainties before adoption of compliance alternatives, some northeast states did not initially adopt the ZEV portion of the program. Once California revised the rules again, the northeast states did adopt ZEV.

Andy Ginsburg, DEQ, asked if the number of lawsuits regarding the California program was unusual. Chuck Shulock, CARB, thought that it was. Mitch Rofsky, Better World Club, asked Steve Douglas, AAM, why they are suing in the opt-in states when they are already making California-compliant cars. Steve Douglas did not know the answer as it was a policy decision and he is an engineer. Additionally, the workgroup discussed the pending lawsuit from the automobile manufacturers against Oregon DEQ. The lawsuit asserts the Governor cannot veto the provision that prohibits the DEQ from working on the California standards.

III. Expected Benefits to Human Health and the Environment in Oregon

A. Overview

As discussed previously, California vehicle emission standards include two components: LEV (Low Emission Vehicle) standards that address a variety of air pollutants (i.e. smog forming emissions, particulate, air toxics); and "Pavley" standards designed to reduce greenhouse gases. The expected emission benefits from each program are discussed below. The Governor's Advisory Group on Global Warming, December 17, 2004 consensus report, "Oregon Strategy for Greenhouse Gas Reductions", recommended the adoption of California vehicle standards as a key strategy to reduce greenhouse gas emissions in Oregon. Adopting California vehicle standards would also provide a secondary benefit of reduction in smog forming emissions and hazardous air pollutants (air toxics).

B. Pollution Impacts

1. Pavley

As discussed in the Governor's Advisory Group on Global Warming, greenhouse gas emissions contribute to a broad range of harmful effects. The report also states emissions will affect water resources, human health, coastal environments, agricultural production and the forest industry among others. Further information on the impact of global warming in Oregon is provided in Sections 3.2.1 to 3.2.5 of the report. Additional information on this topic is available at Oregon Department of Energy's website at: http://egov.oregon.gov/ENERGY/GBLWRM/Strategy.shtml

2. LEV

The LEV portion of California's emissions standards will reduce a variety of criteria pollutants that are linked to air quality public health standards. These include precursors of ground level ozone (volatile organic compounds (VOC), oxides of nitrogen (NOx), and carbon monoxide (CO). Ground level ozone, also known as smog, is an air pollutant formed in the atmosphere by a chemical reaction of VOCs and NOx. This reaction is most intense on hot summer days with poor ventilation. Ozone is a strong respiratory system irritant that aggravates respiratory illnesses, impairs physical activity, and can cause permanent respiratory system damage. Ozone can be especially harmful to older people and children, and can damage crops and other materials.

A secondary benefit of the LEV program is that it also reduces air toxics. Air toxics are generally defined as air pollutants known or suspected to cause cancer or other serious health problems. The U.S. Environmental Protection Agency (EPA) regulates 188 air toxics, also known as hazardous air pollutants. The emission reductions expected from California vehicle emissions standards would help reduce Oregonians' exposure to these hazardous air pollutants, as well as help ensure continued compliance with national ambient air quality standards.

C. Emissions Reductions

1. Background

Because of the federal vehicle standards, today's motor vehicles in Oregon are far cleaner than those of the early 1970s. However, since that time, both the population and the number of vehicle miles traveled (VMT) have increased dramatically. This increase in motor vehicle travel can erode the air quality benefits achieved from cleaner cars. Reducing air pollution in the face of continued growth is a key reason why motor vehicle emission control technology must continue to advance. However, even with continued increase in VMT and population, emissions of criteria pollutants and air toxics from the vehicle fleet will decline by 50 percent over the next two decades because of the federal and California vehicle standards. (For additional information on this subject please refer to "Summary of Workgroup Comments" p. 26-27). For GHG pollutants, emissions will increase proportionally to VMT growth unless further action is taken.

2. Greenhouse Gases (Pavley)

The Pavley requirements of the California standards are designed specifically to reduce greenhouse gases. In 2012, new vehicles are expected to have 22% lower greenhouse gas emissions compared to the 2002 fleet. When the standards are fully implemented in 2016, new vehicles will emit 30% lower greenhouse gas emissions.

California (CARB) staff estimate that the Pavley regulation will reduce climate change emissions from the light duty passenger vehicle fleet in California by 87,000 CO_2 equivalent tons per day in 2020 and 155,200 CO_2 equivalent tons per day in 2030. This equates to an 18 percent reduction in climate change emissions from the light-duty fleet in 2020 and a 27 percent reduction in 2030.

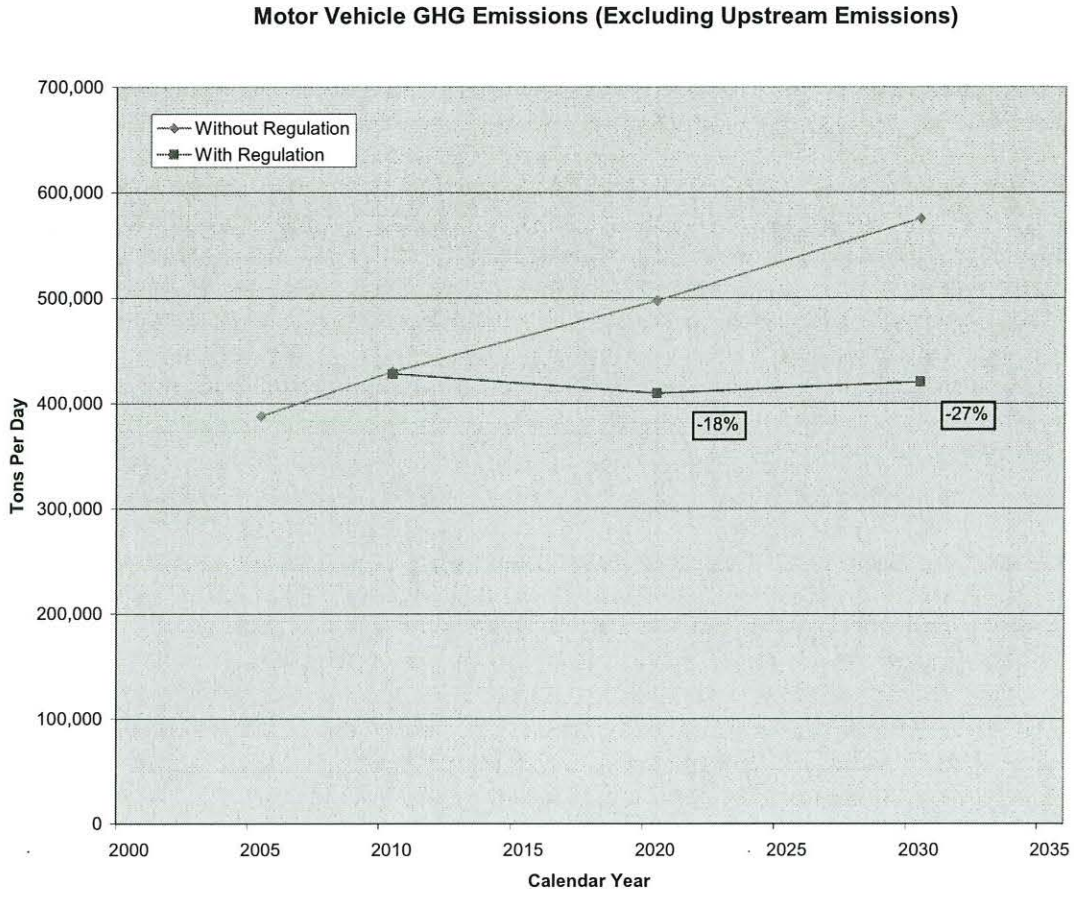
Fleet-wide greenhouse gas emission reductions for Oregon are expected to be similar to those predicted in California. Assuming that vehicle use in Oregon increases about 1.8% per year, California's vehicle emission standards will reduce CO_2 equivalent emissions in Oregon by an estimated 9,000 tons per day in 2020 and 16,000 tons per day in 2030.[20] **Figure 1** shows the reductions of GHG emissions in California under the Pavley standards.

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[20] The figures were based on the following assumptions:
2020 Average Annual Daily Vehicle Miles Traveled = 127.9 million miles
2030 Average Annual Daily Vehicle Miles Traveled = 152.9 million miles
Average baseline fuel efficiency = 25 mpg
CO_2E emissions = 19.4 lbs/gallon
Average fleet CO_2 reduction in 2020 = 18%
Average fleet CO_2 reduction in 2030 = 27%

Example - For 2020: [[[127.9 million miles / 25 mpg] * (19.4 lbs/gallon)] / (2,000 lbs/1 ton)] / 0.18 = ~9,000 tons/day of CO_2 reductions

Figure 1: Motor Vehicle GHG Emissions (in California)[21]



3. Criteria Pollutants (LEV)

To understand how the adoption of California's emissions standards would impact emissions levels in Oregon, the Oregon Department of Environmental Quality worked with Washington's Department of Ecology (ECY) in 2005 to model the emission reduction benefits. Four different types of pollutants were investigated:

- Carbon Monoxide (CO)
- Volatile Organic Compounds (VOC)
- Oxides of Nitrogen (NOx)
- Air Toxics

4. Modeling Results[22]

DEQ and ECY evaluated several modeling scenarios to develop a better understanding of the emission reduction benefits expected in Oregon from California's vehicle standards. The

[21] CARB, Report to the Legislature and the Governor on Regulations to Control Greenhouse Gas Emissions from Motor Vehicles, p. 16, www.arb.ca.gov/cc/reports/ab1493_legreport.pdf

[22] Washington Department of Ecology, "Adoption of the California Low-Emission Vehicle Program in Oregon Expected Emissions Reductions", August 5, 2005. www.deq.state.or.us/aq/aqplanning/CalLev/Index.htm (**Reference 12**)

evaluation addressed three groups of vehicles: brand new vehicles only, the light duty fleet only, and the entire fleet registered in the state.

The results show the additional emission reduction expected beyond what would be achieved by the federal program. For example, in **Table 2** below, the expected VOC benefit from California standards in 2020 is in the range of 12% to 21%. In other words, new vehicles subject to the California standards in that year are expected to have 12% to 21% lower VOC emissions than federal vehicles. The years 2020 and 2030 were chosen to be consistent with the Washington and CARB analyses.

In general, California's LEV II vehicles are significantly cleaner than federal Tier 2 vehicles. There are three reasons for this:

- California's NMOG fleet average emissions requirement produces a cleaner fleet overall than the federal NOx fleet average emission standard;
- California's ZEV provisions require additional numbers of very clean vehicles; and
- California's evaporative emission standards are more stringent than federal standards.

Table 2: LEV II Reductions Compared to Federal Tier 2: *New Vehicles Only (Oregon Fleet)*

Year	Pollutant	Reduction
2020	CO	15%
2020	VOC	12% - 21%
2020	NOx	30% - 33%
2020	Toxics	22% - 38%

Table 3: LEV II Reductions Compared to the Federal Tier 2: *Oregon Light Duty Fleet*

Pollutant	Without I/M *	With I/M**
Year 2020 Evaluation		
CO	7%	8%
VOC	3% - 6%	4% - 7%
NOx	5% - 6%	8% - 9%
Toxics	5% - 10%	7% - 14%
Year 2030 Evaluation		
CO	11% - 12%	13% - 14%
VOC	7% - 11%	8% - 14%
NOx	9% - 11%	15% - 18%
Toxics	9% - 17%	13% - 25%

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Table 4: LEV II Reductions Compared to the Federal Tier 2: *Entire Oregon Fleet*

Pollutant	Without I/M*	With I/M**
Year 2020 Evaluation		
CO	6% - 7%	8%
VOC	3% - 5%	3% - 6%
NOx	3% - 4%	4% - 5%
Toxics	4% - 9%	6% - 11%
Year 2030 Evaluation		
CO	11%	12% - 13%
VOC	6% - 10%	7% - 12%
NOx	7% - 9%	11% - 13%
Toxics	7% - 14%	10% - 19%

* Represents the effects in areas not subject to a vehicle emissions testing (Inspection/Maintenance) program.
** Represents the effects in areas with vehicle emissions testing (Inspection/Maintenance): Clackamas, Jackson, Multnomah and Washington Counties.

In summary:

- **Table 2** shows the range of additional benefit when looking at just new passenger cars and light duty trucks. Because new vehicles reflect the latest technology, **Table 2** shows the greatest amount of emission reduction benefit. The fleet mix in this analysis does not represent the vehicle fleet as a whole.
- **Table 3** shows the range of additional benefit looking at the fleet of passenger cars and light duty trucks of all ages. Because this fleet includes a fraction of older vehicles, the average emission benefit is less than is the case from new vehicles.
- **Table 4** shows the range of additional benefit looking at all vehicles in a typical urban fleet (passenger cars though heavy duty trucks). Because this fleet includes vehicles of all ages as well as all vehicle types (such as heavy duty trucks not regulated by California standards), the average emission benefit is less than is the case in **Tables 2 and 3**.

5. Methodology/Range of Results

To compare the emissions benefit of California's LEV II standards with the federal Tier 2 standards, Washington's ECY used the latest EPA modeling program MOBILE6.2. To describe the future distribution of vehicles, ECY used the sales mix predicted by CARB in January 2005. That vehicle mix assumed the full use of PZEVs and ATPZEVs to meet the ZEV requirement. It is not clear what mix of vehicles manufacturers will produce to meet the Tier 2 standards, so ECY investigated two different scenarios. This approach produced a range of emission reductions. The analysis is consistent with EPA's Guidelines for estimating the benefits of switching from the federal Tier 2 program to the California LEV II standards. By conforming to those guidelines, this analysis avoids criticisms that were raised with an earlier study conducted by the Northeast States for Coordinated Air Use Management. That investigation--dated October 2003--was conducted before EPA released its guidance.

The result representing the lower emissions in the range was calculated using the MOBILE6.2 default fleet mix (developed before the beginning of the Tier 2 program). This assumed that a mixture of high, medium and low emitting vehicles would be produced. Excess emissions from the higher emitting vehicles were offset by the emissions savings produced by lower emitting vehicles. Because the emission limits specified for individual vehicle categories are not completely proportionate to the emissions of vehicles certified in those categories, different mixes of vehicles can produce different overall emissions. In this case, the broad vehicle distribution produced low emissions.

The result representing the higher emissions range was developed by Christopher Porter of Cambridge Systematics, Inc. as part of his review of the Washington State evaluation.[23] This approach assumed a normal bell-shaped distribution of vehicles with most vehicles clustered near the middle of the emission categories ("bin" 5 in the Tier 2 framework). Emissions from this clustered scenario resulted in higher emissions than the default fleet mix. Cambridge suggested that this scenario might be closer to actual vehicle fleet sales than the older default mix.

The analysis also assumed the ZEV requirement will be met using PZEV substitution and applied reasonable assumptions about the future fleet. For a detailed discussion of the assumptions behind the model, please see the August 5, 2005 report from Washington Department of Ecology, which is slated for posting on Oregon DEQ's website at www.deq.state.or.us/aq/.

6. Effects of Inspection/Maintenance Program

In Oregon, vehicles owned in the Portland and Medford areas are subject to emissions testing (I/M) every two years as a precondition of owners' re-registering their automobiles. Vehicles registered in those areas constitute 44% of the total number of vehicles registered in the state. The other 56% of vehicles in the state are not subject to I/M and were modeled separately.

The I/M program helps ensure that a vehicle's engine and emission control system will not significantly degrade over time (increasing air pollution). Because these cars are maintained to a high level over the life of the car, their lifetime emissions are less. The analysis results in **Tables 3 and 4** show this effect in that the range of expected benefits from California standards are higher in areas with an I/M program.

D. Discussion of Costs, Benefits and Impacts

In preparation for the workgroup discussion, Dave Nordberg (DEQ) briefed the workgroup about emission reductions anticipated under the California program.

1. Summary of Guest Speaker Comments

There were no guest speaker comments.

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[23] Email from Christopher Porter, Cambridge Systematics, Inc. to Sally Otterson, Washington Department of Ecology. Re: Revised Sales Mix (Phase-In). January 31, 2005

2. Summary of Public Comments

During the public meetings, five members of the public [Jerry McIntyre (small business owner), Marylou Noble (Multnomah county resident), Bill Bugbee (Washington county resident), Margaret Noel (League of Women Voters), Laura Etherton (OSPIRG)] testified that the implementation of these rules would result in better air quality and fuel efficiency. Adopting the standards will help alleviate global warming and provide cleaner air for humans.

In addition, the following members presented individual testimony at the public meetings:

- Charles Kilo, Physicians for Social Responsibility, commented on the health effects caused by global warming. He discussed how cars are a primary contributor of particulates and that children, especially those who live in the city, suffer from asthma.
- John Charles, Cascade Policy Institute, commented that he does not think the California standards are necessary because air quality has improved dramatically since the 1970's and air emissions are going down. He commented that cars and trucks should not be targeted as the problem regarding air pollution. He stated that 97% of worldwide CO_2 emissions are natural and that the California standards will have very little effect on climate change.
- Laura Etherton, OSPIRG, commented that vehicle miles traveled are predicted to increase and by not adopting the California standards, global warming pollution from tailpipe emissions would increase 30+% in 2020.

3. Summary of Workgroup Comments

The group referred to a handout (Chart included as **Appendix H**) distributed by Steve Douglas, AAM. The chart showed a comparison of the expected emission reduction benefits (reductions in NOx and VOC) from the federal and California programs. The expected benefits differed somewhat from the information DEQ has provided (the AAM chart shows less difference between the federal and California programs in terms of vehicle emissions reduction).

The National Low Emission Vehicle, (NLEV), standards used as the base case in AAM's analysis, was a voluntary program that preceded the federal Tier 2 requirements. Auto manufacturers had the option of agreeing to comply with NLEV tailpipe standards prior to model year 2004. Additionally, it was a program Northeast states could adopt to meet State Implementation Plan requirements in their area. EPA would offer these states SIP credits for participating in the program.

The group acknowledged that there could be variation in the estimates of emission benefit depending on the underlying assumptions of the analysis. DEQ staff agreed to confer with Steve Douglas, AAM, to understand better the data and assumptions used in each analysis. At the request of workgroup members, DEQ created charts (**Tables 5 & 6**) with information supplied by Tom Darlington, Air Improvement Resource, (AAM contractor) to help illustrate the analysis. Data used to create these graphs was provided by Air Improvement Resource and is included as **Appendix I**.

Table 5: AAM's NOx Reductions – Base Case (NLEV), LEV II, and Federal Tier 2: *Entire Oregon Fleet* [24]

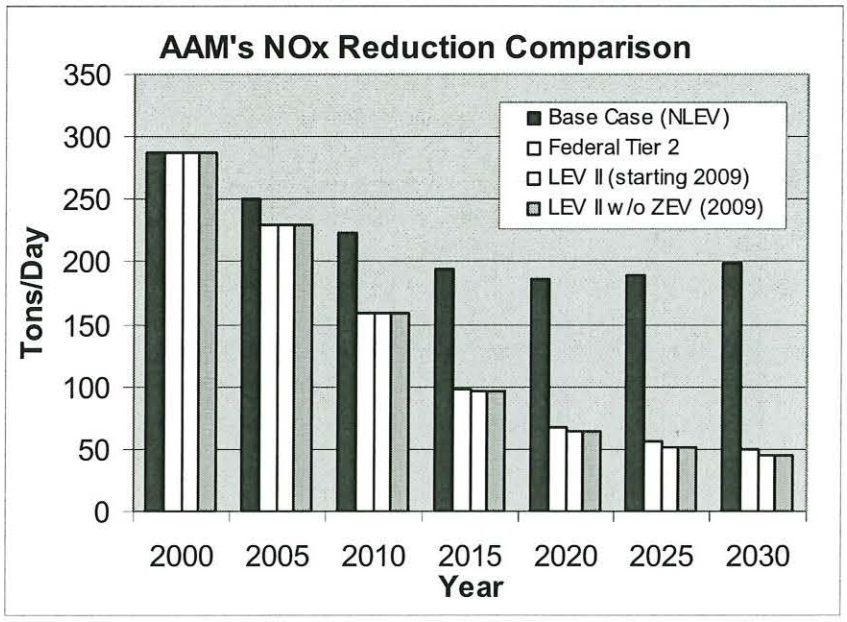
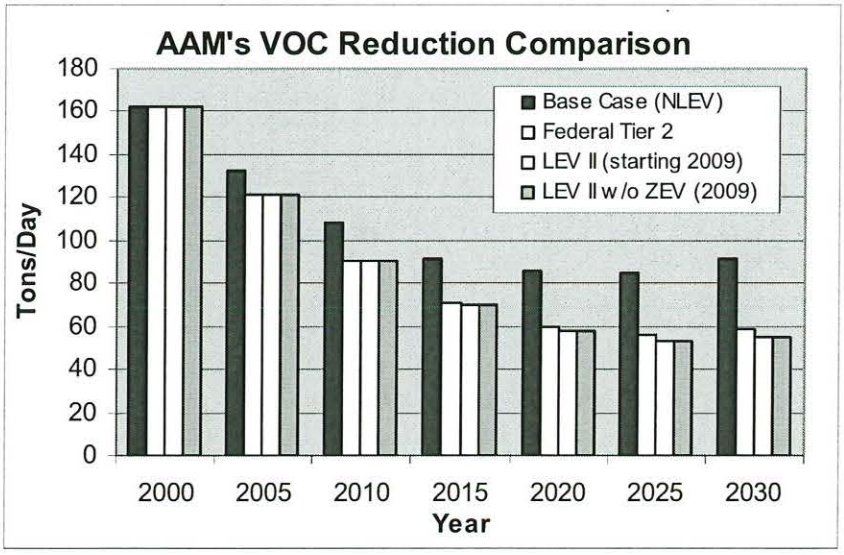


Table 6: AAM's VOC Reductions - Base Case (NLEV), LEV II, and Federal Tier 2: *Entire Oregon Fleet* [25]



[24] E-mail communication from Tom Darlington (AAM contractor) to Dave Nordberg (DEQ), October 11, 2005.

[25] E-mail communication from Tom Darlington (AAM contractor) to Dave Nordberg (DEQ), October 11, 2005.

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Steve Douglas, AAM, pointed out in his handout that the federal vehicle standards would achieve a 70% reduction in NOx and VOC emissions by 2020 compared to 2000 levels. Restated, if Oregon does not adopt the California standards and stays with the federal standards, there will still be 70% emissions reductions for NOx and VOC from 2000 or a 50 percent reduction from 2005 levels.

Oregon's analysis did not look at historic emission reductions but compared expected emissions from the federal and California program today and in the future. Steve Douglas, AAM, was concerned with the way information was portrayed in the report, and wanted to clarify and recognize that substantial emission reduction benefits have been and can be achieved under either the federal or California standards. The workgroup agreed to include the handout in the report and asked DEQ to include graphs with information on CO_2 and air toxics reductions. The AAM handout, however, only addressed VOC and NOx and did not characterize GHG reductions.

Additionally, Steve Douglas, AAM, stated he believed the emission reductions between the federal and California standards are 1%-2% (for NOx and VOC) and questioned whether the cost of the program was worth the small emission reduction benefit. Again, it was recognized that there is variation in the expected benefit depending on the underlying assumptions, and that California, Oregon, and Washington's analysis shows a somewhat larger expected benefit.

DEQ and AAM's emission reduction data are not inconsistent. They simply present a different perspective of the same results. AAM's data focuses on large reductions that both Tier 2 and LEV II are expected to achieve during the next two decades. From that perspective, the difference between Tier 2 and Cal LEV II seems relatively small. DEQ's analysis does not address past emission reductions, but rather focuses on the differences between Tier 2 and LEV II going forward from today. This difference will continue to increase after 2020 because the ZEV standards are not fully phased in until 2018 and that the additional time is needed to allow for fleet turnover before the regulation's full effects are realized. Periodically, the federal and California programs take additional steps with California's program often in the lead. As a result, the gaps ebb and flow as programs come on line. However, the history of the program suggests that the gap could become smaller in the future as EPA adopts the air toxic regulation.

Regarding Oregon's analysis, Mark Reeve, the chair, asked if Oregon's fleet turnover was the same as that in California. Dave Nordberg, DEQ, replied the Oregon vehicles were a little older but that it was not enough of a difference to influence substantially Oregon's estimated benefits. Alan DeBoer, OADA, asked if the modeling was representative of existing cars, including those cars already in Oregon that are California compliant. DEQ's modeling assumes the existing fleet meets the federal cars requirements that currently apply to this state. DEQ believes this modeling assumption is appropriate for several reasons. First, the existence of a California-compliant sticker only means that vehicle falls within the standards of one of several emission categories. There is no indication that new vehicles sold in Oregon meet California's fleet average emission limit, which is the controlling feature of the program. Second, the NMOG fleet average limit will be substantially lower in 2009 when Oregon's rules go in effect. Third, the percentage of California certified vehicles in Oregon could well decline when the Pavley standard goes into effect unless Oregon adopts the California standards. Fourth, the approach used is the one that would be required by EPA, should Oregon ever claim emission reduction credit for the vehicle emission standards as part of the State Implementation Plan (SIP) under the Clean Air Act.

Bob Saunders, WA Ecology, stated that Washington's modeling numbers were similar to those produced by Steve Douglas, AAM. However, Bob Saunders disagreed with the way the information was presented, particularly because the graphs made it seem as though there is no emissions benefit. Washington calculated a 7-8% benefit for NOx and VOC in their state, taking into consideration EPA's guidance and other uncertainties. Washington's analysis (for both Washington and Oregon) applied California's emission standards to the mix of vehicles that California predicted will be used to meet those standards. That scenario was then compared two different fleet-mix scenarios where the Federal Tier 2 requirements would be in effect. One of those scenarios used a fleet mix described by Mobile 6.2 and the other scenario represented a compliance approach where manufacturers cluster most vehicles in the middle of the available emission categories. The clustering option was used because it is a less restrictive allowable compliance scenario. AAM's analysis used only the Mobile 6 default fleet mix[26].

Chris Hagerbaumer, OEC, submitted information showing the difference in smog-forming emissions between a California-certified vehicle and a federal vehicle. This information is included as **Appendix J**.

Some workgroup representatives expressed concern that the focus of the discussion was on criteria pollutants and not GHG. The primary benefit of the California standards is the GHG emissions reductions. Ashley Henry, OBA, asked to include information about CO_2 reductions if Steve Douglas's handout is included; that information is included as **Figure 1** on page 24. The workgroup concurred. Additionally, Steve Douglas, AAM, asked to remove **Table 4** from the report because it includes heavy-duty vehicles, which are not regulated as part of the California standards. DEQ believes **Table 4** provides useful information and has kept it in the report.

Alan DeBoer, OADA, asked about non opt-in states and their GHG levels. Chuck Shulock, CARB, replied studies were conducted regarding criteria pollutant levels but not for GHG because the standards were not yet enforced. However, it was difficult to compare the various states because each state has its own specific air quality issues due to its geographical location (Northeast states vs. Pacific Northwest) or legal criteria (EPA State Implementation Plan requirements).

Oregon's inspection and maintenance (I/M) program was also discussed because the Washington Legislature eliminated its I/M program. David Collier, DEQ, clarified the difference between I/M, which identifies cars that are not operating properly after they are four years old, and the California program, which requires new cars to be cleaner at the point of sale. Dave Collier indicated that the I/M program complements the California standards by ensuring that these highly controlled vehicles are maintained as they age. DEQ intends to retain the I/M program in the Portland and Medford areas because it is necessary to maintain air quality standards even with the California new car standards.

[26] Air Improvement Resource, Inc., Comparison of the Federal Tier 2 and California LEV Program in Oregon, October 4, 2005. www.deq.state.or.us/aq/aqplanning/CalLev/Index.htm (**Reference 13**)

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IV. Cost of Vehicles

A. Overview

The initial purchase price of a new vehicle likely would increase if Oregon adopts California's vehicle emissions standards. At the same time, these advanced vehicles are likely to be more fuel efficient, producing savings to the consumer in fuel costs. The anticipated costs have been studied or estimated by several organizations including California's Air Resources Board (CARB), Northeast States Center for a Clean Air Future (NESCCAF), and Sierra Research. These cost ranges are summarized below.

B. California Air Resources Board (CARB)

1. LEV

Estimates derived from CARB data indicate that the Low Emissions Vehicle II program would increase average vehicle cost $115 to $271. Estimates are based on incremental costs of ZEV, PZEVs, ATPZEV in 2012, and CARB's predicted fleet mix.[27]

2. Pavley Costs

California greenhouse gas reduction regulations are phased in between model years 2009 and 2016. CARB estimates the average vehicle cost in constant dollars will increase over the phase-in period to a little more than $1,000 per vehicle as shown in **Table 7**. California's Pavley emission standards are required by law to achieve maximum feasible and cost effective greenhouse gas emissions reductions without reducing vehicle weight or banning the sale of any vehicle category such as sport utility vehicles or light duty trucks. Therefore, the estimated costs listed represent the cost of applying additional technology to the kinds of vehicles known today to achieve emission reductions.

Table 7: Average Vehicle Cost Increase under Pavley

	Year	Average Cost Increase of Initial Purchase Price (Passenger Cars & Small Trucks/SUVs)	Average Cost Increase of Initial Purchase Price (Larger Trucks/SUVs)
Near Term	2009	$17	$36
	2010	$58	$85
	2011	$230	$176
	2012	$367	$277
Mid Term	2013	$504	$434
	2014	$609	$581
	2015	$836	$804
	2016	$1,064	$1,029

[27] Estimates derived from CARB Staff Report: Initial Statement of Reasons, 2003 Proposed Amendments to the California Zero Emission Vehicle Program Regulations dated Jan.10, 2003, **Table 5.1**. Pg. 39. http://www.arb.ca.gov/regact/zev2003/isor.pdf.

3. Pavley Savings

CARB also found that the increased initial purchase price of vehicles would be more than offset by reduced operating costs. For example, staff evaluated the potential increase in monthly loan payments over a typical 5-year car loan versus the monthly decrease in operating cost resulting from lower fuel consumption. Using the average increase in vehicle prices associated with the fully phased-in regulation (2016) and an assumed fuel price of $1.74 per gallon, staff calculated that the increased vehicle payment minus the lower operating cost would result in a monthly savings to the consumer of $3.38 to $6.74.[28] This savings will produce a net financial benefit that begins with the first month of vehicle ownership. At a fuel price of $3 per gallon, CARB estimated a net monthly savings of $20.37 to $25.68.[29]

The savings of individual vehicle owners may be magnified within the state's economy. That is because money spent on petroleum quickly leaves the state, whereas petroleum savings are more likely to be spent on local goods and services. The extent to which that occurs, the state's economy will recoup even more money from the consumers' savings.

C. Northeast States Center for a Clean Air Future

The Northeast States Center for a Clean Air Future (NESCCAF) studied the cost of dozens of technologies applied in various combinations to reduce greenhouse gas emissions. The analysis considered the emission reduction effects that the most promising technologies will have on five categories of motor vehicles ranging from small cars to large trucks. The study concluded that existing and emerging technologies "can achieve substantial and cost-effective reductions." Using a gasoline price of $2.00 per gallon, NESCCAF estimated that greenhouse gas reductions would save vehicle owners from $300 to $2,200 during the life of a vehicle while yielding CO_2 reductions up to approximately 45%.[30] CARB relied heavily on the information provided in this study to derive the costs and savings under Pavley. This study is available online at: http://bronze.nescaum.org/committees/mobile/rpt040923ghglightduty.pdf

D. Auto Industry Estimates

During California's rulemaking process, the auto industry argued that the greenhouse gas standards would produce lower savings than CARB estimated. The industry's position was based on an analysis by Sierra Research[31], which found that meeting the final (2016) Pavley standard would cost an average $3,000 per vehicle and save approximate 1000 gallons of fuel over that vehicle's life. The auto industry concluded the Pavley requirements would not be economical to the consumer.

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[28] CARB, Regulations to Control Greenhouse Gas Emissions From Motor Vehicles, Final Statement of Reasons, August 4, 2005, Revised **Table 10.5-1** of the ISOR Addendum, pg. 252. http://www.arb.ca.gov/regact/grnhsgas/fsor.pdf

[29] E-mail communication from Bill Dean (CARB) to Rachel Sakata (Oregon DEQ), September 22, 2005.

[30] Northeast States for a Clean Air Future, Reducing Greenhouse Gas Emissions from Light-Duty Motor Vehicles, pg. 3-23; September 2004. http://bronze.nescaum.org/committees/mobile/rpt040923ghglightduty.pdf **(Reference 5)**

[31] Sierra Research, Inc., Report No. SR2004-09-04, Review of the August 2004 Proposed CARB Regulations to Control Greenhouse Gas Emissions from Motor Vehicles: Cost Effectiveness for the Vehicle Owner or Operator, Appendix C to the Comments of The Alliance of Automobile Manufacturers, September 22, 2004. **(Reference 6)**

CARB responded to the industry's claims in the Final Statement of Reasons dated Aug. 4, 2005. In that document, CARB indicated the auto industry's analysis did not consider promising and cost-effective engine technologies such as homogeneous charge compression ignition engines or camless valve actuation systems. The industry analysis also assumed the use of expensive aluminum body structures and assigned higher estimated costs for vehicles components than CARB thought appropriate. Finally, CARB indicated that the industry assigned a higher than reasonable discount rate to their net present value analysis, (8% rather than 5%) and applied lower lifetime vehicle travel and different driving cycles to assess consumer savings.

E. Reliability of Past Cost Estimates

The NESCCAF study noted that cost projections include a degree of uncertainty because not all the technologies expected to be used are commercially available at this time. The study reviewed the cost estimates of meeting earlier California emission standards that CARB and the auto industry groups had made. After comparing those estimates with the actual implementation costs, NESCCAF found that both CARB and the auto industry overestimated the cost of meeting the earlier standards. The National Resources Defense Council, an environmental advocacy organization, found a similar pattern of overestimating the actual cost of controlling vehicle emissions.[32] Results of the NESCCAF review of past CARB and auto industry cost projections are shown in **Table 8**.

Table 8[33]: Estimated Costs of California's Low Emission Vehicle Program

Vehicle	CARB '94	CARB '96	ACG '93	AAMA '94	Actual
TLEV	$66	$72	$273	$298-487	$35
LEV	$122	$120	$788	$911-1,343	$83
ULEV	$227	$145	$679-1,326	$1,666-4,005	$251

TLEV: Transitional Low Emission Vehicle program that preceded California's LEV requirements.
CARB: California Air Resources Board
ACG: Automotive Consulting Group
AAMA: American Automobile Manufacturers Association

In 1990, CARB estimated that improved battery electric vehicles technology over time would result in an incremental cost of only $1,300 for pure electric vehicles. However, recent estimates show the cost of a mid-size full function battery electric vehicle with a range of 70-100 miles is still about $17,000 more than an equivalent conventional vehicle (or $16,900 more than a PZEV). [34]

F. Costs of No Action under the California Standards

Under the Pavley standards, new cars must be cost-effective to the consumer. Therefore, the consumer should not see a net cost increase from the Pavley standards if Oregon opts in to the program. For example, many of the technologies manufacturers choose to comply with the

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[32] Natural Resources Defense Council, Comments on the Proposed Adoption of Regulations by the California Air Resources Board (CARB) to Control Greenhouse Gas Emissions from Motor Vehicles, September 23, 2004, section 3.

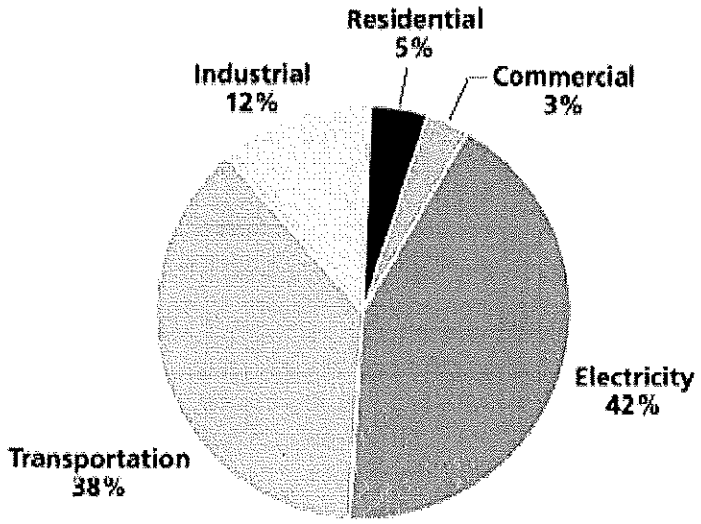
[33] Northeast States for a Clean Air Future, Reducing Greenhouse Gas Emissions from Light-Duty Motor Vehicles, **Table 3-3**, pg. 3-4, September 2004. http://bronze.nescaum.org/committees/mobile/rpt040923ghglightduty.pdf **(Reference 5)**

[34] CARB, Final Statement of Reasons on the 2003 Amendments to the California Zero Emission Vehicle Program Regulations, January 2004, p. 17. http://www.arb.ca.gov/regact/zev2003/fsor.pdf

regulation are also expected to reduce operating costs. California believes that these will more than offset the higher initial purchase price and result in a net dollar savings to consumers.

Significantly, without the California standards there is the loss of GHG emission reductions. According to the Oregon Department of Energy, 84% of greenhouse gas pollution in Oregon is from carbon dioxide emissions. **Figure 2** shows the breakdown of Oregon's CO_2 emissions from fossil fuels by sector. Transportation emissions, such as those from cars and trucks are the second largest source. [35] By not adopting the California standards, Oregon would fail to address the second largest source of GHG emissions in the state.

Figure 2: Oregon's CO_2 Emissions from Fossil Fuels by Sector (Source: Oregon Department of Energy)



Adopting the standards is one important way for the state to reduce costs associated with both air pollution and global warming. More than 50 economists from across the Northwest and most of Oregon's major colleges and universities say that global warming poses an imminent threat to Oregon's $121 billion economy[36]. Temperature increases, rising sea levels, and altered precipitation patterns will directly influence human health and Oregon's agricultural, forestry, tourism and hydroelectric industries. These industries account for at least 25% of Oregon's economy.

- **Health Care**: Health-care costs are expected to rise in a warming world. Oregon could see an increase in unhealthy air days as hotter summertime temperatures lead to more frequent smog episodes. In extreme cases, these higher temperatures could lead to deaths, as evidenced by the abnormally high temperatures in Europe claiming more than

[35] Governor's Advisory Group on Global Warming, Oregon Strategy for Greenhouse Gas Reductions, State of Oregon, December 2004, p. 4-5. http://egov.oregon.gov/ENERGY/GBLWRM/docs/GWReport-FInal.pdf

[36] Resource Innovations Institute for a Sustainable Environment, The Economic Impacts of Climate Change in Oregon, A Preliminary Assessment, University of Oregon, 2005 http://ri.uoregon.edu/publicationspress/Consensus_report.pdf

20,000 lives in August 2003.[37] Drier summers could elevate pollen counts, making life more uncomfortable for people with asthma and allergies. Cases of certain insect-carried diseases are expected to rise, including Lyme disease and malaria.

- **Agriculture**: The sector contributes $11.5 billion to Oregon's economy each year, including $4.1 billion in crop production. Drought and streamflow declines will push irrigation demands beyond the capacity of reservoirs in some river basins, and altered temperatures are likely to displace temperature-sensitive high-value crops like Pinot Noir wine grapes from their current growing areas and diminish other sectors of the farm economy.
- **Forestry and Forest Products**: The sector contributes $10 billion to the state annually, and public and private forests occupy nearly half of Oregon's land area. Reduced snowpack and an increase in the frequency of droughts are likely to increase insect infestations and exacerbate wildfires, especially on the eastside. These changes will affect the forest products industry, rural communities, and the urban-wildland interface around communities, and the public agencies charged with fire response and disaster management.
- **Tourism**: Travel spending contributes more than $6 billion to Oregon each year and employs almost 100,000 Oregonians. Snowpack declines put Oregon's $200 million snow sports industry at risk, while coastal erosion and higher wave action caused by rising sea levels will diminish the state's multi-billion-dollar beach economy.
- **Hydroelectricity**: Dams in the Columbia River Basin generate over $7 billion in wholesale power each year, including surplus power exported out-of-state to meet demand elsewhere. Altered streamflows could reduce power exports by at least $230 million by 2020, according to the Northwest Power and Conservation Council.

There are other costs incurred by not acting under the California standards. These include lost economic opportunities for the state. By not implementing policies that address global warming, Oregon could lose a competitive advantage because it is not focusing on the technologies and practices needed to reduce greenhouse gases.

By adopting the clean car standards, Oregon will reduce carbon dioxide from passenger cars and light trucks by 12.3% below projected levels by 2020. Oregon's actions alone will not curb global warming, but additive efforts taken by states and countries will together reduce the threat.

G. Discussion of Costs, Benefits and Impacts

In preparation for the workgroup discussion, Dave Nordberg (DEQ) briefed the workgroup about the estimated costs of the California program.

1. Summary of Guest Speaker Comments

There were no guest speaker comments.

[37] Governor's Advisory Group on Global Warming, Oregon Strategy for Greenhouse Gas Reductions, State of Oregon, December 2004, p. 4-5. http://egov.oregon.gov/ENERGY/GBLWRM/docs/GWReport-FInal.pdf

2. Summary of Public Comments

At the public meetings, the following commentors provided oral testimony:

- Jerry Magee, citizen, commented that claims by the auto manufacturer regarding increased car prices are disingenuous because the costs of associated with health care and higher fuel demand costs more overall. Additionally, the costs of paying gas taxes and maintaining domestic oil production hurts consumer's pockets.
- Paul Fox, citizen, commented that the initial car price increase would be offset by reduced health care and gasoline costs.

3. Summary of Workgroup Comments

Chuck Shulock, CARB, explained some of the differences in the cost estimates from the auto industry and California. For example, CARB used different markup factors than the auto industry (1.4 vs. 2.25) when estimating the cost of component parts. The auto industry assumed lower GHG benefits would be achieved and assumed that all possible technologies would be needed to meet greenhouse gas standards. This included using expensive aluminum in the construction of a vehicle to bring the weight down. The auto industry also believed CARB did not properly account for high mileage vehicles, specifically those vehicles with very high mileage over a few years. Another point of disagreement involved expectations for fuel economy. The auto industry believes the technology is not as fuel efficient in real world applications.

V. Independent Auto Repair Industry

A. Overview

California Air Resources Board Rules require 15 year/150,000 mile emission control system warranties on a substantial number of new vehicles. The warranties apply to PZEV vehicles to ensure that they will be well maintained and produce few emissions long into the future. These warranties may have an effect on the independent auto repair industry.

Extended warranties are a consequence of the requirement that a percentage of each manufacturer's yearly fleet be Zero Emissions Vehicles (ZEV) -- battery-electric or fuel cell vehicles). The ZEV requirement increases from 10% of new vehicles in 2005 to 16% in 2018, and was originally based on the concept of introducing battery-electric vehicles into widespread use. When the ZEV mandate was adopted in 1990, California Air Resources Board (CARB) acknowledged that the ZEV targets may be difficult or impractical to meet and provided that the agency periodically review the development of ZEV technology to determine the feasibility of the ZEV targets. During the review process, battery-electric technology was found to be advancing more slowly than the agency had hoped. As a result, CARB modified the ZEV rules to create two new vehicle categories that can be used to meet the ZEV requirement. Those are Partial Zero Emission Vehicles (PZEVs) and Advanced Technology Partial Zero Emission Vehicles (ATPZEVs).

PZEVs are conventional vehicles with very low tailpipe emissions and near-zero evaporative emissions, and can be used to offset true ZEVs at a ratio of five to one. (Five PZEVs = one ZEV.) Most ATPZEVs are hybrid vehicles and can be used to offset true ZEVs at a better ratio than PZEVs depending on the characteristics of a given model. (Approximately one and one-half to four and one-half ATPZEVs = one ZEV). To ensure that the reduced emissions of PZEVs and ATPZEVs remain low over a long period, CARB's rules require both groups to be provided with comprehensive warranties on emission control equipment that last 15 years or 150,000 miles. These warranties are far more substantial than warranties required for other California or federal vehicles.

Emission system warranties are required by both California and federal vehicle standards and have the features shown in **Table 9**. These warranties are in addition to the normal bumper-to-bumper or powertrain warranties normally offered by vehicle manufacturers. The emission system warranties generally apply when a faulty component activates the Malfunction Indicator Light (MIL) or "check engine" light. Other warranty requirements may apply if the vehicle fails a required emissions test even when the check engine light does not indicate a problem.

Table 9: Emissions Warranty for Federal vs. California-compliant vehicles

Type of Vehicle	Emissions Warranty (Defects Warranty)
Federal	8 years/80,000 miles*
California-compliant	3 years/50,000 miles** 7 years/70,000 miles***
PZEV	15 years/150,000 miles

* Applies only to high cost emission control components such as catalytic converters and electronic control modules (based on a list of emission control components, not a specific $ amount)

** Applies to all emissions-related parts

*** Applies to high-cost emissions-related parts (based on price of >$460, indexed to inflation)

Both federal and California warranties apply to California vehicles. If a catalytic converter of a California-compliant vehicle failed at 70,001 miles, it would be covered as part of the federal warranty (8 years/80,000 miles).

Oregon DEQ anticipates that the extended emission system warranties will provide some benefit to consumers through reduced repair costs or improved equipment durability. However, there are no data on which to base any projections, so any effects in this area are speculative and cannot be quantified.

CARB recognized that while substituting PZEVs for true ZEVs was beneficial overall, the extended PZEV warranties could have negative effects on the independent auto repair industry. That is because most warranty work is done free of charge only when performed at new-car dealerships. Concerned by this issue, CARB commissioned the RAND Corporation to research how the independent repair industry will be affected by the extended warranties and to assess alternatives for reducing any adverse effects.

The RAND study[38] evaluated a scenario in which the auto industry produces the maximum number of PZEVs allowed to meet the ZEV standard to determine the impact of the extended warranty. The dominant finding was that independent repair shop revenue will continue to grow with extended warranties, but at a slower rate (30% growth as compared to 36% growth by 2020), and will likely reduce profits for independent shop owners. RAND estimated an approximate 4.1% reduction in total revenue.

The RAND study concluded that extended warranties should not cause layoffs in the repair industry as a whole, although there may be some layoffs at some independent repair shops. RAND could not quantify whether, or how many, independent repair shops might have to lay off employees. However, the study states that because the impacts of extended warranties are felt only gradually over time, workforce reductions could possibly be handled through normal attrition. Additionally, slower growth in revenue may translate into slower growth in the number of repair shops statewide. These effects and any regional differences between urban and rural areas were beyond the scope of the study.

Methods that might be used to mitigate unwanted impacts include: a) educating consumers about when auto repairs may be done by those who are not new-car dealers, and b) the possibility of independent repair shops gaining the ability to perform future warranty work through service contract agreements.

B. Discussion of Costs, Benefits and Impacts

In preparation for the workgroup discussion, Dave Nordberg (DEQ) briefed the workgroup about the basics concerning PZEV vehicles and its extended 15-year/150,000 mile warranty.

1. Summary of Guest Speaker Comments

There were no guest speaker comments.

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[38] RAND Corporation, The Impact of Extended Vehicle Emission Warranties on California's Independent Repair Shops. DEQ understands the RAND study to be the most authoritative study to date evaluating the effect of the California's vehicle emissions regulation on the independent auto industry. The RAND study can be found on line at http://www.rand.org/publications/TR/TR235/ **(Reference 7)**

2. Summary of Public Comments

At the public meetings, the following people provided oral comment:

- Jim Houser, Hawthorne Auto Clinic, stated he believes vehicles will become more reliable and encourage the auto industry to make better emission components. This is because the industry will not want to see vehicles returned for warranty work. Secondly, under the PZEV warranty, consumers will have to adhere to the manufacturer's maintenance schedule in order to be eligible for the extended warranty consideration. Car owners will have an incentive to maintain their cars better and longer, thereby leading to cleaner vehicles. Jim claims the maintenance work can be performed by anyone competent, not just the manufacturer's franchisees. While the repair companies may not have as much business, he still supports the rules.
- Barbara Crest, NW Automotive Trades Association, noted their concern about the PZEV warranty and the impact it would have on their industry. Under the warranty, vehicle owners would take their vehicles to dealerships instead of the repair shops. She cited a CARB-commissioned study that found the PZEV warranty would result in lower profits, job losses, and a $500 million decline in business over a 5-year period for independent repair shops in California. In Oregon, this will particularly affect repair shops in rural areas. She commented that the independent auto repair business offers competitive pricing and services, which results in a benefit for Oregon vehicle owners. Additionally, the PZEV warranty would force owners to rely on dealerships and drive business away from the independent shops.

3. Summary of Workgroup Comments

Workgroup members discussed the details of the PZEV warranty, such as (1) the cost of the warranty because manufacturers may not be around for the full 15 year length of the warranty; (2) dealing with the warranty in the aftermarket since the aftermarket part must be California certified; and (3) the effects on auto repair shops as they move from doing repair work to maintenance work.

Bob Anderson, NATA, also discussed a number of items that are covered under the warranty, including the engine, transmission, and other emission control components. Because so many things can trigger the warranty, the industry is concerned about the potential loss of business. He suggested that two lights be installed in the car – one to notify if it is a warranty covered failure and one to indicate that it is not. Therefore, the customer will know what is covered under the warranty. Additionally, he commented that the manufacturer is only responsible to warranty the original emission related parts, therefore, replacement engines, transmissions, and brake components are not covered under the PZEV warranty if they are installed by an independent repair shop.

Dennis McLerran, PSCAA, expressed his disappointment with Washington's decision to eliminate the ZEV requirement and its associated PZEV warranty provisions. Because the warranty covers high-cost components having the warranty keeps the responsibility for emission control performance on the manufacturer and not the consumer. Without the warranty, the cost to fix the components is high enough that owners might not repair their vehicles, potentially causing greater emissions. As the vehicle ages and equipment starts to fail, emissions increase, and the warranty serves as a way to control these emissions.

According to Bob Anderson, NATA, there is concern about lost business to the independent auto repair industry because a large percentage of their work is related to malfunctions that are identified by the MIL, whether emission related or not. This can cause consumer confusion as to where the repair should be made for warranty or non-warranty purposes. Bob commented that consumers could be more inclined to go to the dealership and not the independent repair shop when the MIL is illuminated, because the vehicle owner could think it is an item covered under warranty. The dealer usually performs warranty work, even though compensation for warranty work may be less than the rate for non-warranty work. Bob Anderson, NATA, also commented that because manufacturers reimburse dealership shops at about 60 percent on warranty work, the extended PZEV warranty could be financially burdensome for them.

The workgroup discussed the reduction in expected repair shop growth rate was not only caused by the PZEV warranty, but also because manufacturers are building the cars for more durability to satisfy consumer desires and score higher on ratings like JDPowers.

The workgroup also discussed the effect on consumers, particularly if they live in a rural area where no warranty work can be easily performed. Alan DeBoer, OADA, expressed doubts about the durability of parts under a 15-year warranty. The group discussed how the auto industry and the dealers could work together to design a warranty system that is cost effective for manufacturers and allows dealers to provide a high level of customer service. Because of the many uncertainties surrounding the warranty (such as costs) Steve Douglas, AAM, suggested leaving out the ZEV mandate provisions in the current rules

CARB did not estimate an additional cost for the 150,000-mile warranty because, according to CARB, the manufacturers currently design emissions control system for PZEVs to operate for 150,000 miles with no failures. Discussions with other manufacturers indicate that they are also designing emissions control systems for at least 150,000 miles without failures. This is needed to improve quality results in surveys such as Consumer Union, JD Power's long-term dependability study.

Bob Anderson, NATA, was mostly concerned about how the actual application of the California standards would effect the eventual environmental outcome and the negative effects those standards will likely have on the independent auto repair industry in the state.

VI. Vehicle Model Availability (including diesel vehicles) and the Biodiesel Market

A. Model Availability for Gasoline Vehicles

When other states initially opted in, there was some concern that the clean car standards would prevent farmers and recreational vehicle owners from purchasing the vehicles they need or want. Under the California standards, generally, the ½-ton pickups (F150, GMC Sierra 1500, Toyota Tundra, and Dodge Ram 1500) are subject to the standards and the ¾-ton (F250, F350, GMC Sierra 2500, 3500, Dodge Ram 2500, and 3500) and heavier vehicles are not. These vehicles, however, do not break out cleanly according to model groups. Vehicle weight changes with engine size, body style, plus the type and number of options. Dealers have expressed concern that they would be unable to provide customers with the vehicles they want. However, all opt-in states have indicated to DEQ that the California standards have not affected gasoline vehicle availability.

There have also been concerns that in the future popular models will be unavailable for sale after the Pavley standards take effect in 2009. The legislation prohibited CARB from banning the sale of any vehicle category [39]. For example, under the Pavley standards:

1. Compliance is determined by a manufacturer's average, so higher greenhouse gas emitting vehicles can be averaged with lower greenhouse gas emitting vehicles.
2. A less stringent fleet average emission limit was established for trucks, making it easier for these vehicles to meet California standards;
3. The standards allow the manufacturer with the heaviest vehicle model mix (GM) to comply by using available technologies without altering their current mix of vehicles;
4. The standards are phased-in gradually (through 2016), so changes that will reduce greenhouse gas emissions can be made as new models are normally introduced; and
5. Medium duty trucks are specifically exempted. The Pavley standards do not apply to vehicles with GVW greater than 8500 lbs., such as the Ford 250s or 350s (3/4 ton and heavier pick-up trucks).

In short, CARB does not expect the GHG emission standards to affect the availability of the 2009 and later model year vehicle types and models. CARB expects vehicles to be the same size, have the same carrying capacity as today's cars and trucks and to perform better. They are also expected to cost less to operate. For additional information on the cost of vehicles, please refer to Section IV. Cost of Vehicles.

B. Potential Effect for Gasoline Vehicle Availability in Oregon

It is also expected that model availability will be enhanced in three ways:

1. Purchasers would have more than one choice for a variety of specific vehicles. For example, a 2005 Nissan Altima could have two versions of the car – one as a regular version of the car and the other as a PZEV version (which comes with a 15-year warranty on emissions related components);

[39] California Assembly Bill 1493, Section 43018.5 (d)(2). www.arb.ca.gov/cc/ab1493.pdf **(Reference 8)**

2. Oregon would be more likely to receive shipments of hybrid vehicles because manufacturers will give opt-in states priority because they need to meet the tighter emission standards. As a result, more vehicles would be available, considering Oregon has the second highest percentage of hybrid sales, based on total 2004 figures. In 2004, Oregon sold 2,300 hybrids, California sold 25,000 hybrids and Washington sold 3,500 hybrids; and
3. Dealer trades to match customer demand would be easier because the entire West Coast would be subject to the same standards.

The availability of diesel vehicles in Oregon is discussed in Section C. below and the workgroup discussion is captured in Section E. 3, "Summary of Workgroup Discussion."

C. Model Availability for Diesels

1. Overview

No light duty diesel cars currently meet the California LEV II standards and they are unavailable in California. These cars are the VW diesel Jetta and Passat, Mercedes E320 CDI, and the diesel Jeep Liberty. This is because under the California LEV II standards, vehicles certify to different types of emission categories with different levels of stringency in comparison to the federal standards. Additionally, the California regulations have different on-board diagnostic regulations, different supplemental federal test procedure requirements, and different optional 150,000-mile certification requirements. While all manufacturers are working toward the California standards, AAM indicates there is no certainty that light-duty diesel vehicles will ever meet all of the different California requirements. CARB has an expectation that manufacturers will be able to meet those standards based on its conversations with manufacturers due to advancing technology and the new federal diesel standards.

2. Federal Tier 2 Diesel Standards

When the California LEV II standards went into effect in 2004, the NOx, PM, Supplemental Federal Test Procedure (SFTP), and on-board diagnostic emission requirements were more stringent than the current Federal Tier 2 standards. However, for new passenger cars and light duty trucks, the Federal Tier 2 standards phase-in will be completed by 2007; for heavy light duty trucks and medium duty passenger vehicles, the Federal Tier 2 standards will be phased in beginning in 2008, with full compliance in 2009. Tier 2 standards require manufacturers to reduce significantly emissions from traditional levels. The result will be that the two standards will be closer than they have been in the past. However, even when fully phased-in, Federal Tier 2 standards will offer more flexible NOx requirements for diesel engines than the California LEV program. The automobile industry believes that diesel manufacturers will use the additional flexibility to provide more diesel engine options under the federal program than under California's rules. CARB anticipates that many or most manufacturers interested in serving the automotive diesel market will offer equipment that meets both California and federal standards.

Table 10 shows the differences between the 2009 California and federal standards as they affect diesel passenger vehicles below 8,500 lbs. These categories reflect the expected certification standards for diesel vehicles.

Table 10: California LEV II & Tier 2 Emission Standards for NOx: Light Duty Vehicles <8,500 lbs

California LEV II Emission Standards, Passenger Cars and Light Duty Vehicles < 8500 lbs, g/mi		
Category	**50,000 miles/5 years**	**120,000 miles/11 years**
	NOx	**NOx**
LEV	0.05	0.07
ULEV	0.05	0.07

Tier 2 Emission Standards, Federal Test Protocol (FTP) 75, g/mi		
Bin#	**50,000 miles**	**120,000 miles**
	NOx	**NOx**
8	0.14	0.20
7	0.11	0.15
6	0.08	0.10

For the California standards, the NOx standard is 0.05 g/mi for 50,000-mile standards. The federal standards are less restrictive, specifically for bins 6-8 allowing diesel engines more certification flexibility. Because the federal and California program classify vehicle groups differently, the emission limits for the two programs **are not directly comparable**. As mentioned in **Appendix E**, federal vehicles can be certified to any of eight emissions categories, which are called certification "bins". Manufacturers can choose which bins they use to certify vehicles as long as the average NOx emissions of new vehicles meet the *fleet average emission requirement* of 0.07 g/mi.

There is one vehicle weight class, however, that will still have less restrictive requirements under the Federal Tier 2 standards than under the California standards. This applies to vehicles between 6,000 and 8,499 lbs GVW, such as half-ton pickups (e.g., Ford F150). Currently, all of the trucks made in this weight class use gasoline, not diesel; therefore, vehicle availability should not be a problem.

3. History of Diesel Vehicles in California

In 1998, CARB adopted the LEV II program and eliminated the Transitional Low-Emission Vehicle (TLEV) category beginning in 2004 (which effectively precluded diesels in vehicles below 8500 lbs gross vehicle weight given the then-current status of technology).[40] At that time, there was a significant difference between the technically feasible emission levels of gasoline and diesel vehicles. The TLEV NOx standards for 2004-2006 vehicles would have been 10 times higher than the next less stringent standard (0.5 grams per mile vs. 0.05). The particulate matter (PM) standards would have been four times higher (0.04 vs. 0.01). Taking into account the fact that gasoline PM emissions actually are below the 0.01 standard (approximately 0.002),

[40] Alliance of Automobile Manufacturers, "Barriers to Diesel Vehicles in California", E-mail memo to Oregon DEQ, October 4, 2005

the TLEV standard would have allowed diesel vehicles to emit 20 times more PM than gasoline. Because of those circumstances, CARB decided to eliminate the TLEV standard. At the time of the CARB action diesels had just been identified as a source of mobile toxic air contaminants and CARB was concerned about providing a significantly relaxed standard for diesels when vehicles operating on other fuels could clearly meet levels that are more stringent.[41]

4. The Future of Diesel Vehicles in California

The automobile industry believes the limited number of emission categories in the CARB regulation does not provide air quality improvement because fleet average emission requirements already cap overall fleet emissions. However, the California fleet average requirement only caps overall VOC emissions. The pollutants of concern with diesel vehicles are NOx and PM. Thus, less restrictive emission categories intended to accommodate diesel vehicles could lead to NOx and PM increases despite the VOC fleet average.

Additionally, the federal program temporarily provides greater flexibility because it allows the use of the full useful life Supplemental Federal Test Procedure (SFTP) standards rather than the 4,000-mile SFTP standards. The SFTP is an additional drive cycle developed by CARB and EPA. When adopted, CARB and EPA set the standards based on a vehicle with 4,000 miles. However, EPA provided manufacturers the option to temporarily instead meet the full useful life SFTP (120,000 miles). While the federal program provides greater flexibility, it is not relevant for Oregon because the temporary provision expires after the 2008 model year. In addition, CARB has received information suggesting that it is possible to meet the 4,000-mile SFTP standards without use of a selective catalyst reduction (SCR) system and suggesting that meeting the 4,000-mile SFTP standards is easily doable with SCR systems.

The automobile industry also believes the requirements to monitor diesel oxidation catalysts and diesel particulate filters (DPF) adopted by CARB in 2002 are not technically feasible at this time.[42] CARB has indicated to the Alliance of Automobile Manufacturers that they believe these technologies are, in fact, feasible.

5. Diesel Conclusion

CARB and AAM have different views regarding the feasibility of manufacturing diesel vehicles that satisfy the California vehicle emission standards. The manufacturers note they are likely to meet the federal diesel standards, but are unsure about the California standards.

D. Effect on Biodiesel Market

Adopting California's clean car standards will not block biodiesel growth in Oregon even if manufacturers are not able to certify diesel passenger vehicles. The vast majority of the market for biodiesel fuels will be heavy-duty, on-road vehicles above 14,000 pounds, and non-road applications (e.g., construction equipment, oil heat for homes). These diesel vehicles and non-road uses are not regulated under California's clean car program and would not be regulated in Oregon. Further diesel passenger vehicles that are regulated under California standards can

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[41] California Air Resources Board, "Diesel Vehicles in California", E-mail memo to Oregon DEQ, October 12, 2005

[42] Alliance of Automobile Manufacturers, "Barriers to Diesel Vehicles in California", E-mail memo to Oregon DEQ, October 4, 2005

operate on either regular diesel fuel or biodiesel, and are expected to be available in 2009, the earliest year that the California standards would take effect in Oregon.

E. Discussion of Costs, Benefits and Impacts

In preparation for the workgroup discussion, Rachel Sakata (DEQ) briefed the workgroup on vehicle model availability, including the diesel and biodiesel markets.

1. Summary of Guest Speaker Comments

There were no guest speaker comments.

2. Summary of Public Comments

At the public meetings, the following people provided oral testimony:

- Paul Fox, citizen, commented that by promoting and adopting the standards all of the West Coast would create a large market of California-compliant vehicles that the auto industry could not ignore.
- Jim Houser, Hawthorne Auto Clinic, commented that low sulfur fuel and the commitment from major auto diesel manufacturers to meet California's diesel standards by 2009 would provide Oregon with cleaner diesel autos and trucks. These vehicles would have lower emissions and provide a boost to the biodiesel industry.

3. Summary of Workgroup Comments

The workgroup raised questions about model availability and whether or not that will become a problem under the California standards. Dennis McLerran, PSCAA, said that the issues they dealt with concerned dealers thinking the only vehicles that would match the regulations would be the small vehicles and thereby limiting their selling ability. He indicated Washington's research shows all vehicles will be able to meet the standards. Chuck Shulock, CARB, indicated they did not want to limit vehicle choice for the consumer and ensured vehicles could be available using existing technology. Alan DeBoer, OADA, stated fuel prices would also dictate vehicle demand based on rising gas prices. They are seeing this in the current decrease in big vehicle sales and the long waiting list for Prius cars.

There was disagreement about whether or not the diesel vehicles would be able to meet the California standards in 2009, based on information about the technology and cost feasibility. Steve Douglas, AAM, explained that he did not believe the manufacturers would be able to meet the California standards, based on his discussions with auto industry engineers. Due to the technological advances required, such as modifying the catalytic converter, he expressed manufacturer concerns about the cost feasibility to develop such technology. Additionally, the federal and California have different test procedures and standards. Dennis McLerran, PSCAA, and Chuck Shulock, CARB, said the technology does exist based on their conversations with auto manufacturers and diesel vehicles would be available by model year 2009 under the California standards. In addition, medium-duty diesel trucks are available in California. The workgroup also discussed diesel vehicles and why European cars are mostly diesel (lower taxes on diesel fuel, less stringent NOx standards, and consumer preference for diesel performance).

Alan DeBoer, auto dealer, and Steve Douglas, AAM, felt dealer trading under the California standards will make auto trading more difficult, not easier. This is due to the border state

allowance where a state bordering an opt-in state can sell both federal and California-compliant cars. They felt it was easier now because they can sell both kinds of cars, however, if the state adopts California standards only California cars would be available in Oregon. Dave Collier, DEQ, thought that adopting California standards in Oregon and Washington would help create a level playing field, allowing dealers to trade more easily cars among themselves up and down the West Coast.

Chris Hagerbaumer, OEC, noted that biodiesel growth would not be affected in Oregon by adopting California's vehicle requirements for the reasons noted above.

Steve Douglas, AAM, stated that none of the three statements in Section B "Potential Effect for Gasoline Vehicle Availability in Oregon" accurately portrays how model availability will be affected:

1. For item 1, manufacturers typically do not sell identical vehicles meeting different emission categories. The 2005 Nissan Altima would only be available meeting one emission category (not a "regular version and a PZEV version" as indicated. Thus, this would not enhance model availability.
2. Vehicle availability will be driven by consumer demand not by government mandates. Oregon does not have California regulations and yet they already receive more hybrid vehicles per capita than any other state in the U.S.
3. Dealer trades to match customer demand would be more difficult - not easier, because dealers would not be able to obtain vehicles from neighboring states unless those vehicles had been approved by California.
4. Model availability is already restricted in California where diesels are not available and could be even more restricted if the ZEV mandate or Pavley regulations are adopted.

VII. Zero Emissions Vehicle (ZEV) Requirements: Alternate Path Compliance, Early Banking, and Proportional Crediting

A. Zero Emission Vehicles

California vehicle emission standards include requirements for Zero Emission Vehicles (ZEVs). These requirements were adopted to stimulate advancement of clean vehicle technology and to lower the emission of pollutants from motor vehicles. ZEVs are on-road vehicles that produce none of the compounds that lead to traditional air quality problems such as smog or carbon monoxide.

Advantages of the ZEV program are that it lowers the emission of traditional pollutants (such as Non Methane Organic Gases (NMOG) and Oxides of Nitrogen) approximately 3% from what it would be without the ZEV program. It also promotes the development of technology forcing vehicles with no tailpipe emissions.[43] The disadvantage of the ZEV program is that it is responsible for the majority of the overall cost of meeting California's Low Emission Vehicle II standards. Not all states that adopted the LEV standards have adopted the ZEV sales requirement. As discussed in Section II, Legal Issues EPA has stated that the ZEV program is not required to ensure identicality with California's standards. Although this position has not yet been challenged in any court, EPA's argument is at least plausible and probably has a low practical risk of being challenged.

When ZEVs were originally conceived they were thought of as battery-electric vehicles, but today the category has broadened to include fuel-cell vehicles as well. In addition, the category has been modified to allow more flexible ways to meet the ZEV requirements using Partial Zero Emission Vehicles (PZEVs) and Advanced Technology Partial Zero Emission Vehicles (ATPZEVs).

The ZEV requirement was first adopted in 1990 and specifies that a percentage of vehicles sold by each manufacturer meet the zero-emission level. The basic ZEV rules are that a manufacturer's annual sales of light-duty vehicles must consist of a percentage of ZEVs that starts at 10% in 2008 and increases to 16% in 2018. The requirement first applied only as a percentage of passenger cars and light duty trucks 1 (PC/LDT1). It was expanded to apply to light duty trucks 2 (LDT2) phased in for the period beginning in 2007 and ending in 2012. CARB understood the ZEV requirement would be challenging and provided that the ZEV targets be reevaluated by a technical review panel every two years. During the last review process, CARB determined that ZEV technology was not developing as quickly as hoped, and they added flexible ways to meet the requirement. CARB could adjust the program in the future, as needed, to provide more flexibility.

B. ZEV Compliance Specifics

There are optional pathways for complying with the ZEV mandate. One is the base path and the other is the alternate path compliance. CARB expects that manufacturers will choose to comply under alternate path compliance.

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[43] CARB Initial Statement of Reasons, 2003 Amendments to California ZEV Program Regulations, Released January 10, 2003. **Table 6.2**, pg. 46.

1. Base Path

Knowing the cost and difficulty of meeting true ZEV technology, CARB allows a substitution approach where less expensive, alternative vehicles can be substituted for true ZEVs. The substitution system for ZEVs is not one-for-one. Five PZEVs can be substituted for one ZEV. ATPZEVs, however, can be substituted for true ZEVs at a more favorable rate. The actual substitution rate for ATPZEVs varies according to the characteristics of a given model. On average, approximately 2.5 ATPZEVs are expected to substitute for one ZEV. Finally, the five types of true ZEVs also meet the ZEV requirement at different rates. More credits are allowed for more capable vehicles. Vehicles with a range over 100 miles earn the highest amount of ZEV credits. Such vehicles (long-range battery-electrics and fuel-cell vehicles) can be counted as three ZEVs in complying with the ZEV requirement.

One added feature during the several revisions to the ZEV rules was that 5 Partial-Zero Emission Vehicles (PZEVs) could be substituted for one ZEV to comply with up to 6% of the 10% (2008) to 16% (2018) ZEV requirement. PZEVs are vehicles with very low (SULEV) tailpipe emissions, zero evaporative emissions and a 15-year warranty on the emission control system. PZEVS have only recently been introduced to the market, but many are now available. Examples of PZEVs currently approved by CARB are the Ford Focus and BMW 325i.

Half of the remaining ZEV target (i.e., 2% to 5% of a manufacturer's fleet) may be met with Advanced Technology PZEVs or ATPZEVs. ATPZEVs are vehicles that meet PZEV requirements, but also promote ZEVs through the use of electric drive, gaseous fuel storage, or other ZEV-enabling technology. Most vehicles in this group are gasoline-electric hybrids such as the Toyota Prius. The final amount of the total ZEV requirement must be met with true ZEVs, which are further divided into 5 groups ranging from Neighborhood Electric Vehicles (NEVs) through ZEV Types 0, I, II and III (**Table 11**).

Table 11: Types of "True" ZEVs

Zero Emission Vehicle		Electric & fuel cell vehicles
NEV	Neighborhood Electric Vehicle	(Slow, no min. range)
ZEV Type 0	Utility Electric Vehicle	< 50 mile range
ZEV Type I	City Electric Vehicle	50 to 100 mile range
ZEV Type II	Full Function Electric Vehicle	>100 mile range
ZEV Type III	Fuel Cell Electric Vehicle	> 100-mile range, fast refueling.

The California vehicle regulations describe how manufacturers must calculate compliance under the ZEV alternate methods. For more information on the ZEV program, see CARB's website at:

http://www.arb.ca.gov/msprog/zevprog/factsheets/tutorial/tutorial.htm

Heavy use of the substitution approach means that the future fleet will contain a high number of low-emitting technology vehicles (e.g., PZEVs, ATPZEVs). Because of the high substitution rates, CARB projects that in 2020, PZEVs and ATPZEVs will make up approximately 35% of the light duty fleet. Additionally, Oregon currently has a burgeoning car sharing industry and ATPZEVs used for car sharing may be used towards the accumulation of credits to help fulfill the ZEV requirement.

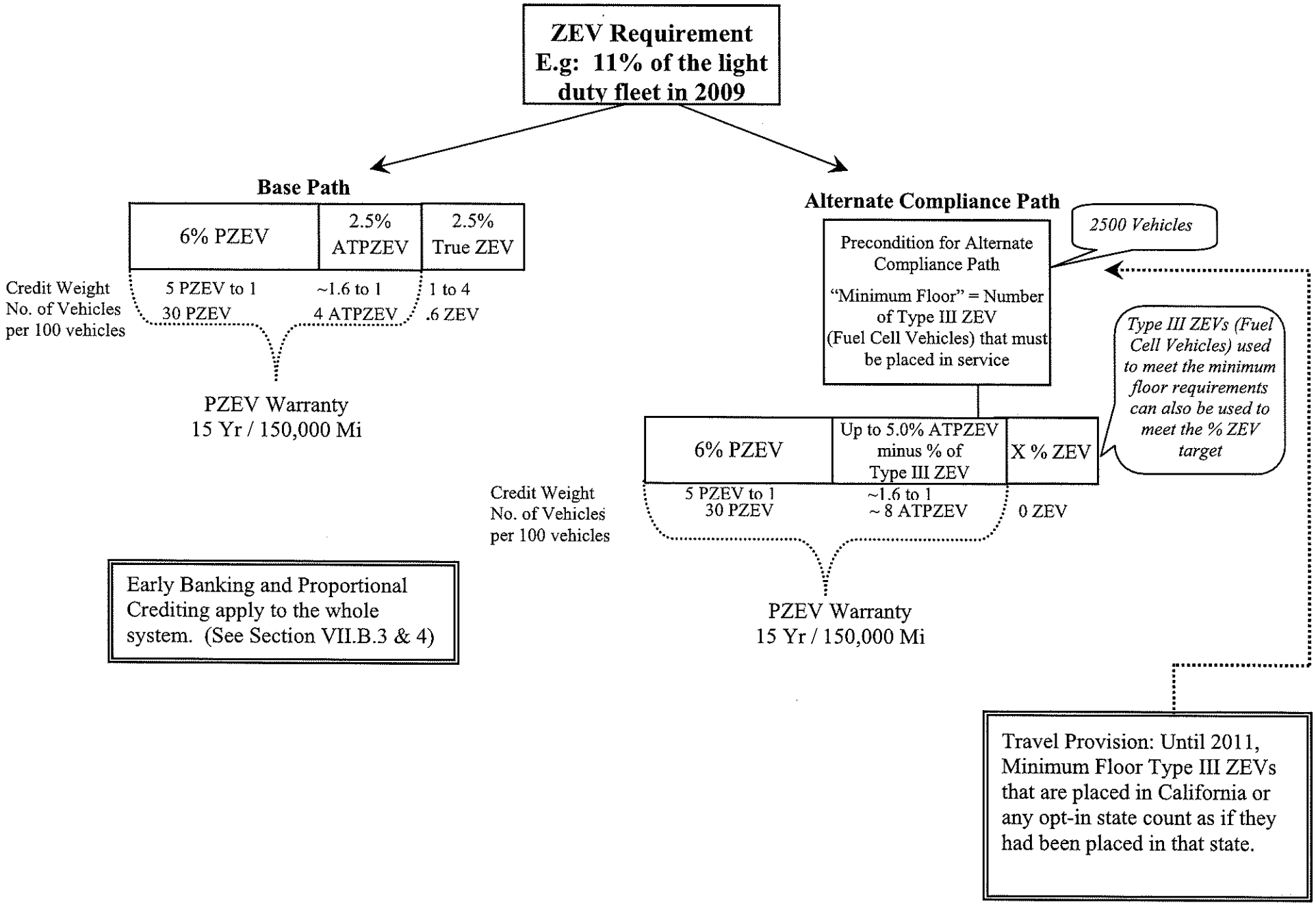
2. Alternate Compliance Path

All manufacturers will meet the requirements for true ZEVs using the Alternate Compliance Path. To qualify for the Alternate Path a manufacturer must meet a precondition by providing a "minimum floor" number of Type III ZEVs (fuel-cell vehicles) that must be placed in service. If all manufacturers use this approach, 2,500 Type III ZEVs will be placed in service during 2009 to 2011. Until 2012, the "travel provision" in the alternate path rules allows the required number of fuel cell vehicles to be placed in service in California or any opt-in state in the country. Credit will be given in each state even if there are no fuel cell cars sold in that state. Each manufacturer electing to follow the Alternate Path must provide a proportion of the required total that equals its market share of passenger vehicles and light duty trucks. Any shortage between the true ZEV credits required under the Base Path and the ZEV credits earned by the fuel cell vehicles placed in service must be made up using ATPZEVs.

The "minimum floor" or number of fuel cell vehicles required increases sharply under the Alternate Compliance Path. From 2012 to 2014, if all manufacturers follow the Alternate Path a total of 25,000 fuel cell vehicles will be placed in California with the number increasing to 50,000 during the years 2015 to 2017. In addition, beginning in 2012, fuel cell vehicles placed in opt-in states no longer count toward meeting the California requirement. For opt-in states, the California Alternate Path requirement would need to be met locally beginning in 2012, unless rule modifications were provided by California to scale the targets proportionally to each state's fleet size.

Figure 3 on the next page graphically depicts the two possible compliance pathways to meet the ZEV program fleet targets. CARB allows the substitution of near-zero emission vehicles (PZEVs and ATPZEVs) for true ZEVs, but not on a one-to-one basis.

Figure 3: Compliance Paths to Meet ZEV Program Requirements



88000

3. Projected Oregon Fleet Mix

CARB estimates that manufacturers will meet the ZEV requirements by using the Alternate Compliance Path and will meet the ZEV-related requirements related to PZEV and ATPZEV production by over complying in the category of Passenger Cars (PC)/Light Duty Trucks (LDT1) <3750 lbs. and undercomplying in the Light Duty Truck 2 (LDT2) category between 3750 and 8500 lbs. California projected the mix of vehicles that would result from this approach as is shown in **Table 12** for the year 2020. Oregon applied that mix of vehicles to its own future fleet to determine vehicle emission reductions.

Table 12: Expected 2020 Oregon Fleet Mix to Meet ZEV Requirements

PC/LDT1 <3750 lbs		LDT2		Medium Duty Vehicles >8500 lbs	
True ZEVs	2%	Cal. LEV II	80%	LEV II	100%
PZEVs	57%	Fed. Tier 2 Bin 4*	20%		
ATPZEVs	14%				

*In cases where federal requirements are more restrictive than California's LEV II requirements, California's emission standards specify that the more restrictive standard applies.

4. Additional Cost of ZEV Vehicles

The same fleet mix projection is also used in conjunction with the expected incremental costs of PZEVs, ATPZEVs and true ZEVs shown in **Table 12** to estimate the average cost of complying with the ZEV program in Oregon. As mentioned earlier, one of the disadvantages of the ZEV program is that it is responsible for most of the cost of meeting the LEV II standards. **Table 13** lists the additional cost per vehicle under the program. While the cost of true ZEVs are substantially higher than for PZEVs and ATPZEVs, under the expected fleet mix in **Table 12**, only a small percentage of true ZEVs are expected in 2020 and potentially could be met through centralized fleets.

Table 13: Additional Cost of ZEV Vehicles[44]

Vehicle	Additional Cost in 2009	Additional Cost in 2012
PZEV	$100	$100
ATPZEV	$1,200	$700
Type II ZEV (battery EV)	$8,000 to $17,000	$8,000 to $17,000
Type III fast-refueling true ZEV (fuel-cell)	$120,000	$9,300

In the staff report, ARB staff noted that estimates for all ZEV vehicle types are subject to great uncertainty associated with projecting future costs for evolving technology.

C. Early Banking

To add regulatory flexibility and provide incentives for carmakers to introduce ZEV technology early, California's regulations allow manufacturers to exceed targets before the requirements take full effect and to bank that excess for future use. Several manufacturers accrued ZEV

[44] Estimates derived from CARB Staff Report: Initial Statement of Reasons, 2003 Proposed Amendments to the California Zero Emission Vehicle Program Regulations dated Jan.10, 2003, **Table 5.1**. Pg. 39. http://www.arb.ca.gov/regact/zev2003/isor.pdf.

credits by placing significant numbers of Neighborhood Electric Vehicles for use in California. Those manufacturers can document this early compliance and present it later to help satisfy the ZEV requirements.

D. Proportional Crediting

While early compliance and banking of credits is generally recognized as a reasonable regulatory feature, it raises problems for vehicle manufacturers when states opt into California's LEV program at a later date. In such instances, manufacturers may not have sufficient lead-time to accrue early credits, which may be critical to their compliance strategy. To address this situation, Rhode Island devised a proportional crediting provision, which acknowledges the early compliance credits that manufacturers earned in California before Rhode Island opted in to California's LEV program. Proportional crediting simply recognizes the percentage of a manufacturer's fleet that earned early credits in California and allows manufacturers to use the same percentage of credits in an opt-in state as if those credits had been earned locally. In addition to Rhode Island, New Jersey and Connecticut are adopting a proportional crediting feature to their programs.

E. ZEV Exclusion in Other States

A few states have omitted the ZEV requirement when opting in to California's LEV program. Massachusetts did not include ZEV requirements when they first opted-in, but added them later after court challenges to the legality of ZEV requirements were settled.

Maine excluded ZEV requirements from their rules in 2000, but adopted them in 2004 after California allowed an alternative path that did not require battery electric vehicles.

Washington State is opting in to California's standards without the ZEV requirement. Omitting the ZEV requirement eliminates the need for specific numbers of PZEVs (low emitting vehicles with zero evaporative emissions) ATPZEVs (hybrid electric vehicles) and true ZEVs (fuel cell and battery-electric vehicles). Not including the ZEV requirement makes the fleet average emission limits for NMOG the only controlling feature of the rules. California estimates that dropping the ZEV requirements allows criteria pollutants to increase approximately 3% from what it would be with ZEV requirements and does not affect the amount of greenhouse gas reductions that the regulations will achieve.

F. ZEV Infrastructure Requirements

As the CARB rules are currently written, the manufacturers have pursued the "alternative path" with the ZEV Type III requirement (> 100-mile range, fast refueling), which has a Fuel Cell Electric Vehicle. In 2012, these vehicles would require hydrogen-refueling infrastructure and repair facility remodeling in Oregon to support the then-existing numbers of Type III ZEVs. California budgeted $6.5 million in 2006 to co-fund up to three hydrogen-fueling stations ($500,000 per station), and incentives for vehicle purchase, etc. The ZEV mandate can also be accommodated by way of the "base path," which would require electrical vehicle recharging stations.

G. Discussion of Pros and Cons of Implementation Features

In preparation for the workgroup discussion, Dave Nordberg (DEQ) briefed the workgroup on zero emission vehicles, alternate compliance, early banking, and proportional crediting. Dave described the characteristics of PZEVs and ATPZEVs.

1. Summary of Guest Speaker Comments

There were no guest speaker comments.

2. Summary of Public Comments

At the public meetings, oral testimony was provided on these specific topics:

- Gary Graunke, of the Oregon Electrical Vehicle Association, commented that he thought an electric vehicle was the best option and should be made available to the public. Additionally, he said electric vehicle technology has been in existence for a long time. While electric vehicles do not burn gasoline, the only constraint is the distance the vehicle can travel with a battery-powered motor. His concern regarding hydrogen fuel cell cars revolves around the conversion of electricity into hydrogen. He says the net effect provides only 20% efficiency, which is about the same as using oil.
- Rick Durst, citizen, commented that electric cars do not have as many parts and should cost less than combustion cars. The also require limited maintenance. He also mentioned that some of the first cars were electric and as people started to purchase gasoline cars, gas stations were installed everywhere. The same could happen with electric cars (with regards to installing plug-in stations) as more of them are brought into the market.
- Jenny Holmes, Ecumenical Ministries of Oregon, commented that the adoption of ZEV would encourage technology and help reduce emissions, subsequently providing clean air.
- Laura Etherton, OSPIRG, commented that without the full ZEV requirements, emissions would increase by 37% more than with the ZEV program. She also commented that ZEV is technology forcing and that in California the number of patents has risen dramatically because of the new technology.

Additionally, three members provided oral testimony expressing support for adopting the full ZEV program component in Oregon. [Jerry Magee (citizen), Gavin Clark (citizen), and Cyd Manro (citizen)].

3. Summary of Workgroup Comments

The workgroup had questions about the estimated additional cost for ZEVs. Chuck Shulock, CARB, clarified the estimate of $700 more for an ATPZEV was based on 2010 estimates for a mass produced hybrid electric vehicle. Additionally, he said GM expects to have, by 2010, a fully designed fuel cell vehicle that would be competitive with gasoline cars if produced in mass quantity. Steve Douglas, AAM, thought the figures should be much higher, especially if looking at the costs of a fuel cell car and expressed concern about having a fuel cell car available in 4 years. Alan DeBoer, OADA, stated he did not know of any hybrid (Prius) being only $700 more, but that they were several thousand dollars more. This raises the issue of whether this increase is due to supply and demand.

Dave Nordberg, DEQ, explained the current ZEV program in California is a demonstration program because manufacturers can place 250 true ZEVs anywhere in the country and meet the ZEV requirement. From 2009-2011, the requirement goes up to 2,500 cars and then to 25,000 cars from 2012 to 2014. This 25,000 requirement must be met by each state. Chuck Shulock, CARB, indicated he thought that having a fixed 25,000 vehicle requirement for each opt-in state was an oversight in the drafting of the regulation, as the other ZEV requirements are scaled proportionally according to vehicle sales in each state and that CARB would likely revise the requirement to correspond to fleet size in each state. In Oregon, if the requirements change, the true ZEV requirement would likely be 0.8% of new cars or approximately 1,000 new cars must be true ZEVs.

True ZEVs can be met by battery electric or fuel cell cars. However, Chuck Shulock, CARB, indicated all the major manufacturers affected by the regulations are choosing the fuel cell option because they did not think there was a future in battery electric vehicles. Bob Anderson, NATA, stated the battery technology is not there for true ZEVs and will not be available in the short term. CARB reevaluates its ZEV program every few years to determine what can realistically be achieved while also forcing technology. Chuck Shulock, CARB, indicated that his agency prefers to be aggressive rather than undershoot and leave potential reductions on the table.

The workgroup also discussed the concerns about developing true ZEV technology regarding fuel cell vehicles. David Van't Hof, Governor's Office, asked who would bear the cost if fuel cell cars were so costly that no one will buy them. Alan DeBoer, OADA, said the consumers would bear the cost, as the auto manufacturers will spread it out among the other cars. Another concern, voiced by Steve Douglas, AAM, and Bob Anderson, NATA, dealt with the lack of any infrastructure such as fuel cell stations in Oregon. Andy Ginsburg, DEQ, pointed out that an analogous problem exists with ultra low sulfur diesel, as it is not yet widely available, and getting the fueling structure developed generally starts with centrally fueled fleets. Andy Ginsburg also suggested that Oregon could consider adopting the ZEV requirement now and reviewing it later. This review could be done before implementation milestones based on the availability of the technology and fueling infrastructure.

Ashley Henry, OBA, and Ray Jubitz, (sitting in for Al Jubitz) raised the option of including cautionary language regarding the ZEV requirement in the report, noting there are caveats that raise concern because of possible lack of technology available at the time. This would make it clear to the Governor, that though they support the development of ZEV technology, it might not be feasible at this time.

David Van't Hof, Governor's Office, noted some states adopted the ZEV requirements, or initially left out ZEV, and then adopted it later. He asked if the rulemaking could adopt ZEV with modifications, such as dropping the true ZEV component. He asked whether that raises identicality issues. David then asked if the group, based on the concerns raised about the true ZEV portion and the potential emissions benefits and technology changes it could achieve, would list the pros and cons of ZEV and a modified ZEV option for consideration by the Governor.

The workgroup created a "brainstormed" list surrounding the adoption of the ZEV requirements, not adopting ZEV, and a modified ZEV program. **Table 14** on the next page summarizes their comments:

Table 14: Brainstormed Advantages of ZEV and Advantages of No ZEV (Disadvantages of ZEV)

FULL ZEV ADVANTAGES	NO ZEV ADVANTAGES
• Consistency • Consumer message • Larger AQ (criteria pollutants) benefits • Technology forcing • Marketing signal (interest) • More vehicle options • GHG benefits if Pavley overturned • Warranty benefits (PZEV): consumer • Economic development opportunity (technology) • Create hydrogen fueling stations • Car-sharing incentives • More durable systems for emissions control • Can repeal ZEV later • Prepares us for inevitable • Warranty makes repairs more likely • Spreads delivery and cost of infrastructure	• Buys time to see how ZEV plays out • Does not place undue burden on car owners compared to other polluters • Far less expensive • Avoids potential higher emissions because of fleet aging • Life cycle issue • Less market risk • Avoid forcing consumers to buy cars that they would not otherwise buy • Warranty increase cost of vehicles • Technology not there yet • Relying on California • Do not have to build infrastructure for warranty (statewide) • Can adopt ZEV later • Do not have to build hydrogen fueling structure • Decrease growth in aftermarket shops • Potential need for capital improvement to do work • Preserves consumer choice for repair • Reduces need for interest training

POTENTIAL OREGON MODIFIED ZEV FEATURES BRAINSTORM
What would it look like in Oregon?

- Explore goals (numbers) of ZEV program to ensure it is realistic for Oregon while also taking into account Oregon's high level of hybrid consumption
- Once a workable infrastructure is in place automatically implement true ZEV
- Proportional goals for true ZEV
- Determine if goals can be met without requiring a true ZEV
- Adopt full ZEV program with a biennial review of the infrastructure and changes in California to determine viability prior to 2012 with sufficient time for manufacturers to respond to any changes
- Adopt ZEV but modify criteria for true ZEV to allow other technology
- Ensure true ZEV technology is supportable by existing or future infrastructure
- Delay when ZEV (or true ZEV) goes into effect
- What version of modified ZEV would not create a 3rd vehicle?

Steve Douglas, AAM, thought the credits earned under early banking and proportional crediting vary by year and decreased over time. Steve Gutmann, Flexcar, asked what sort of car would earn 40 ZEV credits. A fuel cell vehicle put in place before 2009 would earn 40 ZEV credits. However, after 2009, the same vehicle would only earn four credits because the multiplier is reduced at the end of the 2008 model year.

The workgroup recommended that in regards to other options, to the extent California has committed itself to hydrogen fuel cell cars for true ZEVs, Oregon should explore other avenues for true ZEV that are more battery or electricity centric within the true ZEV world.

Chris Hagerbaumer, OEC, noted the growing car sharing industry in Oregon and wondered if any ATPZEVs used in the car-sharing program could be used as credits in meeting the ZEV requirement. Steve Douglas, AAM, indicated some manufacturers use the car-sharing program for credits, but thought Oregon would have to get credit approval by CARB's Executive Officer. Chuck Shulock, CARB, indicated he did not know the specifics but thought it could be approved by the state's Executive Officer.

The workgroup discussed if the proportional crediting and early banking can be adopted retroactively if Oregon adds ZEV later. According to Dave Nordberg, DEQ, the net credit bank in California will zero-out in 2008 or 2009. Chuck Shulock, CARB, said the early banking and proportional crediting were solutions tied to the true ZEV component. If Oregon considers excluding true ZEV, but adopting remaining ZEV requirements, he asked whether it was worth having the early banking/proportional crediting elements. Steve Douglas, AAM, suggested that adopting a modified ZEV program might violate Section 177 of the Clean Air Act.

Andy Ginsburg, DEQ, listed some of the pros and cons of proportional crediting and early banking. The con of proportional crediting is that the state would forgo some emissions reduction even though the effects are minimal. The pro is that it allows manufacturers to have a smoother implementation in states that opt in late.

Alan DeBoer, OADA, asked if there were any available ZEVs on the road right now. Currently, neighborhood electric vehicles are the only true ZEVs available, although there is active work on developing fuel cell cars. Ashley Henry, OBA, asked how close Oregon was to complying with the ZEV standards, looking at existing hybrids (ATPZEVs), PZEVs, and true ZEVs.

The workgroup also discussed the pros and cons of adopting ZEV without the PZEV warranty. Alan DeBoer, OADA, said the PZEV warranty not only adds costs to the vehicle but also exists to ensure people get their cars fixed. He also said the extended warranty should not be forced upon people because it is in the manufacturer's interest to ensure they make the best product available. Andy Ginsburg, DEQ, stated the PZEV warranty benefits the consumer as it provides a longer warranty for the car. Chuck Shulock, CARB, also said it ensures clean cars are on the roads, especially as they age.

Potential options for Oregon ZEV include:

a. Full ZEV program (with contingency provision to opt out of ZEV unless the 25,000 Fuel Cell requirement per state is reapportioned, per capita, by state).
b. ZEV program with Travel Provision extended to a future date contingent upon biennial review.
c. Customize the vehicle mix to achieve then existing "ZEV" program target.
d. Remove "True ZEV" requirement but retain PZEV & ATPZEV.

e. Remove requirement for PZEV Warranty.
f. No ZEV program.

VIII. Exemptions

Under the California standards, certain cars are exempt. These exemptions vary by state, but generally, the following exemptions apply in opt-in states.

A. List of Potential Exemptions

1) Military tactical vehicles,

2) Vehicles sold for registration and use outside of an opt-in state,

3) Previously registered vehicles where the mileage at the time of sale exceeds seven thousand five hundred miles, provided that for vehicle dealers, the mileage at the time of sales is determined by the odometer statement at the time the vehicle dealer acquired the vehicle,

4) Vehicles that are only available for rent to a final destination outside of the state,

5) Vehicles purchased by a nonresident prior to establishing residency in the state, regardless of the mileage on the vehicle,

6) Vehicles transferred by inheritance or as a result of divorce, dissolution or legal separation,

7) An emergency vehicle when a public safety agency has demonstrated to the department satisfaction that a vehicle that will meet said agency's needs is not otherwise reasonably available,

8) A vehicle acquired by a resident of this state for the purpose of replacing a vehicle registered to such resident that was damaged or became inoperative beyond reasonable repair or was stolen while out of this state, provided that such replacement vehicle is acquired out of state at the time the previously owned vehicle either was damaged or became inoperative or was stolen,

9) Vehicles owned by active duty military personnel who are stationed outside of Oregon and register their car in Oregon,

10) Vehicles designed exclusively for off-highway use,

11) Vehicles sold for the purpose of being wrecked or dismantled, and

12) Vehicles not requiring licensing or licensed with restricted highway use.

Washington included exemptions 1 through 7 in its rules.

B. Discussion of Pros and Cons of Implementation Features

1. Summary of Guest Speaker Comments

There were no guest speaker comments.

2. Summary of Public Comments

No members of the public testified about exemptions.

3. Summary of Workgroup Discussion

Bob Saunders, WA Ecology, explained the rationale for Washington's decision in including or excluding various exemptions. For example, regarding #8 Washington advisory committee members questioned how one would verify if a vehicle was stolen or wrecked unless there was an accompanying police report. Washington decided to eliminate that option because they ultimately wanted to keep the number of exemptions to a minimum and limiting the possibility of potential loopholes. Steve Douglas, AAM, did not agree with Washington's decision to exclude #8.

The workgroup discussed adding #8 to the first seven exemptions noted above as proposed by Washington. Alan DeBoer, OADA, said at his dealerships they have sold vehicles to out of state residents that have had damaged, stolen, or inoperable vehicles while in Oregon. He said dealers fill out an affidavit for the out of state resident. The workgroup agreed to add it to the list of possible exemptions that Oregon should consider including in its rules.

The workgroup also discussed the California exemption that allows California residents on active military duty outside the state, to purchase and bring a non-compliant car into the state. The workgroup discussed whether military personnel could maintain a home of record and also be a resident of the state where they are stationed. If they choose to register in their state and then move to their home state, it would fall under a transfer exemption. Steve Douglas, AAM, asked whether the exemption provision applied if they are stationed somewhere else and they want to keep their registration in Oregon. This exemption would also be included. Alan DeBoer, OADA, said the benefit of registering a car in Oregon is the low registration fees. Monty King, Oregon Vehicle Dealer Association (OVDA) said active duty military personnel should not have to pay high out-of-state registrations costs because they cannot register their non-compliant car in Oregon. David Van't Hof, Governor's Office, said the Governor would probably agree with providing military personnel an exemption for their vehicles.

Andy Ginsburg, DEQ, asked how Oregon would verify if a previously registered vehicle qualifies for an exemption. Bob Saunders, WA Ecology, thought items 1-7 were easy to verify. Andy also raised concerns about the potential costs of verifying the exemptions. Sam Imperati, facilitator, suggested minimizing the verification costs by simply having people swear in an affidavit that an exemption applies, with a penalty for fraud.

Workgroup discussion indicated that some of the proposed exemptions might be unnecessary (10, 11, and 12) or not applicable to a state such as Oregon that cannot use registration denial as a component of its program. As a result, the workgroup favored including exemptions 1 through 9 in Oregon's rules.

IX. Compliance Verification and Enforcement

A. Overview

States specify in their regulations that car owners are responsible for owning a California compliant-car and that manufacturers and dealers are responsible for selling California compliant-cars. In implementing this requirement, states rely primarily on the dealer and manufacturer to ensure California-compliant cars are delivered and sold for purchase in an opt-in state.

B. Compliance Verification for Manufacturers

1. Manufacturer Car Certification

Before a car can be sold as California-compliant, manufacturers must have obtained certification from California. California issues an Executive Order to the manufacturer indicating that the specific engine family (a group of engines with similar emission characteristics), for which the manufacturer is seeking approval, is California-certified. Manufacturers then ship California-compliant cars to the dealer in any opt-in state for sale. Every year, manufacturers evaluate the fleet sales in the opt-in state and verify they have met the fleet average emission requirement.

2. Fleet Averaging

Under the California vehicle emission standards, a fleet average is the vehicle manufacturer's average vehicle emissions of all non-methane organic gases (NMOG) or greenhouse gases from all regulated vehicles in that state in a model year. For example, California LEV II regulations establish a fleet average emissions requirement of .053 g/mi NMOG for 2004 model year vehicles. Therefore, all 2004 model year vehicles offered for sale would have to have average fleet emissions that met or were below the standard.[45] This average emissions requirement becomes more stringent with each successive model year vehicles up until 2010. Beginning in 2009, the Pavley fleet average emission limits for greenhouse gas emissions are also applied and verified in similar fashion.

3. Phase In of NMOG Fleet Average Emission Requirements

There are two approaches to transitional allowances. The first is "deferred equalization". California, Connecticut, and Rhode Island defer the equalization year for three years. Debits can be earned in the first three years, but they do not have to be equalized until the fourth year. New Jersey essentially deferred the program for one year. California also allowed early credits before the fleet average first came into effect. The second is "deferred compliance". Massachusetts, Vermont and Maine allowed credits to be earned for three years without counting any debits. Essentially the assessment of debits was deferred for three years during which credits could be earned. Debits incurred in the fourth and subsequent years needed to be offset the following year. New York did not assess debits or credits until seven or eight years into the program. Washington's proposed rules defer the equalization for four years with the equalization year being the fifth. It has received comments from the manufacturers who

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[45] California Code of Regulations, Title 13, Section 1961(b)(1)(A). http://www.arb.ca.gov/msprog/levprog/cleandoc/cleancompletelevreqsasof8-14-04.pdf **(Reference 2)**

preferred the deferred compliance approach, which does not count debits. Washington's rule will be considered for final decision in December 2005. Oregon and Washington consistency has the benefit of easier implementation and leveling of the cross-border playing field.

4. Documentation

Manufacturers demonstrate compliance to each opt-in state by submitting documentation that their engines are certified to California's standards, annual reports of projected and actual sales, and their calculated fleet average emissions information. Each state's environmental department reviews the information and verifies that the manufacturer is in compliance. Manufacturers must also report on emission system warranty work performed and product recalls.

Additional reports must demonstrate how manufacturers meet the requirements for Zero Emission Vehicles (ZEVs) and any alternative compliance efforts (banking and trading). For information on these requirements, see the Section VII, Zero Emissions Vehicle (ZEV) Requirements, above.

C. Compliance Verification for Dealers

1. New Cars

Under the California vehicle emission standards, dealers only responsibility is to sell "new cars" that are California-certified. California's regulations define a "new car" as one having less than 7,500 miles.

Opt-in states vary in the procedures for dealer inspection and verification. At a minimum, states require that dealers keep the paperwork necessary to demonstrate that they sell only California-compliant cars for registration and use in the state. Documentation that can be subject to inspection includes the Manufacturer's Statement of Origin (MSO), delivery or sales records, and records of emission-related part repairs performed under warranty. Additionally, some states conduct under the hood inspections of the required California vehicle I.D. plate on dealer lots.

In most states, dealers can provide titling and registration of new vehicles as an agent of the state's Driver and Motor Vehicle (DMV) Division or Department of Motor Vehicles (DMV). If the state uses "registration denial" as a form of compliance, dealers who arrange for registration must provide proof to DMV that new vehicles meet California's emission standards as a condition of registration. A Manufacturer's Statement of Origin (MSO) states whether the car is compliant or not. Submission of an MSO with a vehicle registration application usually provides proof of compliance for brand new vehicles.

With the exception of Rhode Island and Maine, all states currently use or plan to use "registration denial." Maine relies on audits at the dealerships or a review of DMV registration information submitted by the dealer. California, New York, Connecticut, and Washington conduct dealer inspections as a supplemental way to verify compliance beyond registration denial. Washington's proposed regulations require manufacturers to report, upon request of the Department of Ecology, the vehicle identification numbers of all passenger cars, light duty trucks and medium duty passenger vehicles delivered to dealers that are not certified to California emission standards. By doing so, dealers receiving large numbers of non-California-certified cars are more likely to be inspected.

Massachusetts and Vermont conduct both registration denial and dealer inspections; however, these states rely only on registration denial to confirm compliance. Because Rhode Island and Maine do not have registration denial, they rely on dealer inspections to ensure compliance with the standards. Inspectors go onto the dealer lots to review the records or conduct an under-the-hood inspection. Each state conducts a dealer outreach program to ensure that dealers understand the requirements. Most states that are conducting dealer inspections have encountered fairly uniform compliance.

2. Used Cars

While most used cars have mileage over 7,500 miles, some "used" vehicles have mileage below 7,500 miles, in which case they are still subject to the California motor vehicle emission standards. Compliance verification methods for these cars vary by state.

As mentioned earlier, there are two ways to determine if a car is California-compliant: one is to look under the hood for the emissions label and the other is to look at the Manufacturer's Statement of Origin (MSO), which states whether the car is compliant or not. Most states use the MSO as proof of compliance.

Sometimes, however, there is no MSO accompanying a used car. This could happen if a used car is sold from person to person, from a dealer to a person, or if a vehicle is titled and registered from a non-LEV state and then sold to someone in a LEV state. In these instances, the original MSO is replaced with a titling document that does not say if the car is compliant with California's emission standards. Therefore, it is difficult to tell from the paperwork if the car is California-compliant.

When an MSO isn't available, states determine compliance in different ways. California confirms used car compliance by an under-the-hood inspection at time of registration. In Massachusetts, the owner can arrange to have a DMV inspector look under the hood to certify it is a California-certified car.

In New York, if the MSO does not indicate compliance or the person does not have an MSO, the registrant or dealer can certify compliance on a DMV form. The form must be signed by the registrant or dealer and attached to the registration documents. New Jersey and Washington are still working out compliance and verification details for their states.

D. Compliance Verification for Vehicle Owners

Most opt-in states rely on registration denial to ensure compliance for individual vehicle owners. Since non-compliant vehicles may not be registered in those states, individuals would generally return non-compliant vehicles to the dealer in exchange for a compliant vehicle. States without registration denial (Rhode Island and Maine) focus on compliance by dealers to minimize the potential for individuals to purchase noncompliant vehicles.

E. Compliance Options in Oregon

1. Overview

Based on a preliminary review of Oregon's statutes, Oregon's DMV does not have the authority to deny registration for non-compliant vehicles or to perform under the hood inspections.

Therefore, unless the statute is changed, compliance and enforcement of the California vehicle emission standards would primarily occur at the manufacturer and dealer level.

DEQ would review manufacturer's records to ensure that fleet average and other manufacturer requirements were met. DEQ would ensure dealer compliance for new vehicles by reviewing MSOs provided by Oregon's DMV. Any non-compliant vehicles identified would be flagged and the dealer could be contacted for outreach, technical assistance, or possible enforcement action. DEQ would use a combination of records review and under hood inspections to track compliance and trends for used vehicles below 7,500 miles that were previously registered in another state.

Figure 4 illustrates the basic system for the flow of motor vehicles entering Oregon and the points in that system where DEQ and DMV could engage to verify compliance. There are two main branches within this system, the path for new car sales and the path for used car sales. As **Figure 4** illustrates, the path for new car sales reflects the largest volume of vehicles entering the Oregon fleet.

2. New Car Pathway

For new cars, the main points of compliance verification are:

- Working directly with manufacturers to verify the annual sales mix and fleet average emissions.
- Working with DMV to review registration information and identify dealers selling non-compliance vehicles.

Approximately 140,000 new vehicles are registered for the first time each year in Oregon. As mentioned earlier, the original Manufacturer's Statement of Origin (MSO) accompanies a first-time registration. DEQ would review the MSO from DMV records to see if the cars are California compliant. As a supplement to the MSO, DEQ could request VIN information identifying all California and federal vehicles delivered for sale to any state[46] from the automobile manufacturers. This could come to DEQ in a database format to allow DEQ to sort and crosscheck information obtained from DMV to determine if there are high numbers of out of state or federal cars being registered in Oregon. If DEQ finds that some dealers are selling non-compliant cars, DEQ will work with the dealer through technical assistance or enforcement actions, if needed. If VIN records indicate a large number of federal cars entering the Oregon system, DEQ could investigate for possible compliance problems. Washington plans to request from the automobile manufacturers a list of federal VINs of vehicles delivered to Washington in order to search their Department of Licensing records and determine if any federal cars are registered in Washington.

There are also some cars (federal vehicles) bought in Oregon for use out of state. This may occur if a dealer has a contract with an Oregon company that is purchasing cars for its fleet outside of Oregon. DEQ would track the total number of cars (federal and California-compliant) from the manufacturer's report to look at trends. By doing so, DEQ could determine if dealers are receiving increased numbers of federal cars and potentially selling them for use in Oregon.

[46] AAM indicated that DEQ should only request information from Oregon.

3. Used Car Pathway

For used cars entering the Oregon system, the main points of compliance verification could include:

- Working with dealers to self-certify that used vehicles subject to California standards are indeed compliant.
- Working with DMV to review registration information and identify trends in cars registered from out of state, possibly leading to dealers selling non-compliance vehicles.
- For out-of-state vehicles to be initially registered within the vehicle inspection boundary, performing an under the hood check during vehicle inspection to determine if the cars are California compliant. If the car is non-compliant and does not qualify for an exemption, DEQ could deny them a vehicle inspection certificate.
- DEQ inspections of used vehicle dealers to verify compliance

A used car is subject to California standards if it has mileage less than 7,500 miles and is model year 2009 or later. According to DMV, there are approximately 5,500 used vehicles (with fewer than 7,500 miles) registered in Oregon each year.[47] Those that were originally sold as new in Oregon would already be compliant, but those that were imported from another state might not be California-certified. Used cars can enter the Oregon system through auto auctions, trade-ins, used car auto dealers, individuals, and by other means.

Either the dealer or the individual can register these used vehicles. DMV assumes that almost half of the registrations are completed by the dealer (approximately 2,200 vehicles out of 5,500). Dealers could check under the hood of vehicles, certify that the car is California-compliant, and submit an inspection form to DMV. DEQ could review DMV records for trends in the number of vehicles sold and track if there is a high influx of used vehicles with fewer than 7,500 miles with registrations from out of state.

Oregon's motor vehicle inspection programs (VIP) in Portland and Medford could be used to supplement the compliance verification system for used cars that are being registered in Oregon for the first time. (Vehicle inspection is not required for vehicles that are initially registered in Oregon until they are re-registered 4 years later, so this method of compliance verification would not be applicable to the 140,000 new vehicles sold each year.) When a vehicle is brought in for inspection, DEQ could scan the vehicle bar code located on the doorjamb or check under the hood to verify it is California compliant. If the vehicle is not California compliant, DEQ could deny them the vehicle inspection certificate. Without the inspection certificate, vehicle owners cannot register their car in Oregon. This would apply to approximately 2,500 used vehicles (of the 5,500) that fall within the inspection and maintenance boundary, or about half of the used vehicles under 7,500 miles that were previously registered in another state and are being registered for the first time in Oregon.

For those cars outside the inspection and maintenance boundary DEQ would review DMV records for trends in the number of vehicles (approximately 3,000 vehicles) sold. Because the MSO would not accompany the registration, DEQ would have to track if there were a high influx of vehicles with registrations from out of state. Additionally, DMV (or a dealer acting as a de facto DMV agent) is already performing a VIN inspection on the re-registered cars and could

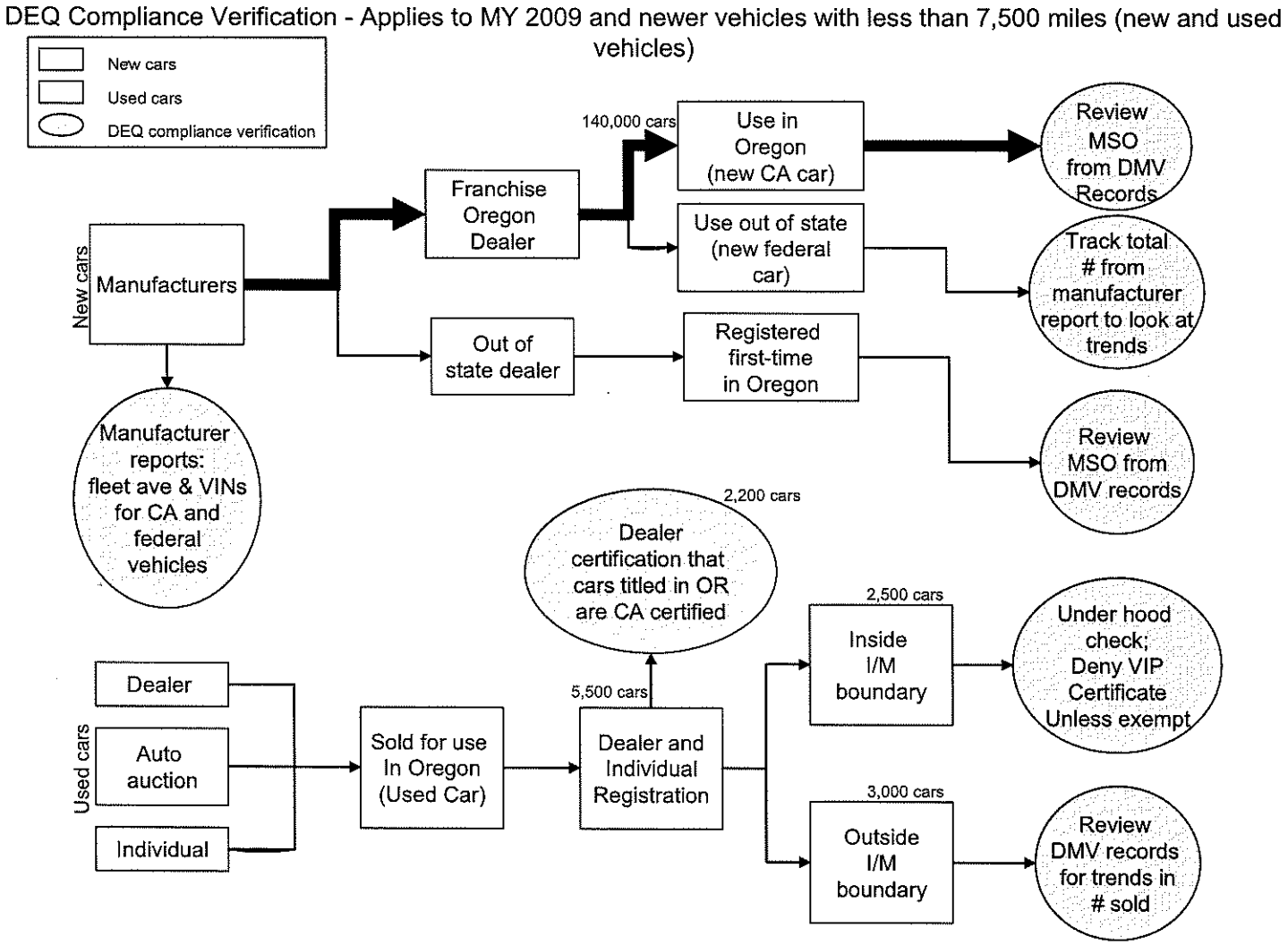
[47] E-mail communication from Lana Cully, Oregon Department of Motor Vehicles, to Rachel Sakata, Oregon DEQ, October 11, 2005.

also check to see if the vehicle is California compliant. While the DMV could not deny registration, it could note any relevant information and provide it to DEQ for tracking purposes.

4. Overall Compliance Approach

DEQ believes the majority of compliance verification can be accomplished by checking the MSOs from DMV records. Used car compliance can be addressed to a large degree though the vehicle inspection programs in Portland and Medford and by working with dealers to self-certify compliance when they register the vehicle with DMV. Any additional compliance issues can be evaluated and addressed as the program matures.

Figure 4: Compliance Verification Tracking in Oregon



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F. Enforcement

Enforcement actions are rare in California and opt in states, but when they do take place, they are typically against the dealer and manufacturer for selling or providing a non-compliant car. The state environmental agencies verify compliance and enforcement by sending inspectors to dealer lots, having environmental agency staff review manufacturer's reporting records, and referring enforcement staff to pursue any necessary penalty and enforcement issues. In Oregon, when penalties are levied and paid, these monies go to the state's general fund.

California assesses a fine of up to $5,000 per vehicle against manufacturers. For dealers and car rental agencies, the fine can be reduced to $2,500. Most of the opt-in states (CT, ME, MA, RI, NJ) assign penalty amounts based on length of time and severity of the penalty. Penalty amounts can range from $100 to $25,000 per incident or vehicle. Some enforcement actions are referred to the Attorney General's office, although most cases are negotiated or settled through administrative actions.

New York establishes a suspended $500 fine for the first violation if there are no additional violations against the dealer or manufacturer. If there are no additional violations within a one-year period, the violation is simply noted and no fine is assessed. However, if there are multiple violations at once, the fine is $1,000 per additional violation (i.e., five violations = $4500 fine). Washington is considering up to a $5,000 fine per vehicle levied against dealers and manufacturers.

In Oregon, DEQ's enforcement procedures and civil penalty structure are described in Oregon Administrative Rules, Chapter 340, Division 12.[48] The Division 12 rules provide the framework to evaluate and determine the appropriate level of penalty levied against dealers and manufacturers based on a number of factors. Division 12 rules and enforcement guidance also allow DEQ flexibility to work with dealers and manufactures through education and other assistance measures to resolve compliance problems, with civil penalties as a secondary tool to ensure compliance.

California and opt-in states report that overall compliance is very high. However, New York, Massachusetts, and California have taken action against either dealers or manufacturers. Some cases are still pending court decisions. The states reported past problems with dealers who imported noncompliant Canadian cars. Some of those cases led to official enforcement action, but most compliance discrepancies are resolved informally, such as by persuading dealers to "unwind" an improper sale and provide the customer with a California-compliant car.

G. Discussion of Pros and Cons of Implementation Features

1. Summary of Guest Speaker Comments

There were no guest speaker comments.

2. Summary of Public Comments

No members of the public testified about compliance and enforcement.

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[48] Oregon Administrative Rules, Chapter 340, Division 12. http://arcweb.sos.state.or.us/rules/OARs_300/OAR_340/340_012.html **(Reference 9)**

3. Summary of Workgroup Comments

Some members of the workgroup raised questions about the lack of "registration denial" and how to deal with compliance issues in Oregon. Dave Kircher, Puget Sound Clean Air Agency, asked how Oregon planned to "unregister" a car if it was found to be non-compliant. Andy Ginsburg, DEQ, replied that unregistering an individual car is not as important as having a system in place to identify any major offenders. A registration denial and under the hood inspections for used cars registered for the first time in Oregon would be an extremely expensive program; tracking trends to see if there are problems is fiscally more sound. Alan DeBoer, OADA, said registration denial is important because the vehicle owner should be responsible for compliance. Registration denial prevents noncompliant cars from being sold for use in Oregon, but it does not let dealers or individuals off the hook for selling noncompliant car in Oregon. Without registration denial, Alan also wanted to ensure Oregon does not create an incentive to bring in cars from out of state that would hurt Oregon dealers.

Chris Hagerbaumer, OEC, asked how much out-of-state buying occurred. Alan DeBoer, OADA, replied that when the Canadian dollar was weaker, he saw many Canadian cars coming from across the border. Washington also found this to be an area of concern to them and according to Bob Saunders, WA Ecology; this is why they required reports from the Department of Licensing to track numbers.

Steve Douglas, AAM, asked if Oregon could penalize out-of-state dealers for selling a non-compliant car. Shelley McIntyre, DOJ, indicated that Oregon could pursue action against an out-of-state dealer as a legal matter, but that collecting on penalties could be difficult as a practical matter.

Alan DeBoer, OADA, also said the consumer is ultimately the one who is harmed without registration denial. If the consumer buys a car from out of state and brings it into Oregon, the consumer may not be aware that they have a noncompliant vehicle. With registration denial, a person would go back to the dealer. This situation, however, would only work with cars that were registered for the first time in Oregon.

Alan DeBoer, OADA, suggested DMV be given the authority to deny registration. Bob Anderson, NATA, asked if there had been any legislative action to bring on registration denial. While it has not been brought before the Legislature, DEQ believes that reviewing MSOs and tracking the cars that are not California certified, Oregon would be able to adequately monitor and verify compliance. If there is a pattern where numbers of non-certified cars or out-of-state cars goes up significantly, then DEQ and DMV could look at options to address the situation, including new legislation to allow for registration denial.

The workgroup believes registration denial is a useful tool to verify compliance with the California standards. Additionally, the workgroup, with Steve and Alan dissenting, recommended pursuing registration denial without making it a condition of adopting these regulations. In combination with registration denial, the workgroup recommends a set of tools such as voluntary dealer inspection, DMV inspection, and a DEQ emissions inspection certificate could be additional ways to track compliance.

Monty King, OVDA (guest participant), said dealers and not DMV inspect many used cars. He indicated that dealers are regulated by DMV. He suggested adding a box on the inspection form to indicate whether or not a vehicle is California certified. If dealers falsified that information, DMV would have licensing jurisdiction. His only concern was not to hold any dealer

liable if the sticker is a fake. Andy Ginsburg, DEQ, said the form makes it clear that sticker inspections by dealers are "to the best of their knowledge". DEQ would not hold a dealer liable for a fraudulent sticker installed by someone else. Dave Kircher, PSCAA also suggested putting a warning box on registration forms indicating that registering a non-compliant car in Oregon is a violation of the law. This puts people on notice that they're subject to other penalties if they continue with registration.

The workgroup also discussed the applicability of the Unlawful Trade Practices Act (UTPA) and whether it could apply in Oregon. The UTPA provides some protection for Oregon's consumers that purchase goods or services for use from a seller or business. A consumer may register a complaint about an unlawful trade practice with the Oregon Attorney General's office. In this instance, a purchaser could register a complaint against an auto dealer if they are sold a non-compliant car.

Steve Douglas, AAM, expressed concern over Oregon's potential requirement for manufacturers to send reports of California and federal vehicles VINs shipped to the state. The added requirement would be burdensome for them, especially if other states had their own special reporting requirements. Andy Ginsburg, DEQ, asked if VINs could be decoded to indicate whether the car is California certified. Steve Douglas, AAM, said the information is not coded in the VIN, but that manufacturers do have a database that identifies California and federal vehicles by VIN. However, Steve indicated that providing that information would be costly.

Washington requests a list of federal VINs that are delivered for their state. This allows Washington to search Department of Licensing records to determine if any of the federal cars are registered in Washington. Andy asked if it was possible for the auto manufacturers to send their entire database of vehicles delivered to any state, but Steve said it would be at least 15 million records. If Oregon requires VIN reporting, Steve suggested following Washington's approach, which was to send a special request letter to the manufacturers each year for them to submit information. This frees manufacturers from the burden of remembering to submit the report on time.

Andy Ginsburg also asked if DMV, while inspecting the VIN of out of state cars being re-registered in Oregon, could check to see if it was California certified. DMV would not deny the registration, but would record the information for later follow-up by DEQ. Lana Cully, DMV, said while not required nor prohibited to do so, DMV would have to change its procedures to gather this information.

IX. Administrative Costs and Fees

A. Overview

The opt-in states currently use or estimate the following resources to write the regulations and implement the California program:

Table 15: Estimated State Resources to Implement California Standards

CA	WA	NY	MA	NJ	ME	CT	VT	RI
~200 FTE	1.5 FTE	2-3 FTE	1 FTE	2 FTE	1 FTE	1 FTE	0.5-1 FTE	0.5 FTE

FTE = Full time equivalent

Oregon DEQ estimates that it would take two full-time equivalents, at a total cost of $500,000 per biennium, for the agency to implement California's vehicle emissions program. Those positions would keep Oregon's rules current with California's program, review manufacturers compliance reports, work with the state DMV to verify vehicle compliance, conduct outreach and technical assistance to the public, car dealers, and manufacturers, conduct dealer inspections, and lead enforcement actions, as needed. In addition, DEQ will need to develop and set up a database tracking system.

B. Fee vs. General Program Funding

In a survey of states that have opted in, some charge fees to help fund the program, whereas others rely on general funds to implement California's vehicle emissions rules.

For example, in Connecticut and Vermont, the DMV collects fees from vehicle owners at the time of registration. Connecticut registrants pay a "Federal Clean Air Act" fee in addition to the regular registration fee each time they register or renew their car. A portion of this CAA fee ($4.25) is allocated to the Department of Environmental Protection and is used to pay for a variety of air quality programs, including the California vehicle emissions rules. Vermont has a similar program where the DMV assesses a Clean Air Fee at the point of registration/renewal. Vermont's fee (~$1 of the general registration fee) funds air quality programs, including the California vehicle emissions rules.

In New York, all registered cars must get an annual safety inspection, and part of this vehicle inspection fee ($4) is used to fund the California vehicle emissions program and the mobile source section of the Department of Environmental Conservation.

Some state environmental agencies assess fees on the auto manufacturer rather than the individual registrant. New Jersey plans to charge large and intermediate sized auto manufacturers $1 per vehicle sold in the state. The fee is imposed on potential users of the ZEV credit bank. California, however, tallies the cost of the on-road vehicle program and divides by the number of new vehicles sold in the state. Auto manufacturers are charged a proportion based on the number of vehicles sold in California.

Other states do not charge a fee, and instead, rely on general fund money. Massachusetts and Maine use general funds to staff its California vehicle emissions rules program. Washington anticipates it will not collect fees, and instead, will use its general fund to staff its program. Rhode Island is not contemplating fees, but is still working out the logistics of its program.

C. Options in Oregon

Under current statutory authority[49], Oregon DEQ likely would take the lead role in compliance verification through car dealer inspections. Oregon's DMV could support this work without additional resources by making registration records available to DEQ. If Oregon wished to pursue a change in statute allowing DMV to deny registration to non-compliant vehicles, the DMV could request a fee to support that additional work.

Oregon's options to administer the California program could include administering a fee-based program. Alternatively, Oregon would pursue a program similar to New Jersey by imposing a fee on auto manufacturers. Once a fee is adopted, it would still have to be ratified by the 2007 Legislature as part of DEQ's budget.

D. Discussion of Pros and Cons of Implementation Features

1. Summary of Guest Speaker Comments

There were no guest speaker comments.

2. Summary of Public Comments

No members of the public testified about administrative costs and fees.

3. Summary of Workgroup Comments

The workgroup discussed various fee options to help fund the program. Ashley Henry, OBA, asked about charging consumers at the time of licensing. Andy Ginsburg, DEQ, explained statutory limitations prevent DEQ from doing so. Ashley also recommended pursuing a licensing fee and not use general fund to pay for the program. Chris Hagerbaumer, OEC, asked if title fees could be used. Shelley McIntyre, DOJ, noted that the Oregon Constitution requires vehicle licensing and title fees to be placed in the highway trust fund. Specifically, all revenue from any fee administered on the registration and use of motor vehicles must be used exclusively for the construction, repair, maintenance, operation and use of public highways, and roads in Oregon. Lana Cully, DMV, said DMV has the ability to keep its administrative costs from the title fee, but the rest of it is used for highway fund purposes.

Ray Jubitz (sitting in for Al Jubitz) did not think charging the manufacturers a fee would be too onerous, because they would likely pass the cost to the consumer, and ultimately, it would add $1-$2 more per cost of the car. Chris Hagerbaumer, OEC, supported the idea of a manufacturer fee because it is a relatively small amount of money for the benefit achieved. Alan DeBoer, auto dealer, and Steve Douglas, AAM, did not support the idea of a manufacturer fee. Additionally, Alan stated he did not think it was fair to make the manufacturers pay for a program they do not want in the first place. He also questioned how to deal with small manufacturers (e.g., Ferrari) that sell very few cars in Oregon.

Andy Ginsburg, DEQ, pointed out that a fee on manufacturers would be much more efficient to collect because there are only 10-15 manufacturers versus 400 to 3,000 dealers.

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[49] Oregon Revised Statute, 468.095. http://landru.leg.state.or.us/ors/468.html **(Reference 10)**

Monty King, OVDA, suggested including an invoice on every title to charge the purchaser a $5 fee. Elliott Eki, AAA, thought AAA's position would be for everyone to pay a fair share for clean air. He suggested adding this provision to tax returns and allow people to make a contribution.

Mark Reeve, chair, said a downside of using general fund is that it spreads the cost across all citizens, whether they have new cars or a car at all. People who do not have a car would not be happy about paying for the program, so from a fairness standpoint a fee based on those who sell, buy, or register new cars seems fairer. In response, Steve Douglas, AAM, pointed out that new vehicle purchasers are paying a significant amount to provide the supposed benefit for everyone else. In turn, people driving older, higher polluting vehicles are not improving air quality. Consequently, from "a fairness standpoint" using general fund money seems fairer. Regulations should encourage new vehicle purchases rather than discourage them through higher taxes and fees.

Chris Rich, OBA, (filling in for Ashley Henry) believes the cost of the program should be spread over as many people as possible because the program reduces CO_2, which benefits everyone.

X. Conclusion:

The Workgroup appreciates the opportunity to explore issues in a collaborative environment. This report contains an accurate summary of our discussions and it includes the advantages and disadvantages surrounding the various implementation issues. We thank the Governor and note our availability to assist in the future if he so desires.

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Appendix A: LEV II Emissions Standards (all)[50]

Table A-1: LEV II Emissions Standards

LEV II Exhaust Mass Emission Standards for New 2004 and Subsequent Model LEVs, ULEVs, and SULEVs in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes							
Vehicle Type	*Durability Vehicle Basis (mi)*	*Vehicle Emission Category*	*NMOG (g/mi)*	*Carbon Monoxide (g/mi)*	*Oxides of Nitrogen (g/mi)*	*Formaldehyde (mg/mi)*	*Particulates (g/mi)*
All PCs; LDTs 8500 lbs. GVW or less Vehicles in this category are tested at their loaded vehicle weight	50,000	LEV	0.075	3.4	0.05	15	n/a
		LEV, Option 1	0.075	3.4	0.07	15	n/a
		ULEV	0.040	1.7	0.05	8	n/a
	120,000	LEV	0.090	4.2	0.07	18	0.01
		LEV, Option 1	0.090	4.2	0.10	18	0.01
		ULEV	0.055	2.1	0.07	11	0.01
		SULEV	0.010	1.0	0.02	4	0.01
	150,000 (Optional)	LEV	0.090	4.2	0.07	18	0.01
		LEV, Option 1	0.090	4.2	0.10	18	0.01
		ULEV	0.055	2.1	0.07	11	0.01
		SULEV	0.010	1.0	0.02	4	0.01
MDVs 8501 - 10,000 lbs. GVW Vehicles in this category are tested at their adjusted loaded vehicle weight	120,000	LEV	0.195	6.4	0.2	32	0.12
		ULEV	0.143	6.4	0.2	16	0.06
		SULEV	0.100	3.2	0.1	8	0.06
	150,000 (Optional)	LEV	0.195	6.4	0.2	32	0.12
		ULEV	0.143	6.4	0.2	16	0.06
		SULEV	0.100	3.2	0.1	8	0.06
MDVs 10,001-14,000 lbs. GVW Vehicles in this category are tested at their adjusted loaded vehicle weight	120,000	LEV	0.230	7.3	0.4	40	0.12
		ULEV	0.167	7.3	0.4	21	0.06
		SULEV	0.117	3.7	0.2	10	0.06
	150,000 (Optional)	LEV	0.230	7.3	0.4	40	0.12
		ULEV	0.167	7.3	0.4	21	0.06
		SULEV	0.117	3.7	0.2	10	0.06

[50] California Code of Regulations, Title 13, Section 1961. http://www.arb.ca.gov/msprog/levprog/cleandoc/cleancompletelevregsasof8-14-04.pdf (**Reference 2**)

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Appendix B: LEV II Vehicle Classifications

Table B-1: LEV II Vehicle Classifications

Abbreviation	Vehicle Category	Example of Emission Standards for non-methane organic gases (ozone precursor)	Examples of Vehicle Type meeting these standards
LEV II	Low Emission Vehicle (II)	0.075 g/mi. NMOG	2005 Ford: Crown Victoria, Chevrolet Impala, Mercedes S350
ULEV	Ultra Low Emission Vehicle	0.040 g/mi. NMOG	2005 Honda Accord, Subaru Legacy, Toyota Camry
SULEV	Super Ultra Low Emission Vehicle	0.010 g/mi. NMOG	2006 Pontiac Grand Prix, Buick LaCrosse, Mitsubishi Gallant, Saturn Ion
PZEV	Partial Zero Emission Vehicle SULEV with zero evaporative emissions due to sealed engine. 15 year, 150,000 mile warranty:	0.010 g/mi. NMOG	2005 Chrysler Sebring, Volvo S40, Nissan Altima, Volkswagen Jetta
ATPZEV	Advanced Technology Partial Zero Emission Vehicle: PZEVs with components that will advance true-ZEV technology. (Typically hybrids)	0.010 g/mi. NMOG	2005 Ford Escape, Honda Civic, Toyota Prius
ZEV	Zero Emission Vehicles The alternative technologies PZEV and ATPZEV vehicles can be used to satisfy most of the ZEV requirement.	Zero emissions	Electric Cars Future fuel cell powered vehicles

Please note that the examples of available vehicle models above are not inclusive. They merely offer a sampling of vehicles that meet the above categories.

Appendix C: Understanding the Pavley Emission Standards for CO2 Equivalents

Each greenhouse gas has its own global warming potency. Carbon Dioxide (CO_2) is the least potent greenhouse gas in terms of its global warming effect, but it is by far the most abundant global warming pollutant. The scientific community has developed a method for comparing all greenhouse gases, such as carbon dioxide, nitrous oxide, methane, and halogenated hydrofluorocarbons (HFC's) on a uniform scale, called **Carbon Dioxide Equivalents (CO_2E).**

This uniform scale uses CO_2 as the standard measure. For the more potent greenhouse gases like methane, nitrous oxide, or HFC's, the actual amount of emissions are adjusted (increased) to reflect an equivalent amount of CO_2 (i.e. how much CO_2 would be needed to have the same global warming potential).

The Pavley emission standards are based on grams per mile of CO_2 equivalent. For example, a 1-gram per mile reduction in nitrous oxide would be the same as reducing 296 grams per mile of CO_2.

Table C-1 lists the CO_2 equivalents of the four greenhouse gases regulated by the Pavley rules:

Table C-1: Carbon Dioxide Equivalencies

Mobile Source Greenhouse Gases	CO_2 Equivalent
Carbon Dioxide (CO_2)	1
Nitrous Oxide (N_2O)	296
Methane (CH_4)	23
HFC 134a	1300

Table C-2 shows the Pavley emission standards for CO_2E:

Table C-2: California Motor Vehicle Greenhouse Gas (Pavley) Emission Standards CO_2E

Fleet Average Greenhouse Gas Exhaust Mass Emissions Requirements for Passenger Car, Light Duty Truck, and Medium-Duty Passenger Vehicle Weight Classes[51]		
Model Year	**Fleet Average Greenhouse Gas Emissions (Grams per mile CO_2 equivalent)**	
	All Passenger Cars, Light Duty Trucks 0-3750 lbs. Loaded vehicle weight (LVW)	**Light Duty Trucks 3751 lbs. LVW – 8500 lbs. gross vehicle weight (GVW); and Medium Duty Passenger Vehicles (MDPV's)**
2009	323	439
2010	301	420
2011	267	390
2012	233	361
2013	227	355
2014	222	350
2015	213	341
2016+	205	332

It is up to manufacturers to determine their GHG emissions levels using equations provided in the regulations. Requirements for the smaller volume manufacturers ("intermediate", "small" and "independent low volume manufacturers" such as Ferrari, Saleen and Panoz) were waived until 2016 and were replaced by other requirements. Manufacturers are allowed to exceed emission limits in one year if they make up the difference the following year.

[51] Final Regulation Order, Amendments to Sections 1900 and 1961, and Adoption of new Section 1961.1,Title 13, California Code of Regulations http://www.arb.ca.gov/regact/grnhsgas/fro.pdf **(Reference 3)**

Appendix D: Examples of technologies that can be used to meet Pavley Emissions Regulations[52]

Low Rolling Resistance Tires: 3% GHG reductions

Rolling resistance is a measure of the force required to move the tires of a vehicle forward. When multiplied by the radius of the tire, this force gives the resistive torque that must be overcome by the engine when the vehicle is in motion. The rolling resistance of a tire can be reduced through improved tread and shoulder designs and the use of improved materials for tire belt and traction surfaces.

Variable Valve Timing and Lift: 3-8% GHG reductions
Currently used by BMW, Honda and Toyota

Valve lift is a measure of the height and duration of the valve opening. Most spark gasoline engines use fixed valve lift, where the valve lift does not change with the speed and load of an engine. Variable lift allows the period of valve opening to vary, which reduces pumping losses, reduces valve train frictional loss, increases compression ratio, and reduces idle speed— all of which reduce CO_2 emissions.

Cylinder Deactivation: 3-6% GHG reductions
Currently used by GM, Honda, Chrysler

Cylinder deactivation technology allows engines to operate on half their cylinders during certain operating modes. Generally, such systems "shut down" cylinders during light load operation so that the engine operates with efficiency similar to that of a lower-displacement engine. From an engineering standpoint, the major CO_2 reductions accrue due to a reduction in pumping losses associated with halving the number of cylinders in operation. The more frequently the deactivation mode occurs, the greater the CO_2 reduction impacts. Therefore, in some cases, the base engine may be upsized to allow more frequent operation in deactivation mode, which results in both reduced CO_2 and greater maximum power.

Smaller Engine with Turbocharger: 5-7% GHG reductions
Currently used by various auto manufacturers

Internal combustion engines eject 25 to 50 percent of energy into the exhaust. A turbocharged engine uses a turbine in the exhaust stream to drive a compressor in the intake manifold, which compresses incoming air to the engine. The higher-pressure air in the intake manifold forces more air into the engine than would otherwise be the case, and the resulting benefit is an increase in engine power. While the technology does not reduce CO_2 emissions directly, the fact that the engine produces greater power allows engines to be downsized without sacrificing performance, and this downsizing can produce significant CO_2 reductions.

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[52] Information on technology provided by NESCAUM study. http://bronze.nescaum.org/committees/mobile/rpt040923ghglightduty.pdf GHG reductions found on Union of Concerned Scientists website 10-27-04. Data also extracted from a 2001NAS report on GHG reductions.

Hybrid Electric Drive: 15-30% GHG reductions
Currently used by Toyota, Honda and Ford

Hybridization involves the interaction, in varying degrees depending on the design, of a conventional gasoline or diesel-powered power engine, in conjunction with an electric motor. Parallel hybrids use the conventional engine coupled directly to the vehicle' s drivetrain as the prime motive power with varying degrees of electric motor assist. Series hybrids also employ a conventional engine, but it is physically de-coupled from the drivetrain, making the electric motor the only motive source. The conventional engine provides power to operate a generator providing power to a battery pack, which in turn provides electric power to operate the electric motor. Reduced CO_2 emissions are achieved through a number of mechanisms, including utilization of smaller engines that operate in a more efficient power band, energy recovery through regenerative braking, engine shutdown at what would normally be idling conditions, and other strategies.

5 or 6 Speed Automatic Transmission (Increased Step Gear Ratio Transmission)
2-3% GHG reduction
Currently used in the Ford Explorer

In both automatic and manual transmissions, increasing the number of gears can provide a wider spread between the lowest (first gear) and highest gear ratios. This allows the engine to operate closer to its optimum efficiency at a wider variety of speeds, which results in a corresponding decrease in CO_2 emissions. Five and six speed automatic transmissions are now available, both of which provide benefits relative to the more traditional four-speed transmission.

Continuously variable transmission: 4-8% GHG reduction
Currently used by Nissan, Toyota, Saturn, or Honda

Conventional transmissions feature a discrete number of gear ratios (generally four to six) that determine the relationship between engine speed and vehicle speed. This results in some compromise in matching engine speed and load-to-vehicle requirements. A continuously variable transmission (CVT) offers an infinite range of gear ratios between fixed limits, which allows for the optimization of engine operating conditions and maximum power transmission efficiency.

Camless Valve Actuation: 15% GHG reduction
Emerging technology

Camless valve actuation expands upon the concept of variable valve timing and lift, described above, by completely eliminating the camshaft and mechanical valve actuation mechanism from the cylinder head. In place of the camshaft mechanism, valve motion is actuated and controlled through either electrical energy or hydraulic energy, and this can occur over a wide range of engine operating conditions. This yields greater CO_2 reductions than variable valve lift/timing systems.

Variable Compression Ratio: GHG Reduction 2-6%
Emerging Technology

Engine efficiency increases with cylinder compression ratio. The greater the compression, the more work performed for a given air-fuel mixture. In standard technology engines, the compression ratio is fixed across all operating conditions based on cylinder geometry. However,

the tendency of engines to experience knock varies with operating conditions. For example, at light loads, higher compression ratios can be tolerated without knock. However, since the geometry of a standard engine cannot be varied it is not possible to optimize compression ratios for specific operating conditions. New engine designs can mechanically vary cylinder geometry. This allows for engines that operate at a high-compression ratio under part-load conditions and at a lower compression ratio under high-load conditions. CO_2 reductions are achieved through the use of a smaller engine to achieve identical performance.

Appendix E: Understanding vehicle emission classifications

Both the California and federal standards use the Federal Test Protocol to simulate vehicle degradation over time as mileage accumulates. Under both the California and federal program, emission limits are set for the 50,000 mile and 120,000 mile thresholds for vehicle life. Emission limits become more lenient as vehicles age from 50,000 miles to 120,000 miles. Because the federal and California program classify vehicle groups differently, it is not practical to show a side-by-side comparison of emission limits for the two programs.

A. Federal Tier 2

The federal Tier 2 standards require vehicles to be certified to any of eight emissions categories. In the federal program, the vehicle emission categories are called certification "bins." Manufacturers are allowed to choose which bins they use to certify vehicles as long as the average NOx emissions of their new vehicles meet the fleet average emission requirement of 0.07 grams/mile (g/mi). **Table E-1** outlines the emissions standards for the federal bins.

Table E-1: Tier 2 Emission Standards

Tier 2 Emission Standards, Federal Test Protocol (FTP) 75, g/mi[53]										
Bin#	50,000 miles					120,000 miles				
	NMOG	CO	NOx	PM	HCHO	NMOG	CO	NOx	PM	HCHO
8	0.100 (0.125)	3.4	0.14	-	0.015	0.125 (0.156)	4.2	0.20	0.02	0.018
7	0.075	3.4	0.11	-	0.015	0.090	4.2	0.15	0.02	0.018
6	0.075	3.4	0.08	-	0.015	0.090	4.2	0.10	0.01	0.018
5	0.075	3.4	0.05	-	0.015	0.090	4.2	0.07	0.01	0.018
4	-	-	-	-	-	0.070	2.1	0.04	0.01	0.011
3	-	-	-	-	-	0.055	2.1	0.03	0.01	0.011
2	-	-	-	-	-	0.010	2.1	0.02	0.01	0.004
1	-	-	-	-	-	0.000	0.0	0.00	0.00	0.000

NMOG= non methane organic gases
CO= carbon monoxide
NOx= oxides of nitrogen
PM = particulate matter
HCHO= formaldehyde

B. California LEV-II Program

California's LEV-II program also classifies vehicles into certification levels of increasing stringency. In California's program, these categories define emission limits for individual vehicle groups. Manufacturers have flexibility in certifying vehicles to these groups as long as the fleet average is with allowable limit. **Table E-2** shows a summary of the emissions standards for light

[53] Table courtesy of dieselnet.com, http://www.dieselnet.com/standards/us/light.html

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duty vehicles under the LEV II standard. Please see **Appendix A** for a more complete listing of these standards including medium duty vehicles to 14,000 lbs. GVW.

Table E-2: California LEV II Emission Standards: Light Duty Vehicles <8,500 lbs

California LEV II Emission Standards, Passenger Cars and Light Duty Vehicles < 8500 lbs, g/mi										
Category	50,000 miles/5 years					120,000 miles/11 years				
	NMOG	CO	NOx	PM	HCHO	NMOG	CO	NOx	PM	HCHO
LEV	0.075	3.4	0.05	-	0.015	0.090	4.2	0.07	0.01	0.018
ULEV	0.040	1.7	0.05	-	0.008	0.055	2.1	0.07	0.01	0.011
SULEV	-	-	-	-	-	0.010	1.0	0.02	0.01	0.004

Each category in both the federal and California programs sets limits for Non Methane Organic Gases (NMOG), Carbon Monoxide (CO), Oxides of Nitrogen (NOx) and formaldehyde. Emission limits within individual vehicle categories are similar in both the federal and California programs, but the proportions of NMOG to NOx vary among the groups.

Each program also sets overall fleet average emissions limits. The California fleet average limit applies to NMOG and the federal fleet average limit applies to NOx. To compare the stringency of the two programs, one must allocate vehicles to individual categories, which provide limits for both NMOG and NOx. Because the proportions of NMOG to NOx are not constant among the categories, different distributions of vehicles among the categories can produce different total emissions of the pollutant that is not limited by the fleet average requirement. For example, California's LEV II program limits the fleet average of NMOG, but not NOx. NOx limits apply only when a vehicle is classified in a given category. Depending on how vehicles are distributed to those categories, total NOx emissions can vary. The same is true for the Tier 2 program. Overall NOx emissions are constrained by the NOx fleet average, but NMOG is capped only by the vehicle categories allowing some variation in total NMOG emissions for different vehicle distributions.

Appendix F: Glossary

ATPZEV: Advanced Technology Partial Zero Emission Vehicle
ATPZEVs are a subcategory of PZEVs. They meet PZEV emission requirements and include vehicles such as dedicated compressed natural gas or hybrid electric vehicles.

CARB: California Air Resources Board
CARB is the state agency that develops and implements the California Motor Vehicle Standards.

CAA: Clean Air Act
The Clean Air Act establishes federal requirements for the regulation of air pollution.

CAFE: Corporate Average Fuel Economy
CAFE standards are federal fuel efficiency requirements for light duty motor vehicles established by the Energy Policy and Conservation Act.

CO_2: Carbon Dioxide
Carbon dioxide is the primary greenhouse gas that causes global warming.

CO: Carbon Monoxide
Carbon monoxide is an air pollutant that causes respiratory distress and can result in death when humans directly inhale excessive amounts.

En Banc: With all judges or a quorum of judges present

GHGs: Greenhouse Gases
Greenhouse gases (GHGs) trap heat in the atmosphere, causing global warming. The greenhouse gases covered under California's motor vehicle emissions standards are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and hydrofluorocarbons (HFCs).

In Toto: **In total**

LDV: **Light Duty Vehicle**
A passenger car or truck with a gross vehicle weight less than 8,500 lbs.

LEV: Low Emission Vehicle
A vehicle that complies with California's least restrictive vehicle emission category.

LEV II: **Low Emission Vehicle program, Phase 2**
California's current motor vehicle emissions program.

MOBILE6.2: **Emissions Factor Model**
EPA's computer modeling program that estimates the quantity of emissions of CO, VOC, NOx, PM2.5, and air toxics from motor vehicles.

NMOG: Non Methane Organic Gases

A group of photochemically reactive compounds that are regulated to reduce the formation of ground-level ozone or smog. NMOG includes most hydrocarbons (except methane) and some nonhydrocarbons that are chemical precursors of ozone.

NOx: Oxides of Nitrogen

NOx refers to several compounds that include nitrogen and oxygen atoms (e.g., NO_2 and NO_3). NOx is associated with respiratory irritation and is also one of the chemicals that can lead to formation of ozone, or photochemical smog. It comes primarily from motor vehicle emissions, but also is generated by other combustion processes.

PM: Particulate Matter

Particles found in the air, which include dust, dirt, soot, smoke, and liquid droplets. Particulate matter is formed by the incomplete combustion of fuel and comes from a variety of sources such as motor vehicles, tilled fields, unpaved roads, stone crushing, and burning of wood.

Pavley: AB 1493 or the Pavley Bill

The Pavley bill, or AB 1493, is the California bill that was enacted to require the California Air Resources Board (CARB) to regulate greenhouse gases from light duty motor vehicles. Named after California Assemblywoman Fran Pavley, it became law in 2002, and takes effect in model year 2009.

PZEV: Partial Zero Emission Vehicle

PZEVs are vehicles meeting the second most stringent set of emission standards under the California Motor Vehicle standards. These cars meet SULEV tailpipe emission standards, have zero evaporative emissions, and have a 15-year / 150,000-mile warranty. Zero evaporative emissions means no gases are allowed to evaporate from a vehicle's engine or fuel system.

SULEV: Super Ultra Low Emission Vehicle

SULEVs are the third most stringent category of emissions under the California program.

Tier 2: The Federal Tier 2 Motor Vehicle Emissions Standards

The Tier 2 program sets the current motor vehicle standards that apply nationwide (except areas that are subject to California's standards. Tier 2 regulates emissions from passenger cars, light trucks and SUVs.

TLEV: Transitional Low Emission Vehicle

Program that preceded California's LEV requirements.

ULEV: Ultra Low Emission Vehicles

ULEVs are the fourth most stringent emission category under the California standards.

ULSD: Ultra-low Sulfur Diesel

ULSD is diesel fuel with very low levels of sulfur (<15 parts per million) that comply with new federal diesel fuel standards that take effect in 2006. ULSD

directly reduces pollution from diesel exhaust and is a necessary precondition for diesel exhaust emission control equipment.

VOC: Volatile Organic Compound

A group of hydrocarbons that are regulated as precursors of ground level ozone. VOCs are compounds containing carbon except ethane, methane and specific other compounds that do not contribute to photochemical reactions.

ZEV: Zero Emission Vehicle

ZEVs are the most stringent emission category in the California program. They have zero tailpipe and evaporative emissions. These include battery electric vehicles and hydrogen fuel cell vehicles.

Appendix G: Additional Information on the Web

The following web links offer additional information on the federal and California motor vehicle emission standards.

California Air Resources Board, LEV-II Program

- http://www.arb.ca.gov/msprog/levprog/levprog.htm

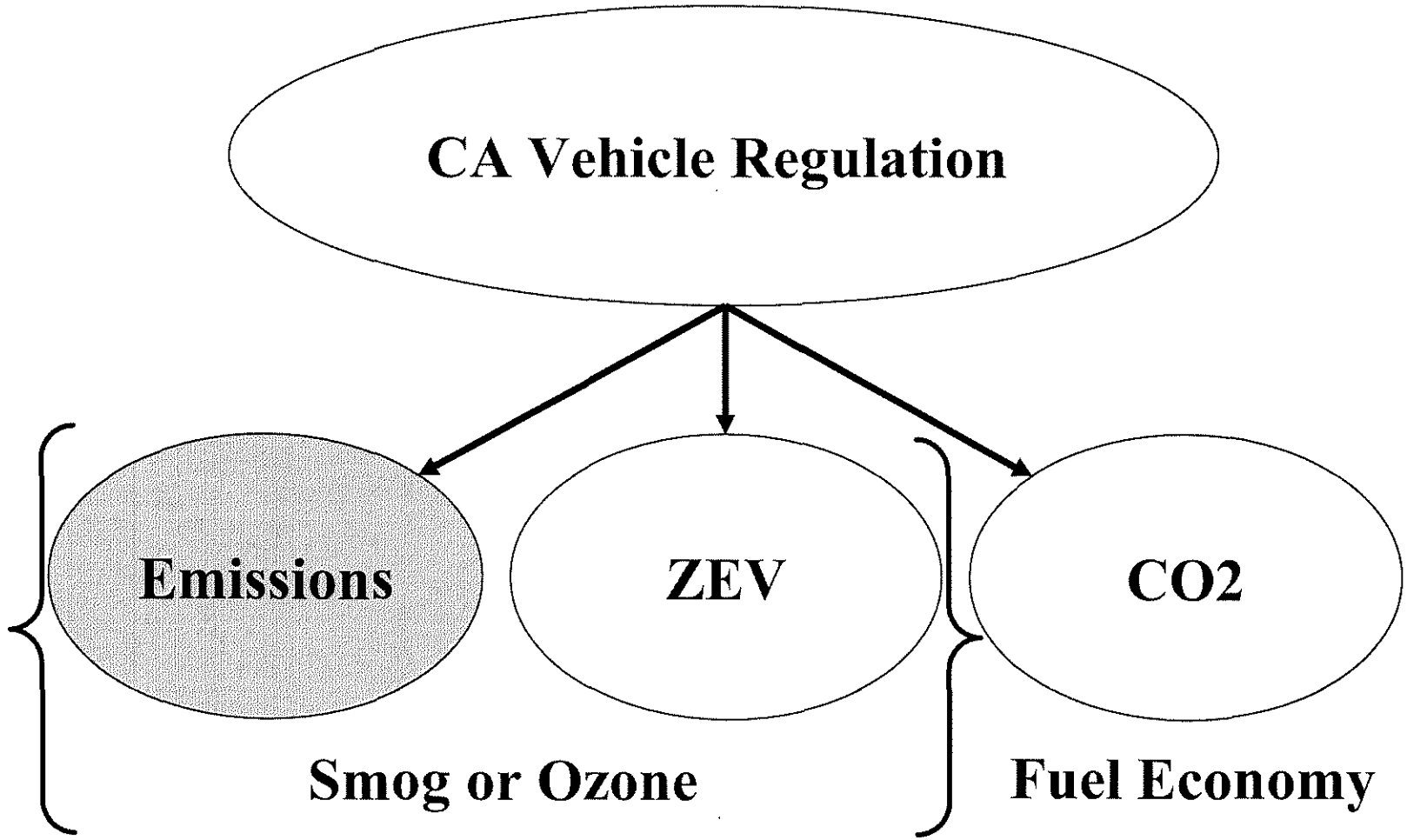
California Air Resources Board, Pavley Program

- http://www.arb.ca.gov/homepage.htm (search Pavley)
- http://www.arb.ca.gov/cc/cc.htm

Federal Motor Vehicle (Tier-2) Program

- http://www.epa.gov/tier2

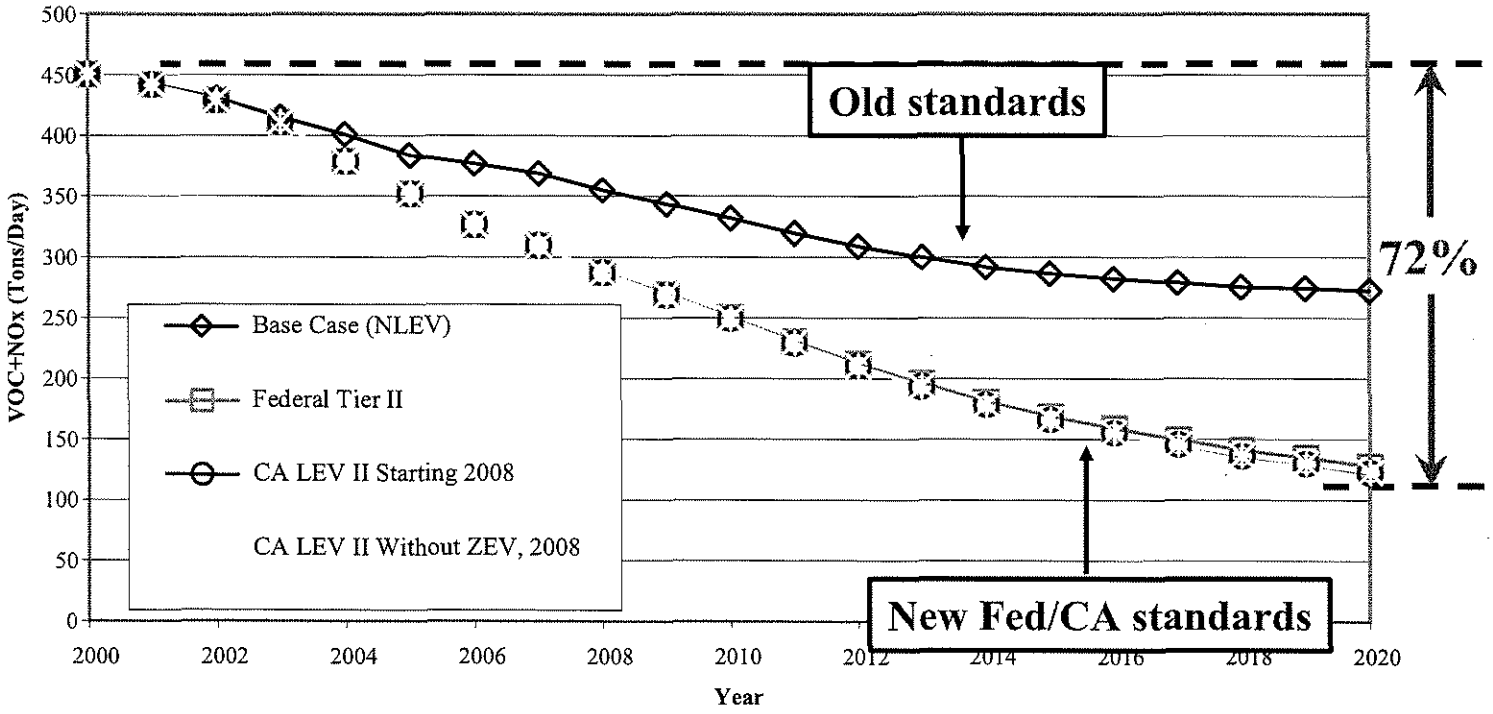
Appendix H: Information from Alliance of Automobile Manufacturers (submitted September 12, 2005)



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Impact of New Regulations

Oregon Summer Season On-Road Inventory
VOC+NOx



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Appendix I: Expected Emissions (Tons/Day) of NOx and VOC from 2000 to 2030 (Information submitted by Air Improvement Resource, AAM contractor, October 11, 2005)

Pollutant	Year	Oregon On-Road Inventory, Summer Season (Tons/Day)				Program Benefit Relative to Base Case (Tons/Day)		
		Base Case (NLEV)	Federal Tier II	CA LEV II Starting 2009	CA LEV II Without ZEV Mandate, Starting 2009	Federal Tier II	CA LEV II Starting 2009	CA LEV II Without ZEV Mandate, Starting 2009
NOx	2000	287.93	287.93	287.93	287.93	0.00	0.00	0.00
	2001	282.83	282.78	282.78	282.78	0.05	0.05	0.05
	2002	277.08	276.08	276.08	276.08	1.01	1.01	1.01
	2003	267.12	264.84	264.84	264.84	2.29	2.29	2.29
	2004	258.15	244.97	244.97	244.97	13.18	13.18	13.18
	2005	251.03	230.32	230.32	230.32	20.71	20.71	20.71
	2006	248.08	212.69	212.69	212.69	35.38	35.38	35.38
	2007	244.34	200.58	200.58	200.58	43.77	43.77	43.77
	2008	237.91	186.19	186.19	186.19	51.72	51.72	51.72
	2009	231.40	173.37	173.06	173.06	58.03	58.34	58.34
	2010	223.89	159.14	158.62	158.62	64.75	65.26	65.26
	2011	215.80	144.29	143.57	143.57	71.51	72.22	72.22
	2012	209.52	131.30	130.31	130.31	78.22	79.21	79.21
	2013	203.70	119.04	117.82	117.82	84.66	85.88	85.88
	2014	198.19	107.59	105.99	106.06	90.60	92.19	92.12
	2015	194.71	98.49	96.59	96.59	96.21	98.12	98.12

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	2016	192.03	90.64	88.41	88.41	101.40	103.62	103.62
	2017	189.79	83.60	81.04	81.04	106.19	108.75	108.75
	2018	187.18	76.54	73.78	73.78	110.65	113.40	113.40
	2019	186.71	71.98	68.95	68.95	114.73	117.77	117.77
	2020	186.58	68.06	64.75	64.90	118.51	121.83	121.68
	2021	187.08	64.91	61.37	61.53	122.17	125.71	125.55
	2022	187.14	61.78	58.10	58.18	125.37	129.04	128.96
	2023	187.67	59.31	55.41	55.50	128.36	132.26	132.18
	2024	188.70	57.40	53.44	53.60	131.30	135.26	135.10
	2025	189.99	55.48	51.28	51.45	134.51	138.71	138.54
	2026	190.88	53.80	49.45	49.71	137.08	141.43	141.17
	2027	192.23	52.57	48.15	48.32	139.67	144.08	143.91
	2028	193.79	51.00	46.43	46.69	142.79	147.36	147.10
	2029	196.20	50.35	45.71	45.98	145.85	150.50	150.23
	2030	198.60	50.11	45.40	45.67	148.49	153.20	152.93
VOC	2000	162.70	162.70	162.70	162.70	0.00	0.00	0.00
	2001	159.22	159.17	159.17	159.17	0.05	0.05	0.05
	2002	153.67	152.61	152.61	152.61	1.06	1.06	1.06
	2003	148.16	145.98	145.98	145.98	2.18	2.18	2.18
	2004	142.84	133.85	133.85	133.85	8.99	8.99	8.99
	2005	132.62	121.57	121.57	121.57	11.05	11.05	11.05
	2006	128.53	113.59	113.59	113.59	14.95	14.95	14.95
	2007	124.34	108.93	108.93	108.93	15.42	15.42	15.42
	2008	117.11	101.05	101.05	101.05	16.06	16.06	16.06
	2009	112.25	95.84	95.59	95.59	16.41	16.66	16.66

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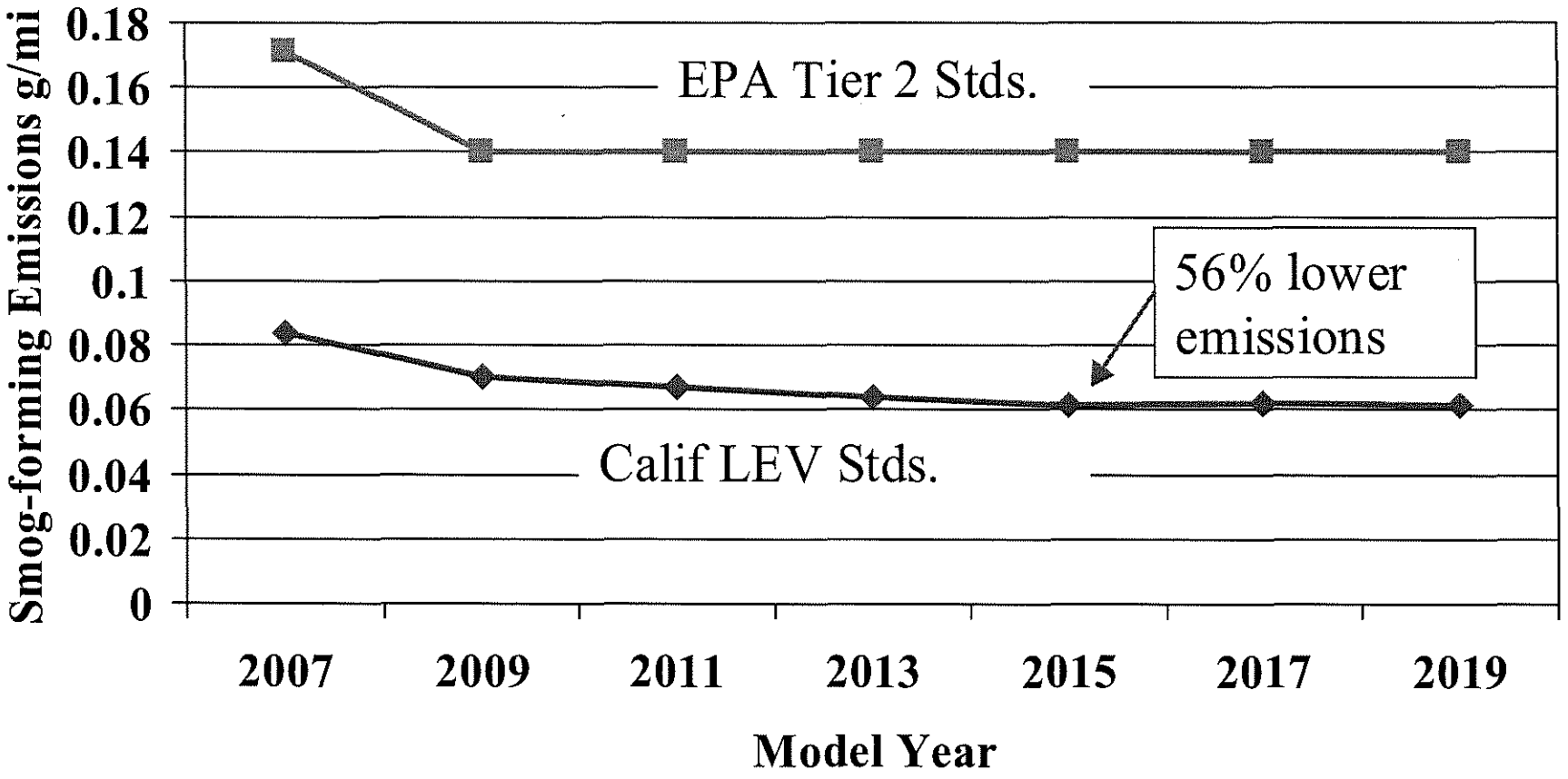
	2010	107.79	90.78	90.39	90.39	17.01	17.39	17.39
	2011	103.69	86.13	85.55	85.61	17.56	18.15	18.08
	2012	99.14	80.83	80.10	80.16	18.31	19.05	18.98
	2013	96.09	77.07	76.12	76.12	19.02	19.97	19.97
	2014	93.53	73.80	72.62	72.69	19.73	20.91	20.84
	2015	91.65	70.98	69.64	69.71	20.67	22.01	21.94
	2016	90.07	68.57	66.99	67.06	21.49	23.07	23.00
	2017	88.95	66.54	64.71	64.71	22.40	24.23	24.23
	2018	87.87	64.47	62.46	62.61	23.40	25.41	25.27
	2019	87.38	62.96	60.84	60.91	24.43	26.55	26.47
	2020	85.36	59.96	57.65	57.73	25.39	27.71	27.63
	2021	84.24	58.07	55.56	55.72	26.17	28.68	28.53
	2022	82.96	56.02	53.31	53.47	26.93	29.65	29.49
	2023	83.37	55.74	52.90	53.15	27.63	30.47	30.23
	2024	84.50	56.08	53.11	53.28	28.41	31.39	31.22
	2025	84.86	55.82	52.80	52.97	29.04	32.06	31.89
	2026	86.13	56.37	53.21	53.47	29.76	32.91	32.66
	2027	87.30	56.99	53.70	53.96	30.31	33.60	33.34
	2028	88.57	57.26	53.74	54.18	31.31	34.82	34.39
	2029	89.91	57.95	54.38	54.74	31.96	35.53	35.18
	2030	91.17	58.64	55.01	55.38	32.53	36.15	35.79
VOC + NOx	2000	450.63	450.63	450.63	450.63	0.00	0.00	0.00
	2001	442.05	441.95	441.95	441.95	0.10	0.10	0.10
	2002	430.75	428.68	428.68	428.68	2.07	2.07	2.07
	2003	415.28	410.82	410.82	410.82	4.47	4.47	4.47
	2004	400.99	378.82	378.82	378.82	22.17	22.17	22.17

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2005	383.65	351.89	351.89	351.89	31.76	31.76	31.76
2006	376.61	326.28	326.28	326.28	50.33	50.33	50.33
2007	368.69	309.51	309.51	309.51	59.18	59.18	59.18
2008	355.01	287.24	287.24	287.24	67.78	67.77	67.77
2009	343.65	269.22	268.65	268.65	74.44	75.00	75.00
2010	331.68	249.91	249.02	249.02	81.76	82.66	82.66
2011	319.49	230.42	229.12	229.18	89.07	90.37	90.30
2012	308.66	212.13	210.40	210.47	96.53	98.26	98.19
2013	299.79	196.12	193.94	193.94	103.68	105.85	105.85
2014	291.72	181.39	178.62	178.76	110.33	113.10	112.97
2015	286.36	169.47	166.23	166.30	116.89	120.13	120.06
2016	282.10	159.21	155.40	155.48	122.89	126.70	126.63
2017	278.73	150.14	145.75	145.75	128.59	132.98	132.98
2018	275.05	141.01	136.24	136.39	134.05	138.82	138.67
2019	274.10	134.94	129.78	129.86	139.16	144.32	144.24
2020	271.93	128.03	122.40	122.63	143.90	149.54	149.30
2021	271.32	122.98	116.93	117.24	148.34	154.39	154.07
2022	270.10	117.80	111.41	111.65	152.30	158.69	158.45
2023	271.05	115.06	108.32	108.64	155.99	162.73	162.41
2024	273.19	113.48	106.55	106.88	159.71	166.65	166.32
2025	274.85	111.29	104.08	104.41	163.55	170.77	170.43
2026	277.01	110.17	102.67	103.18	166.84	174.34	173.83
2027	279.54	109.56	101.85	102.28	169.98	177.68	177.25
2028	282.36	108.26	100.17	100.87	174.10	182.19	181.48
2029	286.12	108.30	100.09	100.71	177.82	186.03	185.40
2030	289.77	108.74	100.41	101.04	181.02	189.36	188.72

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Appendix J: Information on Smog-Forming Emissions for California-Certified Vehicles vs. Federal Vehicles, Information from Chris Hagerbaumer, OEC, (submitted October 13, 2005)

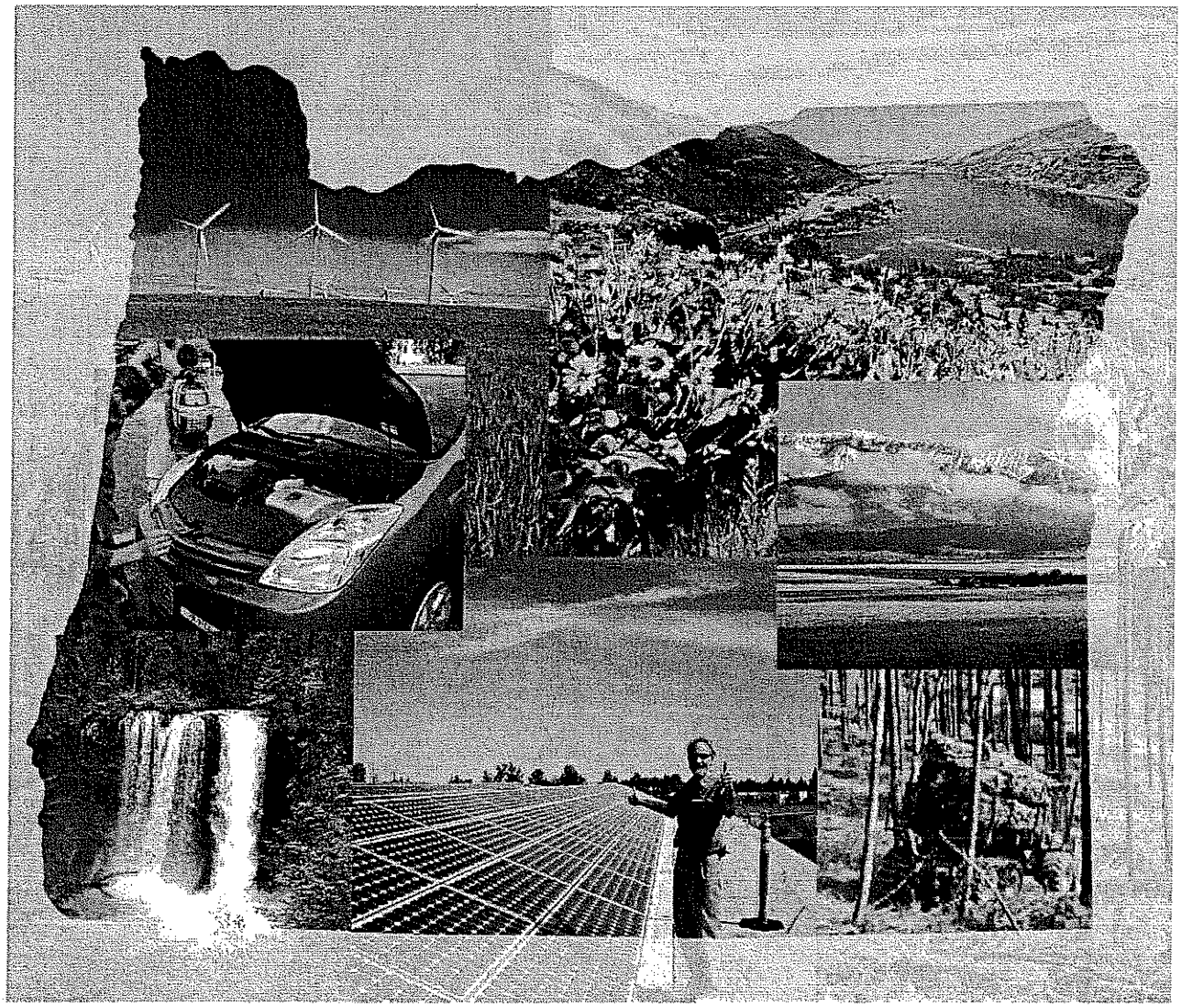


Source: Tom Cackette, Deputy Executive Officer, California Air Resources Board

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Oregon Strategy for Greenhouse Gas Reductions

Governor's Advisory Group On Global Warming



State of Oregon, December 2004

Governor's Advisory Group On Global Warming

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The Oregon Department of Energy published this report on behalf of the Advisory Group.

Oregon Strategy for Greenhouse Gas Reductions

Governor's Advisory Group On Global Warming

State of Oregon, December 2004

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Oregon Stategy for Greenhouse Gas Emissions
Reprinted June 2005

For copies of the report, see
www.oregon.gov/ENERGY/GBLWRM/Strategy.shtml

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Executive Summary

Global warming is not just another environmental issue.

It's not "just another issue," period.

Absent decisive actions across the globe of the sort proposed in this report, the warming already underway is expected to lead to changes in the earth's physical and biological systems that would be extremely adverse to human beings, their communities, economies and cultures. These are changes that we would have unintentionally brought upon ourselves, but that are also in our power to reverse. Our failure to return atmospheric accumulations of greenhouse gases (GHG) back to levels that will sustain historic climate patterns may lead to an Earth that is dramatically altered and far less habitable within only a few generations.

The impacts of such changes on Oregon citizens, businesses and environmental values are likely to be extensive and destructive. Coastal and river flooding, snowpack declines, lower summer river flows, impacts to farm and forest productivity, energy cost increases, public health effects, and increased pressures on many fish and wildlife species are some of the effects anticipated by scientists at Oregon and Washington universities.

The means to arrest and reverse these effects are at hand or within technological reach. Many of them carry co-benefits that would justify acting on them without the impetus of global warming: positive economic returns on dollars invested in energy efficiency, energy price stability, and healthier air and water. Others will cost us something up front for insurance against the deeply disruptive and costly effects that we can expect absent any action. The earlier we take many of these actions, the less drastic they will have to be to achieve the same emissions reduction result.

The Governor's Advisory Group on Global Warming developed this *Oregon Strategy for Greenhouse Gas Reduction.*[1] Governor Ted Kulongoski appointed the Advisory Group early in 2004 to perform this task. This Strategy, if implemented, will complement the agenda of the West Coast Governors' Global Warming Initiative undertaken by the governors of California, Oregon and Washington to address greenhouse gas emissions at a state and regional level.

The Problem

Several thousand of the earth's scientists worked together on the Intergovernmental Panel on Climate Change to review the exhaustive evidence and describe the plausible range of outcomes. They agree that global warming caused by greenhouse gas pollution from human activities represents a profoundly serious threat to human civilization and to even the most robust and insulated natural ecosystems. Their comments are echoed in the *Scientific Consensus Statement on the Likely Impacts of Climate Change on the Pacific Northwest* prepared by scientists at Oregon and Washington universities in the fall of 2004 following a thorough regional review of the science (Appendix C).

[1] The Advisory Group and its 2004 process are described in greater detail below.

Oregon Choices

As Oregonians and Americans, we clearly have choices about how we will respond to the warming of our planet. We can choose a "business as usual" path of contributing ever-increasing greenhouse gas emissions to already high atmospheric concentrations. But if we choose "business as usual," we leave a legacy for our children and grandchildren of a changing global climate that threatens human habitation and biological ecosystems. The costs to adapt to and remedy these changes will be much higher than they would be if we act today.

Alternately, we can adopt the goals and the set of actions recommended in this report to arrest and reverse Oregon's contribution to these global warming trends. In doing so, we will set ourselves on a path to reduce emissions over time and stabilize the global climate conditions we bequeath to our children.

Goals

The Advisory Group believes that setting goals for Oregon, expressed together with actions that can plausibly meet those goals over time, gives purpose and structure to the task of reducing greenhouse gas emissions. The Advisory Group proposes the following new goals:

1. By 2010, arrest the growth of Oregon's greenhouse gas emissions (including, but not limited to CO_2) and begin to reduce them, making measurable progress toward meeting the existing benchmark for CO_2 of not exceeding 1990 levels.
2. By 2020, achieve a 10 percent reduction below 1990 greenhouse gas levels.
3. By 2050, achieve a "climate stabilization" emissions level at least 75 percent below 1990 levels.

The goals offer a pathway to climate stabilization that requires vigorous action, but also allows time for necessary individual and business adjustments.

Economic Investments and Opportunities

In any discussion of addressing global warming, it's easy to get trapped in the underbrush of near-term costs and to miss the forest of rational economic calculation of long-term savings. In some cases those near-term costs are going to be higher, but often the costs will be matched by the returns that Oregon families and businesses will see directly.[2]

The economic dimension of dealing with climate change can be stated as a series of "costs," but it can also be stated in a more affirmative way. Many actions proposed in this report carry price tags, but they are generally in the nature of investments that can generate net economic returns to us over time. Most are investments we are experienced in making, from improving the efficiency of our homes, farms, factories and appliances to developing non-polluting new energy sources such as wind, solar, agricultural biomass and other renewable resources. These should remind us of our long investment in hydroelectricity.

[2] The effects of global warming on Oregonians and the costs we will bear in adapting to climate change are not just a function of what we do in one state. They also depend on the degree to which our leadership and actions are matched by leadership and actions across the country and around the globe.

Near-term costs are further offset by helping Oregon businesses stay *competitive* in a world moving to greenhouse gas limits. Costs of recommended actions should also be measured against the *economic opportunities* that will open for Oregon businesses that develop goods and services for sale to a world in the market for low greenhouse gas solutions.

Other costs are similar to buying insurance policies against events that would otherwise cost far more to cope with. Avoiding the potentially destructive storms, floods and forest fires that are projected to accompany global warming would likely be less costly than the repairs we would need to make following such events. These measures will bring the same welcome returns that past investments in flood control have earned.

We believe there will be many economic opportunities for companies and communities that rise to the challenge by developing the practices and technology products that our trading partners in other states and countries also will need to cope. We have ample experience in Oregon with this outcome. Many companies here have built prosperous business lines in energy efficiency products and consulting practices, in developing renewable energy technologies and adapting the power system for optimal use. We believe Oregon's entrepreneurs, supported by Oregon's academic and technical capabilities, can prosper by positioning themselves at the leading edge of change.

Principles and Strategies

The set of principles the Advisory Group used to guide its efforts placed primary emphasis on real, measurable and meaningful reductions in the state's greenhouse gas emissions. The Advisory Group also emphasized the need to focus first on the most cost-effective actions and those that create investment and entrepreneurial opportunities. We agreed we would not take actions that could impair reliability in our electrical and other energy supply systems, and we believe that many of our recommendations will actually enhance this quality.

The principles create the right direction and focus for Oregon. The Strategy further articulates four broad strategies that complement the principles:

1. Invest in energy, land use and materials efficiency.
2. Replace greenhouse gas-emitting energy resources with cleaner technologies.
3. Increase biological sequestration (farm and forest carbon capture and storage).
4. Promote and support education, research and technology development.

Recommended Actions

The Advisory Group has recommended a set of actions – some very specific, others more in the nature of shifting Oregon's long-term policy orientation – that collectively will meet our first goal of reversing the upward trend of Oregon's greenhouse gas emissions. The list of actions we choose or must take over the next fifty years is far from complete, since many needed actions and opportunities will only reveal themselves as we proceed. New, more cost-effective technologies and applications will emerge. Improved scientific understanding will open new doors.

The Strategy recommends actions in seven areas as outlined in Part Two:

(1) Integrating Actions
(2) Energy Efficiency
(3) Electric Generation and Supply
(4) Transportation
(5) Biological Sequestration;
(6) Materials Use, Recovery and Waste Disposal
(7) State Government Operations

Within these areas, the Advisory Group identified two categories of actions.[3]

Category I: Significant Actions for Immediate State Action
These actions promise significant greenhouse gas savings, are technically feasible today and are often the most cost-effective first actions to be taken.

Category II: Other Immediate Actions
These actions make sense for Oregon to undertake immediately. In most cases the greenhouse gas savings are less significant, but costs are also proportionately lower and many actions are cost-effective now.

Accomplishing Category I actions will usually require the most concerted and disciplined effort on the part of Oregonians. Equally meaningful progress toward the proposed goals will be extremely difficult to achieve without substantially achieving most or all Category I actions.

Some of the major Category I actions include:

Integrating Actions (IA-1): Arrest the growth of and begin to reduce Oregon's greenhouse gas emissions by 2010. Meet a goal of 10 percent below 1990 Oregon emissions levels by 2020 and at least 75 percent below 1990 levels by 2050.

Energy Efficiency (EE-1): Meet Oregon's energy efficiency target set by the Northwest Power and Conservation Council for the next 20 years, capturing at least 960 average megawatts of electricity savings and comparable conservation of natural gas and oil.

Electric Generation and Supply (GEN-1): Increase the renewable content of electricity.

Electric Generation and Supply (GEN-2): Recommend that the Governor create a special interim task force to examine the feasibility of, and develop a design for, a load-based greenhouse gas allowance standard.

[3] The Advisory Group considered Category III Actions that, for various reasons including manageability of the process, it chose to defer. As these and other possible actions are proposed, they can be developed and considered by a successor to this Advisory Group.

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Transportation (TRAN-1): Convene an interim task force to recommend a proposal for the Environmental Quality Commission or the Governor and the Legislature to adopt greenhouse gas emission standards for vehicles.

Materials Use, Recovery and Waste Disposal (MW-1): Achieve the waste disposal and recovery goals already adopted by Oregon in statute.

Of the 19 Category I actions, two are constrained by law to be cost-effective. The Northwest Power and Conservation Council's 20-year energy efficiency goals (incorporated in action EE-1) must meet a test, established in federal law, of being cost-effective to the region (and in nearly all cases, to individual electricity consumers). The California state law establishing the "Pavley" auto tailpipe pollution standards (TRAN-1) requires that new cars be able to meet the twin tests of low greenhouse gas emissions and cost-effectiveness to the purchaser.

The other Category I action with the greatest potential for cost consequences is the proposed greenhouse gas allowance for electricity, gas and oil (GEN-2). Estimating the costs and benefits of this measure depends on its design, on future energy markets and costs, on technology evolution and on future regulatory actions. We can model different paths to our greenhouse gas content (also referred to as "carbon content") goal and select one that offers the greatest greenhouse gas savings at the lowest cost and risk. By relying on energy efficiency and renewable technologies that are unaffected by fossil fuel markets and price swings, compliance actions can minimize abrupt rate shocks to consumers and cost impacts that could undermine the competitiveness of Oregon businesses.

An effective design may maximize the ability to trade emissions savings and offsets with California and Washington, lowering compliance costs. The design of a greenhouse gas allowance mechanism can be made sensitive to competitive pressures on Oregon businesses if other states and countries are not pursuing parallel paths to greenhouse gas reductions.

There are also 27 Category II recommendations in Part Two. Although individually smaller, these actions add up to significant reductions. All actions combined could result in reversing the continued growth of greenhouse gas emissions generated from Oregon and set the state on a path of declining emissions. However, if we continue "business as usual," by 2025 Oregon's greenhouse gas emissions would be 61 percent higher than 1990 levels (today they are 15 percent higher). On the other hand, if we accomplish reductions from all the actions recommended in the report, our emissions would only be 7 percent higher than they were in 1990 and, trending downward, consistent with the Advisory Group's recommended 2020 goal.

In addition to overseeing the implementation of the recommendations, there is a next set of tasks for the Governor's next Advisory Group – further development of some of the more complex recommendations. This new group must also consider what Oregon must do to adapt to the unavoidable warming conditions from greenhouse gas emissions that have already accumulated over the past centuries.

Oregon's Role

The key to stabilizing CO_2 concentrations is limiting total world emissions for the 21st century. What should be Oregon's "share" of this global responsibility?

We are a small state, but part of a country that is the world's largest consumer of fossil fuels and emitter of greenhouse gases. Both U.S. and Oregon emissions are growing rapidly. Oregon total greenhouse gas emissions in 2000 were about 68 million metric tons of carbon dioxide equivalent.[4] About 84 percent of Oregon's greenhouse gas pollution comes from CO_2 emissions directly. Emissions from methane, primarily from cattle and landfills, contribute 7 percent of greenhouse gas pollution; nitrous oxide emissions, primarily from agricultural practices, contribute about 6 percent to the state's greenhouse gas pollution. Manufactured halocarbons, which include hydrofluorocarbons, perfluorocarbons and suflurhexafluoride, account for the remaining 3 percent.

We recognize that Oregon's contribution to both the problem and its solution is a small part of the whole. We can't succeed without complementary activity on the part of states and nations whose emissions dwarf our own.

Fortunately, many countries that have ratified the Kyoto Protocol and other U.S. states are embarking on their responsibilities in parallel with Oregon. For example, the agreement reached among the three governors of Oregon, Washington and California, who joined to form the West Coast Governors' Initiative on Global Warming, means the West Coast states will proceed in parallel and sometimes joint efforts. We also have other partners in the six New England states and five eastern Canadian Provinces that form the Conference of New England Governors and Eastern Canadian Premiers, who have committed to a regional "Climate Change Action Plan." In addition, Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont are designing a regional cap-and-trade system for carbon dioxide emission from power plants. Many of these states and Kyoto-signing countries are also our trading partners, so we may also be preserving access to these markets for Oregon's businesses.

The Advisory Group has made its recommendations based on detailed technical and policy analysis and a broad range of comments from citizens, businesses, academic institutions and other organizations. Now we must decide, as an Advisory Group, a Governor and a State, whether we are prepared to adopt the meaningful carbon reduction goals proposed and the actions that will be required to meet those goals. There couldn't be more of Oregon's future riding on the outcome.

[4] As a reference, Oregonians emitted almost 17 metric tons of CO_2 per capita, compared to a world wide average of about 4 metric tones. On this basis, Oregon is producing about four times its "share."

The Governor's Advisory Group on Global Warming

The Advisory Group is made up of citizens and public officials who were asked by Governor Kulongoski to serve for the limited duration necessary to draft a Global Warming Strategy. The Group's citizen members include representatives of the business community that both deliver and use energy, farmers, environmentalists, scientists and others (a list of members is included in Appendix A).

Individual members of the Group may have conflicts of interest with respect to many of the actions it considered. Such conflicts are inescapable given that the subject matter (energy production and consumption, transportation, waste generation and management, etc.) is integral to the lives and businesses of all Oregonians. Moreover, the Governor wanted citizens who would understand the science and the economic and technical issues involved, and who would be sensitive to the impacts to Oregonians of the actions being considered. State agencies (such as the Department of Environmental Quality) that are directed by independent state commissions (e.g., the Environmental Quality Commission) participated as ex officio members and any recommended actions are subject to subsequent commission policy determinations.

After reviewing public comments, the Advisory Group met to incorporate changes where appropriate and decide on final recommendations to the Governor and other appropriate parties. The Advisory Group reached consensus on the strategies and actions it chose to recommend and adopted these final recommendations unanimously.

Some recommendations emerged as state administrative actions, while others will still need legislative approval. Where there are fiscal or workload effects on state agencies, the Governor and agency heads will determine where these recommendations fit into priorities. The Advisory Group expects that more complex actions will require their own task forces to work out details for legislative consideration.

This report offers final recommendations to the Governor, to state agencies having statutory authority and to Oregonians generally. The Group is advisory only, and its recommendations will take effect only if state and local governments, private businesses and other organizations believe they merit adoption.

Advisory Group members would like to acknowledge the financial assistance provided by The Energy Foundation of San Francisco. This assistance made it possible for the Group to rely on the services of the National Policy Consensus Center and Oregon Consensus Program at Portland State University for logistical and facilitation support.

Recommendation Summary
Actions to Reduce Greenhouse Gases

The summary below lists Category-I (high priority) recommendations contained in the Oregon Strategy for Greenhouse Gas reduction report prepared by the Governor's Advisory Group on Global Warming. Recommended actions in the report are divided into two categories for prioritization: *Category I- Significant Actions for Immediate State Action.* These actions are expected to produce the most significant greenhouse gas savings, are technically feasible today, and cost-effective. *Category II-Other Actions for Immediate State Action.* These actions make sense for Oregon to undertake immediately, but will produce less significant greenhouse gas savings. A full description of Category I and Category-II recommendations can be found in Appendix A of the Oregon Greenhouse Gas Reduction Strategy document.

Category –I Recommendations	DEQ Role
Integrating Actions (See Appendix A, p. 2 of governors report)	No significant role (except as noted)
IA-1: Recommend the Governor adopt near-term, intermediate, and long term greenhouse gas emissions goals for Oregon.	
IA-2: Urge the Governor to renew the charter of the Advisory Group on Global Warming (or a successor body) to continue the Advisory Group's unfinished agenda.	DEQ will likely participate in on-going committee work
IA-3: The Oregon University System should develop strategic and targeted research, development and demonstration (RD&D) programs for greenhouse gas reduction technologies.	Possible collaboration
Energy Efficiency (See Appendix A, p. 8)	None Anticipated Lead by ODOE
EE-1: Meet the Northwest Power and Conservation Council (NWPPC) goal of implementing cost-effective electricity efficiency measures for electric users and equivalent goals for natural gas users.	
EE-1a: Expand and coordinate electric incentive programs for Investor-Owned Utilities (IOU's).	
EE-1b: Upgrade building codes on a 3-6 year cycle.	
EE-1c: Amend building codes to set minimum space and water heating/cooling standards.	
EE-1d: Adopt state appliance efficiency standards.	
EE-1e: Advocate with Bonneville Power Administration (BPA) and Oregon COU's to meet NWPPC goal.	
EE-1f: Support Oregon Public Utility Commission (OPUC) actions to evaluate NW Natural/ETO and ODOE natural gas incentive programs.	

Category –I Recommendations	DEQ Role
EE-1g: Advocate with OPUC for AVista and Cascade to meet gas energy savings goals comparable to NW Natural.	
EE-1h: Advocate for federal equipment and appliance efficiency standards.	
EE-1i: Strengthen state marketing of energy and incentive programs; initiate Governor's Awards.	
Electric Generation and Supply (See Appendix A, p. 20)	None Anticipated Lead by ODOE
GEN-1: Increase the renewable content of electricity.	
GEN-2: Develop a greenhouse gas allowance standard for delivered energy.	
GEN-2a: Develop an Oregon Renewable Portfolio Standard (RPS) or expand public purpose charge as an alternative to GEN-2 above (e.g. have a new renewables goal to meet 25% of 2025 load)	
GEN-3: Support Oregon PUC's review of rules and tariffs for renewable and combined heat and power (CHP) facilities.	
Transportation (See Appendix A, p. 28)	Significant DEQ role
TRAN-1: Convene an interim working group to recommend a proposal for the Governor, Environmental Quality Commission, and the Legislature to adopt emission standards for vehicles.	**Lead by DEQ**
TRANS-1a: Adopt Low Emission Vehicle (LEV-II) Emission Standards for Motor Vehicles	**Lead by DEQ**
TRANS-1b: Adopt CO_2 Tailpipe Emission Standards (per California AB 1493 "Pavley" standards).	**Lead by DEQ**
TRAN-2: Integrate land use and transportation decisions with GHG consequences.	Consultation
TRAN-3: Promote biofuel use and production.	Consultation Effort lead by ODOE
Note: There are two Category-II Transportation recommendations where DEQ has already made substantial progress. These relate to reductions in emissions from heavy-duty diesel vehicles through retrofit technology and the electrification of truck stops.	**Lead by DEQ**
Biological Sequestration (See Appendix A, p. 43)	No significant role (except as noted)
BIOSEQ-1: Reduce wildfire risk by creating a market for woody biomass from forests.	DEQ coordination - linked to Regional Haze

Category –I Recommendations	DEQ Role
	program for visibility and smoke management
BIOSEQ-2: Consider GHG effects in farm and forest land use decisions.	
BIOSEQ-3: Increase forestation of under-producing lands.	
Materials Use, Recovery and Waste Disposal (See Appendix A, p. 51)	
MW-1: Achieve the waste generation and recycling goals in statute.	**Lead**
MW-2: DEQ should develop guidance to clarify alternative final cover performance at larger landfills: Demonstrate control of gas emissions comparable to geomembrane cover.	**Lead**
MW-3: Provide incentives for larger landfills to collect and burn minimum percentage (65 percent to 80 percent) of methane generated.	**Lead**
State Government Operations (See Appendix A, p. 65)	Yes
GOV-1: State agencies should use their agency Sustainability Plans as the tool for agencies' dynamic involvement in GHG reductions. Operational activities in the areas of electricity, natural gas, transportation, waste and water will be the focus for reduction opportunities.	Consultation
GOV-2: Through a collaborative effort, the departments of Energy, Environmental Quality and Administrative Services should develop a process to educate agency personnel about opportunities for GHG reductions including how to set goals and calculate GHG reductions.	Consultation

Automakers Subject to Cal-LEV Requirements

The breakdown of current automakers subject to the Cal-LEV requirements is as follows[1]:

Small Volume Manufacturers (SVM):

Ferrari, Maserati, Morgan, Panoz, Cosworth, Spyker, Lotus: These manufacturers produce Ford-based souped up or specialty vehicles under various brand names such as Quigley, Qvale, Rousch, Saleen. Also produced on small volumes are special vehicles converted to alternative fuels, (chiefly CNG and LPG) Baytech, such as Quantum, TeleflexGFI. Vehicles that have not been California certified for some time and are less likely to continue in certain markets include London Taxi and Utilimaster.

Independent Low Volume Manufacturer (ILVM):

Porsche: According to recent news, Porsche is buying 20% of VW. When the transaction is completed, Porsche would be removed from the ILVM category and would likely become a Large Volume Manufacturer.

Intermediate Volume Manufacturers (IVM):

None

Large Volume Manufacturers[2] (i.e., all current others not mentioned above):

Ford group (Ford, Aston Martin, Jaguar, Rover, Volvo, Mazda)
GM group (GM, GM Daewoo, Isuzu, Suzuki, Subaru, Saab)
DaimlerChrysler "group" (Chrysler, Mercedes, Mitsubishi)
Honda
Toyota
Nissan
BMW group (BMW, Rolls-Royce)
VW group (Audi, VW, Bentley, Lamborghini, and Porsche pending the shift noted in the ILVM category)
Hyundai "group" (Hyundai, Kia)

[1] Based on CARB's best understanding today of automakers in the marketplace.
[2] By definition, "Large Volume Manufacturers" include: "Non-small volume manufacturers (SVM)", "non-independent low volume manufacturers (ILVM)", and "non-intermediate volume manufacturers (IVM)".

DEPARTMENT OF ENVIRONMENTAL QUALITY
STATEMENT OF NEED AND JUSTIFICATION
A Certificate and Order for Filing Temporary Administrative Rules accompanies this form.

Department of Environmental Quality — Agency and Division
OAR Chapter 340 — Administrative Rules Chapter Number

In the Matter of: Oregon Low Emission Vehicles, OAR Chapter 340, Division 257.

Statutory Authority: ORS 468.020, 468A.025

Other Authority: N/A

Statutes Implemented: ORS 468.020, 468A.025

Need for the Temporary Rule(s):

This temporary rule is needed in order to provide automobile manufacturers advance notice required under the Clean Air Act that Oregon is adopting California Low Emission Vehicle standards to begin with the 2009 model year.

Background

In December 2004, the Governor's Advisory Group on Global Warming reported that global warming is likely to have extensive and destructive effects for Oregon's citizens. Those effects include increased flooding, decreased snowpack and summer river flows, plus harmful consequences for agriculture, energy costs and public health. In response to these threats, the Advisory Group recommended that Oregon reduce its "fair share" of greenhouse gas emissions beginning with the most cost-effective solutions. The advisory group prominently recommended adoption of California's motor vehicle emission standards as one such measure. California's Low Emission Vehicle (CAL-LEV) standards are expected to reduce greenhouse gas (global warming) emissions from new cars and light duty trucks 30% by the year 2016; as well as reduce ozone forming emissions and air toxics 12% to 38% more than would be achieved by federal vehicle standards by 2020.

California's motor vehicle emission standards would apply to new cars sales beginning with the 2009 model year. Vehicles subject to these requirements include 2009 and subsequent model year passenger cars, light duty trucks, medium duty vehicles and medium duty passenger vehicles registered, leased, rented or sold in Oregon. These standards do not affect used cars with over 7,500 miles, motorcycles, or heavy duty trucks. According to California, the new requirements will increase the initial cost of new vehicles up to about $1,000 by 2016, but improved operating efficiency is expected to produce a continuous net savings to vehicle owners. Those most affected by this rulemaking include the public, automobile manufacturers, automobile dealers, and the independent auto repair industry.

This temporary rule adopts requirements for implementing California vehicle standards in Oregon beginning with the 2009 model year, and provides the two year advance notice to automobile manufacturers required by the Clean Air Act for states that wish to opt into California's vehicle standards. The two-year notification requirement is discussed further below. This temporary rule will be followed by a permanent rulemaking that will also include revisions to DEQ's Division 12 enforcement rules, and potentially other DEQ rules needed for full implementation of the standards.

Documents Relied Upon:

This rulemaking relied on the Governor's Vehicle Emissions Workgroup Report (November, 2005), and documents prepared by the California Air Resources Board for the development of that state's rules for Low Emission Vehicles, Zero Emission Vehicles, and Greenhouse Gas Emission Reductions from Motor Vehicles. This rulemaking also relied on the "Oregon Strategy for Greenhouse Gas Reductions" prepared by the Governor's Advisory Group On Global Warming and "Reducing Greenhouse Gas Emissions from Light-Duty Motor Vehicles" prepared by the Northeast States Center for a Clean Air Future. These and other documents are available for inspection at Oregon Department of Environmental Quality headquarters located at 811 SW 6th Avenue, Portland, OR, 97204.

Justification of Temporary Rule(s): The Commission finds that failure to adopt the temporary rule will result in serious prejudice to the public interest because it will have the following consequences:

California's greenhouse gas (global warming) vehicle emission standards begin with the 2009 model year. States opting into California requirements must give automobile manufacturers two years notice before they are able to implement California emission requirements. Governor Kulongoski has directed the Department of Environmental Quality to develop rules implementing California's vehicle emission standards starting with the 2009 model year. In order for the California standards to go into effect in Oregon for 2009, Oregon must adopt the standards by Jan. 1, 2006, thereby providing the required advance notice to auto manufacturers.

Both Washington and California have already adopted standards for the model year 2009, and so have met the deadline. However, Washington's adoption is contingent upon Oregon's adopting the California standards. Failure to adopt this temporary rule by January 1, 2006 will prevent both Oregon and Washington from implementing California motor vehicle emission standards beginning with the 2009 model year. If Oregon fails to meet the January 1st deadline, both Oregon and Washington will lose the emission reduction benefits of the rules for an entire model year.

Housing Cost Impacts:
The Department has determined that this proposed rulemaking will have no effect on the cost of development of a 6,000 square foot parcel and the construction of a 1,200 square foot detached single family dwelling on that parcel.

Stephanie Hallock
Stephanie Hallock, Director

11-28-05
Date Signed

RECEIVED
NOV 23 2005
AIR QUALITY DIVISION
Dept. Environmental Quality

THEODORE R. KULONGOSKI
Governor

November 23, 2005

Ms. Stephanie Hallock, Director
Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204-1390

Dear Director Hallock:

I am writing to direct the Department of Environmental Quality (DEQ) to commence the process necessary to develop administrative rules regulating tailpipe emission standards in Oregon.

I have reviewed the recent report produced by the Tailpipe Work Group. The report achieved its purpose in identifying the environmental and economic costs, benefits and impacts of implementing stricter tailpipe emissions. It will serve as a critical tool as DEQ develops administrative rules regulating tailpipe emission standards for consideration by the Environmental Quality Commission (EQC) by the end of this year.

The threat of global warming is real and the effects are already evident. If combined, Oregon, Washington and California would rank seventh globally for CO2 emissions from fossil fuels. All of us – individuals and institutions – have played a role in contributing to the effects of global warming and we each have a responsibility to curb those effects for future generations. California already has done its part by adopting tailpipe emissions standards stricter than the federal government standards, and if Oregon follows suit, Washington will also adopt new standards. Our entire region will benefit both environmentally and economically.

By adopting new standards, Oregonians will help:

- **Curb Global Warming:** Transportation alone accounts for nearly 40 percent of total carbon emissions in Oregon. It is projected that if Oregon adopts new emissions standards for cars and small trucks, we can reduce carbon emissions by up to 30 percent over the next 25 years. If we do nothing, emissions will continue to increase at approximately 1.6 percent per year. My Global Warming Advisory Group identified adopting tailpipe emission standards as the most effective, available and viable option for reducing greenhouse gasses in the transportation sector and, in turn, will ensure Oregon helps combat global warming regionally and nationally.

- **Deliver Consumer Savings:** Contrary to arguments by automobile manufacturers, new emissions standards would translate into savings for new car owners by reducing fuel consumption and maintenance costs over the lives of their cars. According to recent studies, when calculating the increased vehicle payment minus the lower operating costs at $1.74/gallon of gas, consumers would save between $3.38 - $6.74/month; at $3.00/gallon of gas, consumers will save between $20.37-$25.68/month.

- **Protect Consumer Choice:** Also contrary to arguments against new standards, diesel vehicles will still be available to Oregonians. The majority of diesel vehicle owners in Oregon are large trucks/heavy equipment operators and not subject to the new standards. Furthermore, the new federal requirements for diesel vehicles under development will comply with California standards, and are expected to be available by the model year 2009 – when the new standards in Oregon will take effect for new cars only.

- **Create Economic Opportunities:** Oregon already has one of the highest per capita uses of hybrid vehicles in the country and we also have a small niche of electric car manufacturers in the state. New tailpipe emissions standards would increase demand for advanced technology cars, like hybrids and electric cars, which in turn would attract and support emerging new industries in the fields of technology and innovation.

- **Improve Air Quality:** Oregon has made progress in improving its air quality over the last 20 years. Adopting new tailpipe emissions standards will reduce carbon emissions, which will also help us continue to improve the quality of air that we and our children breathe.

Based on these factors, it would be irresponsible for Oregon to ignore an opportunity to do its part to reduce global warming, deliver cost and choice benefits for consumers, advance air quality and strengthen economic opportunities for its citizens. Over the next several weeks, my staff will continue to work with your staff to address the technical issues raised in the report in order to prepare proposed rules for implementing Oregon-specific tailpipe emission standards for consideration by the EQC in December.

Thank you for your agency's invaluable assistance with this important effort.

Sincerely,

THEODORE R. KULONGOSKI
Governor

TRK:PTC:krg

Handout from Kevin Masterson to EQC
Item E

NPDES 1200-C CONSTRUCTION STORMWATER PERMIT COMPARISON: EXPRING, DRAFT, AND RECOMMENDED PERMITS

	EXPIRING PERMIT *(2/20/01)*	**DRAFT PERMIT FOR PUBLIC COMMENT** *(8/22/05)*	**RECOMMENDED PERMIT** *(12/7/05)*
PUBLIC NOTICE ON APPLICATIONS & PLANS	No public notice and comment on applications and plans	o DEQ-run 14-day period for all sites subject to permit requirements o Notice and comment on both application and plans. o Opportunity for informational hearing if 10 or more persons request it o Public comment on Plan revisions that relax or eliminate stormwater controls.	o DEQ-run 14-day period for sites disturbing 5 or more permits. o Notice and comment on both application and plans.
PLAN APPROVAL	Plan must be submitted to DEQ 30 days prior to starting work, but if DEQ does not respond within 30 days, the Plan is "deemed approved."	Registration under the permit does not occur until DEQ sends notice to applicant that application and plan have been approved.	Registration under the permit does not occur until DEQ sends notice to applicant that application and plan have been approved.
COMPLIANCE WITH INSTREAM WATER QUALITY STANDARDS	Compliance with water quality standards stated as the "ultimate goal" of the permit.	Prohibits permittee from causing or contributing to a violation of water quality standards.	o Prohibits permittee from causing violation of water quality standards o If comply with permit and approved plan, compliance w/ standards assumed, unless evidence to the contrary is obtained
STORMWATER MONITORING	None.	Stormwater sampling for turbidity is one of two options required for permittees discharging to 303(d)/TMDL streams limited for turbidity and sediment (currently about 1% of total sites). Minimum sampling frequency is once per week when runoff is occurring.	Stormwater sampling for turbidity is one of two options required for permittees discharging to 303(d)/TMDL streams limited for turbidity and sediment (currently about 1% of total sites). Minimum sampling frequency is once per week when runoff is occurring.

BENCHMARKS	None.	160 NTU turbidity benchmark for only those permittees subject to the 303(d)/TMDL requirements (see below), and who choose the monitoring option. This benchmark could covert to a numeric effluent limit (see below).	160 NTU turbidity benchmark for only those permittees subject to the 303(d)/TMDL requirements (see below), and who choose the monitoring option.
NUMERIC EFFLUENT LIMITS	None.	The 160 NTU benchmark would convert to an enforceable effluent limit if the mean of 4 consecutive samples (or the daily median of 4 consecutive sampling events) exceeded the benchmark.	None
REQUIREMENTS FOR DISCHARGES TO IMPAIRED WATERBODIES *[i.e., Waterbodies on DEQ's 303(d) List or that have an established Total Maximum Daily Load]*	No specific requirements. Permit states that additional controls <u>could</u> be required by DEQ if a Total Maximum Daily Load (TMDL) is established, or the permittee may be required to apply for individual permit.	o Requirements affect those discharging to waterbodies limited for turbidity or sedimentation. o Permittees can choose between: (a) monitoring for turbidity and meeting a 160 NTU benchmark that can convert to an effluent limit (see above) <u>OR</u> (b) implementing one or more best management practices listed in the permit.	o Requirements affect those discharging to waterbodies limited for turbidity or sedimentation. o Permittees can choose between: (a) monitoring for turbidity and meeting a 160 NTU benchmark <u>OR</u> (b) implementing one or more best management practices listed in the permit.
REPORTING REQUIREMENTS	o Keep records of visual monitoring on site, and submit records to DEQ or local agent upon request.	o Quarterly reporting to DEQ of visual and stormwater (if applicable) monitoring results o Corrective actions and Plan revisions must be documented and submitted to DEQ in the form of an "Action Plan" 30 days prior to implementation of Plan revisions. The department is provided with 20 days to respond with comments.	o Keep records of visual and stormwater monitoring on site, and submit records to DEQ or local agent upon request. o Corrective actions and Plan revisions must be documented and submitted to DEQ in the form of an "Action Plan" 10 days prior to implementation of Plan revisions or within 10 days of making the immediate correction actions. The department is provided with 10 days to respond with comments.

SITE INSPECTIONS (VISUAL MONITORING)	o Daily when run-off occurring. Once every two weeks during inactive periods. o Inspect discharge points, stormwater discharges, best management practices, and entrance/exit locations. o Inspections must be conducted by a person knowledgeable construction stormwater controls and management practices	o Daily when run-off occurring. Once every two weeks during inactive periods. o Inspect discharge points, stormwater discharges, best management practices, and entrance/exit locations. o Inspections must be conducted by a person with training and experience in construction stormwater controls and management practices.	o Daily when run-off occurring. Once every two weeks during inactive periods. o Inspect discharge points, stormwater discharges, best management practices, areas disturbed by construction activity, and entrance/exit locations. o Inspections must be conducted by a person knowledgeable in the principles and practices of erosion & sediment controls, and who: (a) possesses the skills to assess conditions at the site that could impact stormwater quality, (b) is knowledgeable in the correct installation of the erosion and sediment controls, and (c) is able to assess the effectiveness of any selected sediment and erosion control measures.
WAIVERS FROM PERMIT REQUIREMENTS	Two waivers available to sites disturbing 1-5 acres of land if they meet criteria: o Rainfall erosivity waiver: if erosivity factor less than 5, waiver applies o TMDL waiver – applies if TMDL states that construction stormwater runoff is not a problem	None	None

State of Oregon
Department of Environmental Quality — Memo

Date: November 30, 2005

To: Environmental Quality Commission

From: Stephanie Hallock, Director S. Hallock

Subject: Agenda Item G, Action Item: Tax Credit Considerations
December 23, 2005 EQC Meeting

Proposed Action

The Department of Environmental Quality (DEQ, Department) presents its analyses and recommendations regarding Pollution Control Facilities Tax Credits in this agenda item. The Department requests the Environmental Quality Commission's decision summarized in Attachment A of this staff report.

EQC Action Alternatives

All Considerations The Environmental Quality Commission (EQC, Commission) may postpone any application to a future meeting if the Commission:

- Requires the Department or the applicant to provide additional information; or
- Makes a determination different from the Department's recommendation, and that determination may have an adverse effect on the applicant.

Extensions of Time to File The Department presents two requests for extensions of time to file application in Attachment C. The EQC may either:

- Approve one or both of the requests.
- Deny one or both of the requests. The applicants may seek judicial review of the Commission's findings according to ORS 468.110 and ORS 183.484.

Preliminary Certification Boise White Paper, LLC, submitted an application (number 7008) requesting the preliminary certification of a 500-foot outfall extension and new diffusers as presented in Attachment B.

The Commission may take one of the following actions:

- Approve the preliminary certification if the EQC finds the installation meets the definition of a pollution control facility, contingent upon the applicant's submittal of quantitative analysis showing a significant temperature or turbidity drop within the outfall extension or within the diffusers.

The Commission's approval is prima facie evidence that the installation qualifies for the pollution control tax credit once the company completes construction.

- Deny the preliminary certification if the EQC finds that the installation does not meet the definition of a pollution control facility for tax credit purposes. The denial means the project would not qualify for the pollution control tax credit once the company completes construction.

  Upon denial, the applicant may seek judicial review of the Commission's findings according to ORS 468.110 and ORS 183.484.

Department Recommendation

The Department recommends that the EQC:

- Approve the final certification of the applications summarized in Attachment A and detailed in Attachment B.
- Reissue two certificates presented in Attachment C.
- In Attachment D:
  - For application 7018, approve the request for an extension of time to file the application and approve the facility for certification as presented in this attachment.
  - For application 7034, deny the request for an extension of time to file the application for three of the four tiling installations; and approve the tiling installation that met the one-year filing period.
- Deny the preliminary certification of application number 7088 presented in Attachment E.

Attachments

A. Summary of Recommendations
B. Background and References for Final Certifications
C. Certificate Administration
D. Requests for Extensions of Time to File
E. Background and References for Preliminary Certification
F. Tax Expenditure Report
G. Certified Wood Chipper Report

Available Upon Request

ORS 468.150 to 468.190 and OAR 340-016-0005 to 340-016-0080

Approved:

Section: Maggie Vandehey

Division:

Report Prepared By: Maggie Vandehey
Phone: 503-229-6878

Attachment A

Summary of Recommendations

App #	Media	Applicant	Claimed	Certified	Difference	% Allocable	Maximum Percent	Tax Credit	EQC Action
Recommended for Approval in Attachment B									
6965	Alt FB	McKee: Bruce, Doug, Norm	22,000	6,380	(15,620)	100%	35%	2,233	
6966	Alt FB	McKee: Bruce, Doug, Norm	25,750	16,480	(9,270)	100%	35%	5,768	
6967	Alt FB	McKee: Bruce, Doug, Norm	68,400	68,400	0	100%	35%	23,940	
6971	UST	Safeway Fuel #2627	85,111	66,764	(18,347)	100%	35%	23,367	
6981	NPS	Starvation Farms	40,487	40,487	0	100%	35%	14,170	
6983	Alt FB	Knox Seed, Inc.	148,279	135,292	(12,987)	32%	35%	15,153	
6985	NPS	Martin Richards	8,291	8,291	0	100%	35%	2,902	
7008	Alt FB	David Elam	13,075	13,075	0	39%	35%	1,785	
7009	Alt FB	David Elam	12,625	12,625	0	39%	35%	1,723	
7010	Alt FB	David Elam	17,500	17,500	0	58%	35%	3,553	
7012	Alt FB	David Elam	22,503	22,503	0	90%	35%	7,088	
7013	Alt FB	David Elam	49,837	49,837	0	100%	35%	17,443	
7014	Alt FB	David Elam	43,772	43,772	0	100%	35%	15,320	
7015	Alt FB	Wendy Coates	11,250	11,250	0	42%	35%	1,654	
7020	Air	Klamath Energy, LLC	5,068,049	5,138,746	70,697	100%	35%	1,798,561	
7026	Alt FB	Mark McKay and Dean McKay	231,407	231,407	0	99%	35%	80,183	
7036	Air	Columbia Steel Casting Co., Inc.	11,157	11,157	0	100%	35%	3,905	
7043	Water	Conrad Wood Preserving Co, Inc.	$70,210	$69,976	($234)	100%	35%	24,492	
7045	Alt FB	David Elam	43,772	43,772	0	100%	35%	15,320	
7046	Alt FB	David Elam	43,772	43,772	0	100%	35%	15,320	
7047	Alt FB	David Elam	43,772	43,772	0	100%	35%	15,320	
7048	Alt FB	David Elam	43,772	43,772	0	100%	35%	15,320	
7049	Mat Rec	Bors, Inc.	411,535	411,535	0	73%	35%	105,147	
7051	Mat Rec	East County Recycling	50,000	50,000	0	100%	35%	17,500	
7053	Alt FB	LeRoy and Lowell Kropf	280,061	277,361	2,700	75%	35%	72,807	
7054	Mat Rec	L & M K Enterprises, LLC	70,449	70,449	0	100%	35%	24,657	
7061	Water	West Linn Paper Company	107,593	106,681	(912)	100%	35%	37,338	
7062	Water	M&M Automotive Service Inc	2,995	2,995	0	100%	35%	1,048	

Attachment A

Summary of Recommendations

App #	Media	Applicant	Claimed	Certified	Difference	% Allocable	Maximum Percent	Tax Credit	EQC Action
7070	Mat Rec	Newberg Garbage Service Inc	25,475	25,475	0	100%	35%	8,916	
7072	Air	Hampton Lumber Mills, Inc.	340,770	199,220	(141,550)	100%	35%	69,727	
7075	Water	Tidewater Barge Lines, Inc.	2,290,336	2,231,009	(59,327)	56%	35%	437,278	
7080	Water	USA Performance Auto Inc	2,855	2,855	0	100%	35%	999	
7084	Water	Hampton Lumber Mills, Inc.	165,339	165,339	0	95%	35%	54,975	
7087	Water	Ronald C Selis, DMD	850	850	0	100%	35%	298	
33 Applications		Sum	$9,873,048	$ 9,682,799				$ 2,935,211	
		Average	290,384	284,788				86,330	
		Minimum	850	850				298	
		Maximum	5,068,049	5,138,746				1,798,561	

Recommendations for Certificate Administration in Attachment C

Cert. #	Action	Change To	Reason	
3092	Reissue	PCC Structurals, Inc.	Name Change	
3615	Reissue	One - Hesston 4690 3-Tie rectangular baler, Serial No. B469 00615	Replacement Facility	

Recommendation for Extensions of Time to File in Attachment D

Resulting in the approval of a portion of the claimed facility

7018	Approve	Truax Harris Energy LLC	330,449	320,899	(9,550)	100%	15%	48,135	
7034	Deny	David A. Vanasche	62,365	28,643	(33,722)	100%	35%	10,025	

Recommendation for Preliminary Certification in Attachment E

7088	Deny	Boise White Paper LLC							

00007

Attachment B
Background and References for Final Certifications

The Department recommends that the Environmental Quality Commission approve certification of the pollution control and material recovery facilities presented in summary on Attachment A and in detail in this attachment. The individual application records and the Pollution Control Facilities Tax Credit regulations support the Director's Recommendation as shown at the top of each Review Report.

The Department organized the reports by ascending application number under the following categories.

1. Air Pollution Controls (*Air* on the tab)
2. Alternatives to Open Field Burning (*Alt FB* on the tab)
3. Hazardous Waste Pollution Controls (*HW* on the tab)
4. Material Recovery (*Mat Rec* on the tab)
5. Nonpoint Source Pollution Controls (*NPS* on the tab)
6. Underground Storage Tanks (*USTs* on the tab)
7. Water Pollution Controls (*Water* on the tab)

Organization of Review Reports

The organization of the review reports reflects the decision making process for certifying a pollution control facility and the amount of the tax credit. The report is the Department analysis and recommendation regarding:

- The facility's ability to meet the definition of a pollution control facility (technical qualifications)
- The amount of the credit
- The percentage of the credit attributed to pollution control
- The maximum allowable credit

The Department will use the information in this attachment to:

- Notify the applicant of the EQC certification
- Develop the Pollution Control Facility Tax Credit Certificate
- Print the taxpayer's Department of Revenue form for claiming the credit on the Oregon Tax Return
- Develop reports for the Department of Revenue, the Commission and other interested parties

Pollution Control Facility Certification Authority

ORS 468.170 provides the Commission with the authority to certify pollution control facilities.

Regulation	Department Interpretation
468.170 (4)(a) The commission shall certify a pollution control, solid waste, hazardous waste or used oil facility or portion thereof, for which an application has been made under ORS 468.165, if the commission finds that the facility:	The applicant filed a valid application.
(A) Was erected, constructed or installed in accordance with the requirements of ORS 468.165 (1);	The applicant constructed the claimed facility after authorizing legislation.
(B) Is designed for, and is being operated or will operate in accordance with the requirements of ORS 468.155; and	The claimed facility meets the definition of a pollution control facility.
(C) Is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, 468A and 468B and rules thereunder.	The claimed facility is necessary to satisfy DEQ administered regulations.

ORS 468.170[1] provides the authority for the Commission to certify the facility cost, the portion of the cost allocable to pollution control and the applicable percentage (Maximum Allowable Percentage) of certified cost of facility eligible for tax credit.

Regulation	Department Interpretation
468.170 (1) The Environmental Quality Commission shall act on an application for certification before the 120th day after the filing of the application under ORS 468.165. The action of the commission shall include certification of the actual cost of the facility and the portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or	The certified facility cost represents the actual cost. The claimed items contribute to pollution control.

[1] ORS 468.170 Action on application; rejection; appeal; issuance of certificate; certification.

Regulation	Department Interpretation
appropriately disposing of used oil. The actual cost or portion of the actual cost certified may not exceed the taxpayer's own cash investment in the facility or portion of the facility. Each certificate shall bear a separate serial number for each such facility.	The cost represents the applicant's own cash investment
468.170 (10) If the construction or installation of a facility is commenced after December 31, 2005, the facility may be certified only if the facility or applicant is described in ORS 468.173 (3). A facility described in ORS 468.173 (2) for which construction or installation is commenced after December 31, 2005, may not be certified under this section.	The applicant, the facility, or the location of the facility qualifies for a maximum allowable percentage above zero percent.

Air Pollution Control Facilities

The Department recommends that the Environmental Quality Commission approve three facilities for certification as air pollution control facilities.

The claimed facilities may include land, structures, buildings, installations, excavations, machinery, equipment or devices used to prevent, control or reduce air pollution. The primary and most important purpose of each of these facilities is to respond to a requirement imposed by the DEQ, the federal Environmental Protection Agency or a regional air pollution authority to prevent, reduce or control air pollution.

Each facility accomplishes the prevention, control or reduction of air pollution by:

- the disposal or elimination of or redesign to eliminate air contaminants or air pollution or air contamination sources **and**
- the use of air cleaning devices as defined in ORS 468A.005.

Summary of Air Pollution Control Facilities

App #	Applicant	Certified	% Allocable	Maximum Percent	Tax Credit
7020	Klamath Energy, LLC	$5,138,746	100%	35%	$1,798,561
7036	Columbia Steel Casting Co., Inc.	$11,157	100%	35%	$3,905
7072	Hampton Lumber Mills, Inc.	$199,220	100%	35%	$69,727
3 Apps	**Sum**	**5,349,123**			**1,872,193**
	Average	1,783,041			624,064
	Minimum	11,157			3,905
	Maximum	5,138,746			1,798,561

References

ORS 468.155[2]

(1)(a) As used in ORS 468.155 to 468.190 and 468.962, unless the context requires otherwise, "pollution control facility" or "facility" means any land, structure, building, installation, excavation, machinery, equipment or device, or any addition to, reconstruction of or improvement of, land or an existing structure, building, installation, excavation, machinery, equipment or device reasonably used, erected, constructed or installed by any person if:

(A) The principal purpose of such use, erection, construction or installation is to comply with a requirement imposed by the Department of Environmental Quality, the federal Environmental Protection Agency or regional air pollution authority to prevent, control or reduce air...pollution...; or

(B) The sole purpose of such use, erection, construction or installation is to prevent, control or reduce a substantial quantity of air... pollution ...

(1)(b) Such prevention, control or reduction required by this subsection shall be accomplished by: ... (B) The disposal or elimination of or redesign to eliminate air contaminants or air pollution or air contamination sources and the use of air cleaning devices as defined in ORS 468A.005;...

ORS 468A.005 provides the following definitions.

Air contaminant means a dust, fume, gas, mist, odor, smoke, vapor, pollen, soot, carbon, acid or particulate matter or any combination thereof.

Air pollution means the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby.

Air contamination source means any source at, from, or by reason of which there is emitted into the atmosphere any air contaminant, regardless of who the person may be who owns or operates the building, premises or other property in, at or on which such source is located, or the facility, equipment or other property by which the emission is caused or from which the emission comes.

An air-cleaning device means any method, process or equipment that removes, reduces or renders less noxious air contaminants prior to their discharge in the atmosphere.

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[2] Definitions for ORS 468.155 to 468.190 and 468.962

OAR 340-016-0060[3]

(4) Eligible Activities. The facility shall prevent, reduce, control, or eliminate: ...(a) Air contamination by use of air cleaning devices as defined in ORS 468A.005 or through equipment designed to prevent, reduce or eliminate air contaminants prior to discharge to the outdoor atmosphere; ...

[3] Eligibility

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7020, Klamath Energy, LLC

1 Recommendation for Certification

According to ORS 468.165(6), **Klamath Energy, LLC** timely filed application number **7020** on May 25, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$5,138,746**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$1,798,561

2 Applicant Identification

Klamath Energy, LLC
1125 NW Couch, Suite 700
Portland, OR 97209

Organized as: LLC
Taxpayer ID: 01-0783017

3 Air Pollution Control Facility Identification

4940 Highway 97 South
Klamath Falls, OR 97603

The EQC certification will identify the facility as:

Four – Selective Catalytic Reduction System (SCR), Part No 2026
One – Anhydrous Ammonia Storage/Handling System
Control and Monitoring Systems

4 Technical Information

Klamath Energy, LLC, operates a combined-cycle power plant located at the Klamath River. Natural gas fires the combustion turbines used to generate electricity. The applicant claims systems to control oxides of nitrogen (NO_x) emissions released from the combustion processes. The major components of the claimed facility are:

- **Four Selective Catalytic Reduction Systems** The applicant installed four selective catalytic reduction (SCR) systems in the exhaust ducting of four natural gas combustion turbines (CT-3, CT-4, CT-5, CT-6) located at the Klamath Generation Peaking Plant. In pairs, the four turbines (Pratt & Whitney model FT-8) connect to two generators to generate electricity at 13.8 Kilovolts (kV). The peaking plant is located adjacent to the 500 megawatt Klamath Cogeneration Plant on land leased from Collins Pine.

  The SCRs control oxides of nitrogen (NO_x) emissions released from the combustion processes. Cormetech, Inc. manufactured the catalyst. The SCR Catalyst is equal to Cormetech CMHT-21 vanadia-titania homogeneous suitable for maximum continuous exhaust gas temperatures of 870 degrees Fahrenheit.

- **Anhydrous Ammonia Storage/Delivery System** ATS Express manufactured the Anhydrous Ammonia Storage/Delivery System, which includes one 2,400-gallon storage tank and two tank heaters for ammonia vaporization and transfer to the dilution skid. The Anhydrous Ammonia Dilution Skid includes two dilution air fans and one air/ammonia mixing chamber with heating elements.

  The ammonia injection system blows an air/ammonia mixture into the turbine exhaust ducting upstream of the catalyst zone. The ammonia reacts with the NO_x within the catalyst producing water and nitrogen.

- **Control and Monitoring Systems** The Allen-Bradley model SLC 5/04 PLC-based Control System operates the SCR systems and associated ammonia storage system.

  The applicant also installed four NO_x and CO analyzers, and two O2 analyzers that continuously monitor emissions from each combustion turbine exhaust and provide feedback for controlling the ammonia flow to each exhaust stream.

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria — The **principal purpose** of the facility complies with a DEQ, the federal Environmental Protection Agency (EPA), or a regional air pollution control requirement to prevent, reduce or control air pollution. The principal purpose is the most important or primary purpose of the facility. The facility has only one primary purpose.

Air pollution is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application

The primary and most important purpose of safety supplies (contract 1123), flag relocation (contract 1093) and paving (contract 1091) do not directly relate to the SCR/ammonia system or to the permit conditions. The Department deducted the cost associated to these items from the claimed facility cost in section 8 below.

Prior to installing the SCR/ammonia system, the NO_x emissions from each combustion turbine were approximately 16 to 20 pounds per hour. On January 22, 2004, DEQ issued Air Contaminant Discharge Permit 18-0032 to the applicant. The claimed facility meets the permit requirement for NO_x emissions. It has reduced NO_x emissions about 3 to 4 pounds per hour, which is an **80 percent decrease.** The applicant based the comparisons on each combustion turbine operating 150 hours per year as peaking units for electrical generation.

5 The facility accomplishes pollution control by a method in law.

ORS 468.155 (1)(b)(B)

Criteria

The facility accomplishes the prevention, control or reduction by disposal or elimination of air contaminants, air pollution (see section 5 for definition), or air contamination sources; and the use of an air-cleaning device as defined in ORS 468A.005.

Air contaminant means dust, fume, gas, mist, odor, smoke, vapor, pollen, soot, carbon, acid or particulate matter or any combination thereof. ORS 468A.005.

Air pollution - see section 5 for definition.

Air contamination source means any source at, from, or by reason of which there is emitted into the atmosphere any air contaminant, regardless of who the person may be who owns or operates the building, premises or other property in, at or on which such source is located, or the facility, equipment or other property by which the emission is caused or from which the emission comes. ORS 468A.005.

Air-cleaning device means any method, process or equipment that removes, reduces or renders less noxious air-contaminants prior to their discharge in the atmosphere. ORS 468A.005.

Criteria Applied to this Application	The SRC/ammonia system **meets** the definition of an air-cleaning device and NOx emissions meet the definition of air pollution.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria	The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.
Criteria Applied to this Application	As an air pollution control facility, by definition, is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria

The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Ineligible Costs ORS 468.155(3), OAR 340-016-0070(1) and -0070(3)
The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:

a. the **salvage value of a pre-existing** facility if the applicant is replacing a facility;
b. the amount of any government grants received to pay part of the facility cost;
c. the present value of any other state tax credits for which the investment is eligible; and
d. **ineligible costs** as set forth in ORS 468.155(3) and OAR 340-016-0070(3).

Criteria Applied to this Application	The State of Oregon has issued **one** Pollution Control Facilities Tax Credit Certificate to the applicant at this location for CO reduction. The claimed facility is **not a replacement** of the previously certified facility.

The applicant claimed ineligible costs described in section 5 and subtracted on from the claimed facility cost below.

The applicant did not include the eligible internal labor. The Department increased the claimed facility cost by the actual pay rate and fringe benefits of the employees that work on the claimed facility. The applicant also subtracted the future salvage value of the claimed facility rather than the salvage value of any pre-existing facility. The Department added $60,000 to the claimed facility cost for this erroneous deduction.

Section	Description	Facility Cost
	Claimed	**$5,068,049**
5	Safety supplies, Contract 1123	-1,400
	Flag relocation, Contract 1093	-2,250
	Ineligible Paving Contract 1091	-42,901
8	Eligible Internal Labor	+92,156
	Duplicate Invoice - Contract 1093	-34,908
	Erroneous deduction	+60,000
	Recommended	**$5,138,746**

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(1)

Criteria

The certified percentage allocable is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of air pollution.

The following factors establish the portion of costs properly allocable to pollution control for facilities that cost more than $50,000.

a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;

b. The estimated annual percent return on the investment in the facility;

c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;

d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and

e. Any other relevant factors.

Criteria Applied to this Application

The certified facility cost **exceeds $50,000**. The Department determined that **100 percent** of the facility cost is allocable to pollution control.

The applicant and the Department calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering the factors a. through e. above and a **10-year** useful life. The claimed facility does not produce a salable or useable commodity, and there is no revenue or cost savings associated with it. The expenditures exceed the revenue; therefore, the resulting Facility ROI (0.0%) is less than the National ROI of 6.7%, the facility's construction completion year of 2004. The applicant did not investigate an alternative technology.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(h)

Criteria

The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the facility is, at the time of certification, is located within a designated economically distressed defined in ORS 285A.010 by the Economic and Community Development Department.

Criteria Applied to this Application

The **maximum tax credit is 35 percent** because the applicant submitted the application on May 25, 2005, and Klamath Falls is in an economically distressed area.

Reviewers: Maggie Vandehey
Peter Brewer, DEQ, ER

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7036, Columbia Steel Casting Co., Inc.

1 Recommendation for Certification

According to ORS 468.165(6), **Columbia Steel Casting Co., Inc.** timely filed application number **7036** on June 30, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$ 11,157**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$ 3,905

2 Applicant Identification

Columbia Steel Casting Co., Inc.
PO Box 83095
Portland, Oregon 97283

Organized as: S Corp
Taxpayer ID: 93-0336095

3 Air Pollution Control Facility Identification

10425 N. Bloss Avenue
Portland, OR 97203

Same as the applicant's address.

The EQC certification will identify the facility as:

A mobile smoke collection hood with flexible ductwork and supporting structure

4 Technical Information

Columbia Steel Casting Company, Inc., manufactures alloy steel castings. The company cuts large steel castings (used scrap) using an oxy-fuel torch in its scrapyard prior to using the material in the casting process. The applicant claims a moveable hood, the hood's support structure and flexible ductwork to capture smoke from the cutting process and route it to an exisiting baghouse. The cylindrical hood, with a partially open side, hangs from a jib crane, so that its can be swung into position to surround the casting. The operator rotates the hood to redirect air flow when moving around the casting.

Prior to installing the hood, the applicant performed the oxy-torch cutting work inside the building

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the facility complies with a DEQ, the federal Environmental Protection Agency (EPA), or a regional air pollution control requirement to prevent, reduce, or control air pollution. The principal purpose is the most important or primary purpose of the facility; the facility has only one primary purpose.

> **Air pollution** is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application

The facility complies with the applicant's Air Contaminant Discharge Permit #26-1869. The primary and important purpose of the claimed facility is to reduce air pollution.

6 The facility accomplishes pollution control by a method in law.

ORS 468.155 (1)(b)(B)

Criteria

The facility accomplishes the prevention, control or reduction by disposal or elimination of air contaminants, air pollution (see section 5 for definition), or air contamination sources; and the use of an air-cleaning device as defined in ORS 468A.005.

Air contaminant means dust, fume, gas, mist, odor, smoke, vapor, pollen, soot, carbon, acid or particulate matter or any combination thereof. ORS 468A.005.

Air pollution - see section 5 for definition.

Air contamination source means any source at, from, or by reason of which there is emitted into the atmosphere any air contaminant, regardless of who the person may be who owns or operates the building, premises or other property in, at or on which such source is located, or the facility, equipment or other property by which the emission is caused or from which the emission comes. ORS 468A.005.

Air-cleaning device means any method, process or equipment that removes, reduces or renders less noxious air-contaminants prior to their discharge in the atmosphere. ORS 468A.005.

Criteria Applied to this Application: The hood and the flexible ductwork is an effective method for capturing particulate emissions prior to discharge to the atmosphere. The ductwork connects to the existing #1 Baghouse.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria: The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.

Criteria Applied to this Application: As an air pollution control facility, the facility is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria: The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Criteria Applied to this Application: A paid invoice, made out to the applicant, and minor in-house labor charges document **$11,157** as the actual cost of the facility. There are **no ineligible costs**.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce air pollution to the entire time the facility is used for any purpose.
Criteria Applied to this Application	The certified facility cost **does not exceed $50,000** and the applicant uses the facility **100 percent** of the time for pollution control.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(h)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified cost of the facility does not exceed $200,000.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on June 30, 2005, and the certified facility would not exceed $200,000.

Reviewers: Maggie Vandehey
Greg Grunow, ODEQ Northwest Region

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7072, Hampton Lumber Mills, Inc.

1 Recommendation for Certification

According to ORS 468.165(6), **Hampton Lumber Mills, Inc.** timely filed application number **7072** on August 31, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$199,220**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$69,727

2 Applicant Identification

Hampton Lumber Mills, Inc.
9600 SW Barnes Road, Suite 200
Portland, OR 97225-6666

Organized as: C Corp
Taxpayer ID: 93-0589650

3 Air Pollution Control Facility Identification

Hampton Lumber Mills, Inc.
3111 Third Street
Tillamook, OR 97141

The EQC certification will identify the facility as:

One - Clarke's Sheet Metal baghouse
Model# 100-20 G5, ID PBH1
One - EQPIII 100HP, 1800 RPM Motor

4 Technical Information

Hampton Lumber Mills, Inc., manufactures kiln-dried lumber at its Tillamook Lumber Company site. The mill processes hemlock lumber into kiln-dried dimensional (i.e., 2x4) lumber. The dimensioning process takes place in the planer mill. A series of cyclones collect the air from the planer operation and vent to the claimed Planer Baghouse System to control particulate emissions.

Clark's Sheet Metal manufactured the baghouse and the baghouse ducting. The baghouse system has a rated efficiency of 99.9964 percent. It contains 100 20-foot-long bags. The design inlet gas flow rate is 72,792 ACFM (actual cubic feet per minute); the design air-to-cloth ratio is 7.92:1 with a design pressure drop of 2.5 inches of water column. The system uses a reverse-air continuous cleaning mechanism that cycles 5 percent of the bags at all times.

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the facility complies with a DEQ, the federal Environmental Protection Agency (EPA), or a regional air pollution control requirement to prevent, reduce, or control air pollution. The principal purpose is the most important or primary purpose of the facility. The facility has only one primary purpose.

> **Air pollution** is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application

The facility controls emissions of particulates from the planer operations. The baghouse complies with the applicant's Title V Air Operating Permit NO. 29-0007 issued on July, 23, 2002.

The primary and most important purpose of the spark detection system is to prevent fire and protect the system, not to respond to permit conditions. The exclusion is consistent with past EQC actions. DEQ will subtract $19,769 from the claimed facility cost in section 8 below.

The new baghouse system emits less than 1 ton per year of PM and PM10. Before installation of the baghouse, the planer cyclones emitted approximately 9.9 tons per year of particulate matter (PM) and 4.9 tons per year of particulate matter up to 10 micrometers in size (PM10) directly to atmosphere.

6 The facility accomplishes pollution control by a method in law.

ORS 468.155 (1)(b)(B)

Criteria

The facility accomplishes the prevention, control or reduction by disposal or elimination of air contaminants, air pollution (see section 5 for definition), or air contamination sources; and the use of an air-cleaning device as defined in ORS 468A.005.

Air contaminant means dust, fume, gas, mist, odor, smoke, vapor, pollen, soot, carbon, acid or particulate matter or any combination thereof. ORS 468A.005.

Air pollution - see section 5 for definition.

Air contamination source means any source at, from, or by reason of which there is emitted into the atmosphere any air contaminant, regardless of who the person may be who owns or operates the building, premises or other property in, at or on which such source is located, or the facility, equipment or other property by which the emission is caused or from which the emission comes. ORS 468A.005.

Air-cleaning device means any method, process or equipment that removes, reduces or renders less noxious air-contaminants prior to their discharge in the atmosphere. ORS 468A.005.

Criteria Applied to this Application

The applicant installed the baghouse on the exhaust of the planer mill cyclones to contain, control and/or eliminate emissions of particulates from the planer operations being released into the atmosphere. Particulate emissions **meet the definition** of air pollution as defined by ORS 468A.005 and shown under section 5. The baghouse meets the definition of an air-cleaning device.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria

The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.

Criteria Applied to this Application

The facility is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.
ORS 468.170(1)

Criteria

The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Ineligible Costs ORS 468.155(3), OAR 340-016-0070(1) and -0070(3)

The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:

a. the salvage value of a pre-existing facility if the applicant is replacing a facility;

b. the amount of any government grants received to pay part of the facility cost;

c. the present value of any other state tax credits for which the investment is eligible; and

d. ineligible costs as set forth in ORS 468.155(3) and OAR 340-016-0070(3).

The regulations exclude over 40 items from the definition of a Pollution Control Facility including replacement facilities, demolition, and "Any distinct portion of a pollution control facility that makes an **insignificant contribution to** the principal or sole **purpose** of the facility".

Criteria Applied to this Application

Paid invoices, made out to the applicant, document **$340,770** as the actual cost of the facility.

DEQ subtracted the cost for the demolition and removal of three shaving bins and a cyclone bin and the cost to rent a jackhammer from the claimed facility cost.

The applicant included invoices from Platt Electric, North Coast Electrical, Wadsworth Electric, Murray Electrical Contractors, Loy Clark and S.C. Paving (Ref. BK) and included internal electrical labor cost in the amount of **$103,495.** The new electrical upgrades are sized to handle a much larger load than needed for the claimed faclity. The applicant and their electrician identified 10 percent of the cost of the upgrade as needed to operate the baghouse.

The applicant included the cost of paving for the Twelfth Street approach to the mill, which was disturbed to install the new electrical service. The Department subtracted $3,370 because roadways are ineligible costs. The Department also subtracted $350 for the cost of the PUD permit to install a road to access the electrical connection.

The Department and the applicant agreed to subtract $29 for costs that were not cost effective to document accurately.

Section	Description	Facility Cost
	Claimed	$340,770
8	Rounding Error (Internal labor)	1
	Demolition (Ref. E, BG, BH, AY)	-24,557
	$103,495 X 0.90	-93,145
	Addition error (Ref. BD, BE)	-331
	Paving (Ref. BS)	-3,370
	Access road permit (Ref. BQ)	-350
	Unknown item (Ref. BB)	-29
5	Spark Detection	-19,769
	Recommended	**$199,220**

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(1)

Criteria

The certified percentage allocable is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of air pollution.

The following factors establish the portion of costs properly allocable for facilities that cost more than $50,000.

a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;

b. The estimated annual percent return on the investment in the facility;

c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;

d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and

e. Any other relevant factors.

Criteria Applied to this Application

The certified facility cost **exceeds $50,000**. The Department determined that **100 percent** of the facility cost is allocable to pollution control.

The applicant and the Department calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering the factors a through e above and a **10-year** useful life. The claimed facility does not produce a salable or useable commodity, and there is no revenue or cost savings associated with it. The applicant did not investigate an alternative technology.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(h)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002, and December 31, 2008, inclusively, and facility is located within an economically distressed area, at the time of certification, as defined in ORS 285A.010 by the Economic and Community Development Department.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on August 31, 2005, and Tillamook is in a designated economically distressed area.

Reviewers: Maggie Vandehe
Jim Broad, ODEQ, NWR

Alternatives to Open Field Burning Facilities for Approval

The Department recommends that the Environmental Quality Commission approve **seventeen** facilities that provide alternatives to open field burning. The claimed facilities include buildings, tiling installations, and equipment to reduce air pollution. The primary and most important purpose of each of these facilities is to respond to a requirement imposed by DEQ to reduce the maximum number of acres that are open-burned in compliance with acreage limitations and allocations under OAR 340-266-0060.

Summary of Alternatives to Open Field Burning

App #	Applicant	Certified	% Allocable	Maximum Percent	Tax Credit
6965	McKee: Bruce, Doug, Norm	$6,380	100%	35%	$2,233
6966	McKee: Bruce, Doug, Norm	$16,480	100%	35%	$5,768
6967	McKee: Bruce, Doug, Norm	$68,400	100%	35%	$23,940
6983	Knox Seed, Inc.	$135,292	32%	35%	$15,153
7008	David Elam	$13,075	39%	35%	$1,785
7009	David Elam	$12,625	39%	35%	$1,723
7010	David Elam	$17,500	58%	35%	$3,553
7012	David Elam	$22,503	90%	35%	$7,088
7013	David Elam	$49,837	100%	35%	$17,443
7014	David Elam	$43,772	100%	35%	$15,320
7015	Wendy Coates	$11,250	42%	35%	$1,654
7026	Mark McKay and Dean McKay	$231,407	99%	35%	$80,183
7045	David Elam	$43,772	100%	35%	$15,320
7046	David Elam	$43,772	100%	35%	$15,320
7047	David Elam	$43,772	100%	35%	$15,320
7048	David Elam	$43,772	100%	35%	$15,320
7053	LeRoy and Lowell Kropf	$277,361	75%	35%	$72,807
17 Apps	**Sum**	**$1,080,970**			**$309,931**
	Average	$63,586			$18,231
	Minimum	$6,380			$1,654
	Maximum	$277,361			$80,183

References

ORS 468.150[4]

After alternative methods for field sanitation and straw utilization and disposal are approved by the Department of Environmental Quality, "pollution control facility," as defined in ORS 468.155, shall include such approved alternative methods and persons purchasing and utilizing such methods shall be eligible for the benefits allowed by ORS 468.155 to 468.190 and 468.962. [1975 c.559 §15; 1999 c.59 §136]

Note: 468.150 was enacted into law by the Legislative Assembly but was not added to or made a part of ORS chapter 468 or any series therein by legislative action. See Preface to Oregon Revised Statutes for further explanation.

OAR 340-016-0060[5]

(4) Eligible Activities... (b) Alternatives to Open Field Burning. The facility shall reduce or eliminate:

(A) Open field burning and may include equipment, facilities, and land for gathering, densifying, handling, storing, transporting and incorporating grass straw or straw based products;

(B) Air quality impacts from open field burning and may include propane burners or mobile field sanitizers; or

(C) Grass seed acreage that requires open field burning. The facility may include:

(i) Production of alternative crops that do not require open field burning;

(ii) Production of rotation crops that support grass seed production without open field burning; or

(iii) Drainage tile installations and new crop processing facilities.

[4] Field sanitation and straw utilization and disposal methods as "pollution control facilities."
[5] Eligibility

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 6965, Bruce McKee @ 33.3%
Doug McKee @ 33.3%
Norm McKee @ 33.3%

1 Recommendation for Certification

According to ORS 468.165(6), **Bruce McKee, Doug McKee, and Norm McKee** timely filed application number **6965** on March 31, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$6,380**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$2,233

2 Applicant Identification

Bruce McKee @ 33.3%
Doug McKee @ 33.3%
Norm McKee @ 33.3%
23350 SW McKee Road
Amity, OR 97101

Organized as: Partnership
Taxpayer ID: 93-0771353

3 Air: Field Burning Pollution Control Facility Identification

McKee River Ranch
11640 Elkins Road
Monmoth, OR 97361

The EQC certification will identify the facility as:

One - Hesston 4690 3-Tie rectangular baler, Serial No. B469 00615

4 Technical Information

Bruce McKee, Doug McKee and Norm McKee own equal shares of McKee River Ranch that produces, warehouses, and markets grass seed. The partnership owns 1,415 acres and leases 1,045 acres in Yamhill and Polk counties. They cultivate perennial grass-seed on all 2,240 acres. The partnership purchased a new bailer that is capable of bailing 350 acres of straw.

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria	The **principal purpose** of the **new facility** is to reduce air pollution by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). The principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.
Criteria Applied to this Application	The primary or most important purpose of the claimed facility is to provide an alternative to open field burning grass seed acreage.

6 The facility accomplished the pollution control by a method in law.

ORS 468.150, OAR 340-016-0060 (4)(b)

Criteria

As an alternative to open field burning, the facility must reduce or eliminate:

a. Open field burning and it may include **equipment,** facilities, and land for gathering, **densifying, handling**, storing, transporting and incorporating grass straw or straw based products;

b. Air quality impacts from open field burning and it may include propane burners or mobile field sanitizers; or

c. Grass seed acreage that requires open field burning. The facility may include:

- Production of alternative crops that do not require open field burning;
- Production of rotation crops that support grass seed production without open field burning; or
- Drainage tile installations and new crop processing facilities.

Criteria Applied to this Application: The baler eliminates the need to open field burn.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria	The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, 468A and 468B and rules thereunder.
Criteria Applied to this Application	The applicants state the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits to the applicant or to the site. The facility, by definition, is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicants own cash investment.

ORS 468.170(1)

Criteria

The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Ineligible Costs ORS 468.155(3), OAR 340-016-0070(1) and -0070(3)

The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:

a. the salvage value of a pre-existing facility if the applicant is replacing a facility;

b. the amount of any government grants received to pay part of the facility cost;

c. the present value of any other state tax credits for which the investment is eligible; and

d. **ineligible costs as set forth in ORS 468.155(3)** and OAR 340-016-0070(3).

The regulations exclude over 40 items from the definition of a Pollution Control Facility. Items excluded from the definition are ineligible for certification.

One of the excluded items is the replacement or reconstruction of all or part of a previously certified pollution control facility. The regulations provide two exceptions.

a. If the cost to replace or reconstruct the facility is greater than the like-for-like replacement cost of the original facility due to a requirement imposed by the DEQ, the federal Environmental Protection Agency or a regional air pollution authority, then the facility may be eligible for tax credit certification up to an amount equal to the difference between the

cost of the new facility and the like-for-like replacement cost of the original facility.

b. If a facility is **replaced** or reconstructed **before the end of its useful life** then the facility may be eligible for the remainder of the tax credit certified to the original facility.

Criteria Applied to this Application

Paid invoices, made out to the applicant, document **$22,000** as the actual cost of the facility.

Section	Description		Facility Cost
		Claimed	$22,000
8	Replacement		-15,620
		Recommended	**$6,380**

The State of Oregon has issued **five** Pollution Control Facilities Tax Credit Certificates to the applicants. Previously certified equipment removed straw from 560 acres and two previously certified buildings stored straw from 850 acres.

The claimed facility **replaced** a previously certified 370 Freeman Baler. The original baler had a 250-acres capacity and the new bailer has a 350-acre capacity. DEQ presents this transaction in two actions:

1) Reissue Certificate Number 3615 to allow the applicants to use the remaining credit according to ORS 468.155(3)(e)(b). The Department presents the reissue of the original certificate under Attachment C of the staff report.

2) Certify the new baler for $6,380 to represent the 100-acre capacity increase. The Department subtracted $15,620 (250/350 = 71% * $22,000 = $15,620) from the claimed facility cost.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria

If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce air pollution to the entire time the facility is used for any purpose.

Criteria Applied to this Application

The certified facility cost **does not exceed $50,000** and the applicant uses the facility **100 percent** of the time for pollution control.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on March 31, 2005, and the certified facility cost does not exceed $200,000.

Reviewers: Maggie Vandehey
John Beyers, Oregon Department of Agriculture

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 6966, Bruce McKee @ 33.3%
Doug McKee @ 33.3%
Norm McKee @ 33.3%

1 Recommendation for Certification

According to ORS 468.165(6), **Bruce McKee, Doug McKee, and Norm McKee** timely filed application number **6966** on March 31, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$16,480**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$5,768

2 Applicant Identification

Bruce McKee @ 33.3%
Doug McKee @ 33.3%
Norm McKee @ 33.3%
23350 SW McKee Road
Amity, OR 97101

Organized as: Partnership
Taxpayer ID: 93-0771353

3 Air: Field Burning
Pollution Control Facility Identification

McKee River Ranch
11640 Elkins Road
Monmoth, OR 97361

The EQC certification will identify the facility as:

One - ProAg Bale Skoop, Model HD4SR,
Serial No. 4-I-0721

4 Technical Information

Bruce McKee, Doug McKee and Norm McKee own equal shares of McKee Farms. The farm produces, warehouses and markets grass seed. The partnership owns 1,415 acres and leases 1,045 acres in Yamhill and Polk counties. They cultivate perennial grass seed on all 2,240 acres.

The partnership purchased a new bale scoop used in conjunction with the baler claimed on Application No. 6967.

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the **new facility** is to reduce air pollution by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). The principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

> Air pollution is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application

The primary or most important purpose of the claimed facility is to provide an alternative to open field burning as a method for sanitizing grass-seed acreage.

6 The facility accomplished the pollution control by a method in law.

ORS 468.150, OAR 340-016-0060 (4)(b)

Criteria

As an alternative to open field burning, the facility must reduce or eliminate:

a. Open field burning and it may include **equipmen**t, facilities, and land **for gathering**, densifying, **handling**, storing, transporting and incorporating grass straw or straw based products;

b. Air quality impacts from open field burning and it may include propane burners or mobile field sanitizers; or

c. Grass seed acreage that requires open field burning. The facility may include:

- Production of alternative crops that do not require open field

burning;

- Production of rotation crops that support grass seed production without open field burning; or
- Drainage tile installations and new crop processing facilities.

Criteria Applied to this Application: The bale scoop is part of a process that eliminates the need to open field burn.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria: The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.

Criteria Applied to this Application: The applicant states the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits to the applicant or to the site. As an air pollution control facility, the facility is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria: The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Ineligible Costs ORS 468.155(3), OAR 340-016-0070(1) and -0070(3)
The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:

a. the salvage value of a pre-existing facility if the applicant is replacing a facility;

b. the amount of any government grants received to pay part of the facility cost;

c. the present value of any other state tax credits for which the investment is eligible; and

d. ineligible costs as set forth in ORS 468.155(3) and OAR 340-016-0070(3).

The regulations exclude over 40 items from the definition of a Pollution Control Facility. Items excluded from the definition are ineligible for certification.

One of the excluded items is the **replacement** or reconstruction of all or part of a previously certified pollution control facility. The regulations provide two exceptions.

a. If the cost to replace or reconstruct the facility is greater than the like-for-like replacement cost of the original facility due to a requirement imposed by the DEQ, the federal Environmental Protection Agency or a regional air pollution authority, then the facility may be eligible for tax credit certification up to an amount equal to the difference between the cost of the new facility and the like-for-like replacement cost of the original facility.

b. If a facility is replaced or reconstructed before the end of its useful life then the facility may be eligible for the remainder of the tax credit certified to the original facility.

Criteria Applied to this Application

Paid invoices, made out to the applicant, document $25,750 as the actual cost of the facility.

Section	Description		Facility Cost
		Claimed	$25,750
8	Replaced Facility		-9,270
		Recommended	**$16,480**

The State of Oregon issued **five** Pollution Control Facilities Tax Credit Certificates to the applicants. Previously certified equipment removed straw from 560 acres and two previously certified buildings stored straw from 850 acres.

The claimed facility replaced a previously certified 1075 New Holland Stackwagon. The original Stackwagon had a 250-acre capacity and the new bale scoop has a 700-acre capacity. The applicants **replaced the original facility after it had expended its useful life**; therefore, 36% (250/700 = 36%) of the new facility is ineligible according to ORS 468.155(3)(e)(b). The Department subtracted $9,270 (36% * $25,750 = $9,270) from the claimed facility cost. The new scoop is eligible for the 450 acre increase in capacity.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce air pollution to the entire time the facility is used for any purpose.
Criteria Applied to this Application	The certified facility cost does not exceed $50,000 and the applicant uses the facility **100 percent** of the time for pollution control .

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on March 31, 2005, and the certified facility cost does not exceed $200,000.

Reviewers: Maggie Vandehey
John Beyers, Oregon Department of Agriculture

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 6967, Bruce McKee @ 33.3%, Doug McKee @ 33.3%, Norm McKee @ 33.3%

1 Recommendation for Certification

According to ORS 468.165(6), **Bruce McKee, Doug McKee, and Norm McKee** timely filed application number **6967** on March 31, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$68,400**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$23,940

2 Applicant Identification

Bruce McKee @ 33.3%
Doug McKee @ 33.3%
Norm McKee @ 33.3%
23350 SW McKee Road
Amity, OR 97101

Organized as: Partnership
Taxpayer ID: 93-0771353

3 Air: Field Burning Pollution Control Facility Identification

McKee River Ranch
11640 Elkins Road
Monmoth, OR 97361

The EQC certification will identify the facility as:

One - Hesston 4490 3' X 4' Large Baler, Serial No. HM 74665

4 Technical Information

Bruce McKee, Doug McKee and Norm McKee own equal shares of McKee Farms. The farm produces, warehouses and markets grass seed. The partnership owns 1,415 acres and leases 1,045 acres in Yamhill and Polk counties. They cultivate perennial grass-seed on all 2,240 acres. The partnership purchased a new baler used in conjunction with the bale scoop claimed on Application No. 6966.

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the **new facility** is to reduce air pollution by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). The principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

> Air pollution is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application

The primary or most important purpose of the claimed facility is to provide an alternative to open field burning as a method for sanitizing grass-seed acreage.

6 The facility accomplished the pollution control by a method in law.

ORS 468.150, OAR 340-016-0060 (4)(b)

Criteria

As an alternative to open field burning, the facility must reduce or eliminate:

a. Open field burning and it may include equipment, facilities, and land for gathering, densifying, handling, storing, transporting and incorporating grass straw or straw based products;

b. Air quality impacts from open field burning and it may include propane burners or mobile field sanitizers; or

c. Grass seed acreage that requires open field burning. The facility may include:

- Production of alternative crops that do not require open field burning;

- Production of rotation crops that support grass seed production without open field burning; or
- Drainage tile installations and new crop processing facilities.

Criteria Applied to this Application: The baler recovers straw and is part of a process that eliminates the need to open field burn.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria: The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.

Criteria Applied to this Application: The applicant states the facility and site are in compliance with Department rules and statutes and with EQC orders. DEQ has not issued any permits to the applicant or the site. As an air pollution control facility, the facility is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria: The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Criteria Applied to this Application: Paid invoices, made out to the applicant, document **$68,400** as the actual cost of the facility. There are **no** other **ineligible costs.**

The State of Oregon issued **five** Pollution Control Facilities Tax Credit Certificates to the applicant at this location. The claimed facility is **not a replacement** of these previously certified facilities.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(1)

Criteria

The certified percentage allocable is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of air pollution.

The following factors establish the portion of costs properly allocable to pollution control for facilities that cost more than $50,000.

a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;

b. The estimated annual percent return on the investment in the facility;

c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;

d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and

e. Any other relevant factors.

Criteria Applied to this Application

The certified facility cost **exceeds $50,000**. The Department determined that **100 percent** of the facility cost is allocable to pollution control.

The baler recovers straw to applicant and the Department calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering factors a through e above and a **10-year** useful life. The claimed facility does not produce a salable or useable commodity, and there is no revenue or cost savings associated with it. The expenditures exceed the revenue; therefore, the resulting Facility ROI is less than the National ROI for the facility's construction completion year of 2004. The applicant did not investigate an alternative technology.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria

The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.

Criteria Applied to this Application

The **maximum tax credit is 35 percent** because the applicant submitted the application on March 31, 2005, and the certified facility cost does not exceed $200,000.

Reviewers: Maggie Vandehey
John Beyers, Oregon Department of Agriculture

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 6983, Knox Seed, Inc.

1 Recommendation for Certification

According to ORS 468.165(6), **Knox Seed, Inc.** timely filed application number **6983** on April 13, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$135,292**
Percentage Allocable	X	**32%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$15,153

2 Applicant Identification

Knox Seed, Inc.
36185 Bohlken Drive
Lebanon, OR 97355

Organized as: C Corp
Taxpayer ID: 93-1142632

3 Air: Field Burning Pollution Control Facility Identification

Same as the applicant's address.

The EQC certification will identify the facility as:

One - Straw storage building

4 Technical Information

Knox Seed, Inc., farms 400 acres of annual grass seed and 324 acres of perennial grass seed. The farm owns 100 acres and leases an additional 624 acres.

The applicant claims a 106 foot by 150 foot steel straw storage building that has 33 foot eaves. The all-steel building sits on concrete footings and it has a gravel floor. The building is capable of storing 900 acres (1,900 tons) of straw. The applicant's 324 perennial grass-seed growing operation is within farm number 4845:

- 44 acres in Tract 1428 , 20 acres in Tract 1433, and 38 acres in Tract 4845 of Section 20, Township 11S, Range 2W
- 32 acres in Tract 1429 of Sections 21, Township 11S, Range 2W
- 190 aces in Tract 1435 of Section 22, Township 11S, Range 2W

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the **new facility** is to reduce air pollution by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). The principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

> Air pollution is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application

The primary or most important purpose of the claimed facility is to provide an alternative to open field burning as a method for sanitizing grass-seed acreage.

6 The facility accomplished the pollution control by a method in law.

ORS 468.150, OAR 340-016-0060 (4)(b)

Criteria

As an alternative to open field burning, the facility must reduce or eliminate:

a. Open field burning and it may include equipment, facilities, and land for gathering, densifying, handling, **storing**, transporting and incorporating grass straw or straw based products;

b. Air quality impacts from open field burning and it may include propane burners or mobile field sanitizers; or

c. Grass seed acreage that requires open field burning. The facility may include:

- Production of alternative crops that do not require open field burning;
- Production of rotation crops that support grass seed production without open field burning; or
- Drainage tile installations and new crop processing facilities.

Criteria Applied to this Application

The applicant and J & J Farming's customers have reduced the number of acres they open burn by storing their straw in the building to maintain its salable characteristics until a market becomes available.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria

The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.

Criteria Applied to this Application

The facility is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria

The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Ineligible Costs ORS 468.155(3), OAR 340-016-0070(1) and -0070(3)

The applicant must provide documents that substantiate the claimed facility cost, subtracting any of the 40 items excluded from the definition of a Pollution Control Facility. Excluded items include parking lots and road improvements.

Criteria Applied to this Application

Invoices substantiated the eligible facility cost. According to ORS 468.155(3)(d)(B), DEQ subtracted $12,987 in **road improvements** from the claimed facility cost.

The State of Oregon has issued **three** Pollution Control Facilities Tax Credit Certificates to the applicant, one at this location for equipment. The claimed facility is **not a replacement** of these previously certified facilities.

Section	Description		Facility Cost
		Claimed	$148,279
8	Road Improvements		-12,987
		Recommended	**$135,292**

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(1)

Criteria

The certified percentage allocable is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of air pollution.

The following factors establish the portion of costs properly allocable to pollution control for facilities that cost more than $50,000.

a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;

b. The estimated annual percent return on the investment in the facility;

c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;

d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and

e. Any other relevant factors.

Criteria Applied to this Application

The certified facility cost exceeds $50,000. The Department determined that **32 percent** of the facility cost is allocable to pollution control.

The building stores **32 percent** (600 tons) of straw from the applicant's acreage and 68 percent (1,300 tons) of straw from other area grass-seed growers.

The building does not recover or convert a waste product into a salable or usable commodity though it stores straw, a waste product to grass-seed growers, for

export. The building has an average lease income of $2,200 a year and it does not provide a cost savings to the applicant. The average annual expenditure for the building is $200. The National ROI (6.7) for 2004, the year the applicant completed constructing the building, exceeds the Facility ROI (0), calculated according to OAR 340-016-0075(3) using a **20-year** useful life. When the National ROI exceeds the Facility ROI, the percentage of the facility cost allocable to pollution control is 100 percent. The applicant did not investigate an alternative technology.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on April 13, 2005, and the certified facility cost does not exceed $200,000.

Reviewers: Maggie Vandehey
John O. Byers, ODA, Smoke Management Program

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7008, David Elam

1 Recommendation for Certification

According to ORS 468.165(6), **David Elam** timely filed application number **7008** on May 25, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$13,075**
Percentage Allocable	X	**39%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$1,785

2 Applicant Identification

David Elam
6802 Ogle Street SE
Salem, OR 97301

Organized as: Individual

3 Air: Field Burning Pollution Control Facility Identification

Same as the applicant's address.

The EQC certification will identify the facility as:

One - Used 1987 White Model 2-135 tractor, Serial No. 4011361

4 Technical Information

David Elam owns a custom bailing and stacking operation and grows grass seed. The applicant owns 220 acres and leases 7,299 acres. The applicant claims a used tractor to process and remove grass seed straw when used in conjunction with the New Holland baler claimed on application number 7046 also presented in this staff report and a tedder (not claimed.) The tractor bales straw from the 650 acres identified as:

- Sections 23, 24, 26, 29, Township 9S, Range 3W
- Sections 3,4,9,16, Township 10S, Range 3W

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the new facility is to **reduce air pollution** by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). The principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

Air pollution is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application

The primary or most important purpose of the tractor is to reduce air pollution by reducing the 650 acres from open burning when used in conjunction with a baler and a tedder.

6 The facility accomplishes pollution control by a method in law.

ORS 468.150, OAR 340-016-0060 (4)(b)

Criteria

As an alternative to open field burning, the facility must reduce or eliminate:

a. Open field burning and it may include **equipment**, facilities, and land **for gathering, densifying, handling**, storing, transporting and incorporating grass straw or straw based products;

b. Air quality impacts from open field burning and it may include propane burners or mobile field sanitizers; or

c. Grass seed acreage that requires open field burning. The facility may include:

- Production of alternative crops that do not require open field burning;
- Production of rotation crops that support grass seed production without open field burning; or
- Drainage tile installations and new crop processing facilities.

Criteria Applied to this Application	The applicant reduces open field burning using a tractor in conjunction with a baler and a tedder.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria	The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.
Criteria Applied to this Application	The applicant states that the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits for this site. As an air pollution control facility, the facility is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria	The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.
Criteria Applied to this Application	A paid invoice, made out to the applicant, documents **$13,075** as the actual cost of the facility. There are **no ineligible costs.** The State of Oregon has issued one Pollution Control Facilities Tax Credit Certificate to the applicant for a wood chipper prior to December 23, 2005. The claimed facility is **not a replacement** of any previously certified facility.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce air pollution to the entire time the facility is used for any purpose.
Criteria Applied to this Application	The Department determined the **39 percent** of the facility cost is allocable to pollution control. The applicant uses the 138 horsepower tractor to operate a tedder and baler 176.5 hours a year on 650 acres. The standard average annual operating hours for the tractor is 450 hours; therefore, the applicant uses the tractor 39 percent (176.5/450 = 39%) of the time for an alternative to open field burning.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on May 25, 2005, and the certified facility cost does not exceed $200,000.

Reviewers: Maggie Vandehey
John Byers, ODA, Smoke Management Program

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7009, David Elam

1 Recommendation for Certification

According to ORS 468.165(6), **David Elam** timely filed application number **7009** on May 25, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$12,625**
Percentage Allocable	X	**39%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$1,723

2 Applicant Identification

David Elam
6802 Ogle Street SE
Salem, OR 97301

Organized as: Individual

3 Air: Field Burning Pollution Control Facility Identification

Same as the applicant's address.

The EQC certification will identify the facility as:

One - Used 1979 John Deere Model 4430 tractor, Serial No. 025189

4 Technical Information

David Elam owns a custom bailing and stacking operation and grows grass seed. The applicant owns 220 acres and leases 7,299 acres. The applicant claims a used tractor to process and remove grass-seed straw when used in conjunction with the New Holland baler claimed on application number 7045 also presented in this staff report and a tedder (not claimed). The tractor bales straw from the 650 acres identified as:

- Sections 30, 31, Township 8S, Range 2W
- Section 36, Township 8S, Range 3W
- Sections 9, 10, 16, Township 9S, Range 2W

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the **new facility** is to reduce air pollution by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). The principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

> Air pollution is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application

The primary or most important purpose of the tractor is to reduce air pollution by reducing the 650 acres from open burning when used in conjunction with a baler and a tedder.

6 The facility accomplishes pollution control by a method in law.

ORS 468.150, OAR 340-016-0060 (4)(b)

Criteria

As an alternative to open field burning, the facility must reduce or eliminate:

a. Open field burning and it may include **equipment**, facilities and land **for gathering, densifying, handling**, storing, transporting and incorporating grass straw or straw based products;

b. Air quality impacts from open field burning and it may include propane burners or mobile field sanitizers; or

c. Grass seed acreage that requires open field burning. The facility may include:

   - Production of alternative crops that do not require open field burning;
   - Production of rotation crops that support grass seed production without open field burning; or
   - Drainage tile installations and new crop processing facilities.

Criteria Applied to this Application	The applicant reduces open field burning using a tractor in conjunction with a baler and a tedder.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria	The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.
Criteria Applied to this Application	The applicant states that the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits for this site. As an air pollution control facility, the facility is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria	The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.
Criteria Applied to this Application	A paid invoice, made out to the applicant, document **$12,625** as the actual cost of the facility. There are **no ineligible costs**. The State of Oregon has issued one Pollution Control Facilities Tax Credit Certificate to the applicant for a wood chipper prior to December 23, 2005. The claimed facility is **not a replacement** of any previously certified facility.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce air pollution to the entire time the facility is used for any purpose.

Criteria Applied to this Application	The Department determined that **39 percent** of the facility cost is allocable to pollution control. The applicant uses the 130 horsepower tractor to operate a tedder and baler 176.5 hours a year on 650 acres. The standard average annual operating hours for the tractor is 450 hours; therefore, the applicant uses the tractor 39% (176.5/450 = 39%) of the time for an alternative to open field burning.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on May 25, 2005, and the certified facility cost does not exceed $200,000.

Reviewers: Maggie Vandehey
John Byers, ODA, Smoke Management Program

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7010, David Elam

1 Recommendation for Certification

According to ORS 468.165(6), **David Elam** timely filed application number **7010** on May 25, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$17,500**
Percentage Allocable	X	**58%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$3,552

2 Applicant Identification

David Elam
6802 Ogle Street SE
Salem, OR 97301

Organized as: Individual

3 Air: Field Burning Pollution Control Facility Identification

Same as the applicant's address.

The EQC certification will identify the facility as:

One - Used 1979 John Deere Tractor, Model 4440, Serial No. 17623R

4 Technical Information

David Elam owns a custom bailing and stacking operation and grows grass seed. The applicant owns 220 acres and leases 7,299 acres. The applicant claims a used tractor to process and remove grass-seed straw when used in conjunction with the New Holland baler claimed on application number 7014 also presented in this staff report and a tedder (not claimed).

The applicant uses the tractor to bale straw from

- 880 acres identified as:
  - Sections 27, Township 8S, Range 2W
  - Sections 17, 18, 19, 21, 24, 25, 26, 27, 28, 29, Township 8S, Range 3W
  - Sections 19, 30, Township 8S, Range 2W
  - Section 25, Township 8S, Range 4W
- 104 acres identified as:
  - Section 14, Township 9S, Range 2W

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the **new facility** is to reduce air pollution by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). The principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

> Air pollution is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application

The primary or most important purpose of the tractor is to reduce air pollution by reducing the 984 acres from open burning when used in conjunction with a baler and a tedder.

00068

6 The facility accomplishes pollution control by a method in law.

ORS 468.150, OAR 340-016-0060 (4)(b)

Criteria

As an alternative to open field burning, the facility must reduce or eliminate:

a. Open field burning and it may include **equipment**, facilities, and land **for gathering, densifying, handling**, storing, transporting and incorporating grass straw or straw based products;

b. Air quality impacts from open field burning and it may include propane burners or mobile field sanitizers; or

c. Grass seed acreage that requires open field burning. The facility may include:

- Production of alternative crops that do not require open field burning;
- Production of rotation crops that support grass seed production without open field burning; or
- Drainage tile installations and new crop processing facilities.

Criteria Applied to this Application

The applicant reduces open field burning using a tractor in conjunction with a baler and a tedder.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria

The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.

Criteria Applied to this Application

The applicant states that the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits for this site. As an air pollution control facility, the facility is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria

The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Criteria Applied to this Application	A paid invoice, made out to the applicant, documents **$17,500** as the actual cost of the facility. There are **no ineligible costs.** The State of Oregon has issued one Pollution Control Facilities Tax Credit Certificate to the applicant for a wood chipper prior to December 23, 2005. The claimed facility is **not a replacement** of any previously certified facility.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(1)

Criteria	**Facility Cost ≤ $50,000** ORS 468.190 (3) If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce air pollution to the entire time the facility is used for any purpose.
Criteria Applied to this Application	The Department determined the **58%** of the facility cost is allocable to pollution control. The applicant used the 130 horsepower tractor to operate a tedder and baler 260 hours a year on 984 acres. The standard average annual operating hours for the tractor is 450 hours; therefore, the applicant uses the tractor 58% (260/450 = 58%) of the time for an alternative to open field burning.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on May 25, 2005, and the certified facility cost does not exceed $200,000.

Reviewers: Maggie Vandehey
John Byers, ODA, Smoke Management Program

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7012, David Elam

1 Recommendation for Certification

According to ORS 468.165(6), **David Elam** timely filed application number **7012** on May 25, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$22,503**
Percentage Allocable	X	**90%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$7,088

2 Applicant Identification

David Elam
6802 Ogle Street SE
Salem, OR 97301

Organized as: Individual

3 Air: Field Burning Pollution Control Facility Identification

Same as the applicant's address.

The EQC certification will identify the facility as:

One – 40' x 132' straw storage building

4 Technical Information

David Elam owns a custom bailing and stacking operation and grows grass seed. The applicant owns 220 acres and leases 7,299 acres. The applicant claims a 40 foot by 132 foot pole barn. Poles sunk into concrete and gravel support the metal roof. The structure has metal sides and a dirt floor. It is capable of storing 250 acres of perennial grass-seed straw from the following acreage:

- Sections 29, 30, Township 9E, Range 3W
- Sections 23, 25, 26, Township 9S, Range 4W
- Section 12, Township 10S, Range 3W

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the new facility is **to reduce air pollution** by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). The principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

> **Air pollution** is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Applied to this Application

The primary or most important purpose of the straw storage building is to reduce air pollution by reducing the number of acres (250 acres) to be open-burned.

6 The facility accomplishes pollution control by a method in law.

ORS 468.150, OAR 340-016-0060 (4)(b)

Criteria

As an alternatives to open field burning, the facility must **reduce** or eliminate:

a. Open field burning and it may include equipment, facilities, and land for gathering, densifying, handling, **storing**, transporting and incorporating grass straw or straw based products;

b. Air quality impacts from open field burning and it may include propane burners or mobile field sanitizers; or

c. Grass seed acreage that requires open field burning. The facility may include:

- Production of alternative crops that do not require open field burning;
- Production of rotation crops that support grass seed production without open field burning; or
- Drainage tile installations and new crop processing facilities.

Applied to this Application: The building stores straw, thereby preventing stack burning of molded/wet baled straw from 250 acres each year.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria: The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.

Applied to this Application: The applicant states that the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits for this site. As an air pollution control facility, the facility is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria: The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Applied to this Application: Paid invoices, made out to the applicant, document **$22,503** as the actual cost of the facility. There are **no ineligible costs**.

The State of Oregon has issued one Pollution Control Facilities Tax Credit Certificate to the applicant for a wood chipper prior to December 23, 2005. The claimed facility is **not a replacement** of any previously certified facility.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce air pollution to the entire time the facility is used for any purpose.
Applied to this Application	The applicant completed constructing the building in 2004. With straw production down, the applicant stored implements in the building for the first year. The applicant and the Department agreed to reduce the percentage of the facility cost allocable to pollution control to **90 percent** (10-year certificate period – 1 year).

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.
Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on May 25, 2005, and the certified facility cost does not exceed $200,000.

Reviewers: Maggie Vandehey
John Byers, ODA, Smoke Management Program

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7013, David Elam

1 Recommendation for Certification

According to ORS 468.165(6), **David Elam** timely filed application number **7013** on May 25, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$49,837**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$17,443

2 Applicant Identification

David Elam
6802 Ogle Street SE
Salem, OR 97301

Organized as: Individual

3 Air: Field Burning Pollution Control Facility Identification

Same as the applicant's address.

The EQC certification will identify the facility as:

One – 52' x 240' straw storage building

4 Technical Information

David Elam owns a custom bailing and stacking operation and grows grass seed. The applicant owns 220 acres and leases 7,299 acres. The applicant claims a 52 foot by 240 foot pole barn with 24 foot eaves. Poles sunk into concrete and gravel support the metal roof. The structure has metal sides and a dirt floor. It is capable of storing 525 acres of perennial grass-seed straw from the following acreage:

- Section 1, Township 9S, Range 2W
- Sections 5, 6, Township 9S, Range 1W
- Sections 10, 11, Township 9S, Range 1E
- Sections 22, 27, Township 9S, Range 1W

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the new facility is to **reduce air pollution** by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). The principal purpose must be the most important or primary purpose of the facility; the facility must have only one primary purpose.

> **Air pollution** is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application

The primary or most important purpose of the claimed facility is to reduce air pollution by reducing the number of acres to be open-burned.

6 The facility accomplishes pollution control by a valid method.

ORS 468.150, OAR 340-016-0060 (4)(b)

Criteria

As an alternative to open field burning, the facility must reduce or eliminate:

a. Open field burning and it may include equipment, facilities, and land for gathering, densifying, handling, **storing**, transporting and incorporating grass straw or straw based products;

b. Air quality impacts from open field burning and it may include propane burners or mobile field sanitizers; or

c. Grass seed acreage that requires open field burning. The facility may include:

- Production of alternative crops that do not require open field burning;
- Production of rotation crops that support grass seed production without open field burning; or
- Drainage tile installations and new crop processing facilities.

Criteria Applied to this Application

The facility reduces the number of acres burned annually (525 acres), as the straw is harvested and stored for sale rather than burned in the field. Additionally, the building maintains the straw's marketable properties and eliminates the need to stacked burn it in the field.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria

The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.

Criteria Applied to this Application

The applicant states that the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits for this site. As an air pollution control facility, the facility is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicants own cash investment.

ORS 468.170(1)

Criteria

The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Criteria Applied to this Application

Paid invoices, made out to the applicant, and canceled checks document **$49,837** as the actual cost of the facility. There are **no ineligible costs**.

The State of Oregon has issued one Pollution Control Facilities Tax Credit Certificate to the applicant for a wood chipper prior to December 23, 2005. The claimed facility is **not a replacement** of any previously certified facilities.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce air pollution to the entire time the facility is used for any purpose.
Criteria Applied to this Application	The Department determined that **100 percent** of the facility cost is allocable to pollution control. The applicant stores straw in the building after harvest as an alternative to burning straw in the field or in stacks.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on May 25, 2005, and the certified facility cost does not exceed $200,000.

Reviewers: Maggie Vandehey
John Byers, ODA, Smoke Management Program

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7014, David Elam

1 Recommendation for Certification

According to ORS 468.165(6), **David Elam** timely filed application number **7014** on May 25, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$43,722**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$15,302

2 Applicant Identification

David Elam
6802 Ogle Street SE
Salem, OR 97301

Organized as: Individual

3 Air: Field Burning Pollution Control Facility Identification

Same as the applicant's address.

The EQC certification will identify the facility as:

One – New Holland Baler, Model BB900
Serial No. 3126

4 Technical Information

David Elam, applicant, owns a custom baling and stacking operation and is a grass seed grower who owns 220 acres and leases 7,299 acres. The applicant cultivates perennial grass - seed on the leased acreage, and provides a custom bailing and stacking service.

The applicant claims new equipment to bale grass seed straw, used in conjunction with the tractor claimed on application 7010 also presented in this staff report. The baler processes straw from the 880 acres identified as:

- 880 acres identified as:
  - Sections 27, Township 8S, Range 2W
  - Sections 17, 18, 19, 21, 24, 26, 27, 28, 29, Township 8S, Range 3W
  - Sections 19, 30, Township 8S, Range 2W
  - Section 25, Township 8S, Range 4W
- 104 acres identified as:
  - Section 14, Township 9S, Range 2W

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the **new facility** is to reduce air pollution by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). The principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

> Air pollution is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application

The primary or most important purpose of the baler is to reduce air pollution by reducing the number of acres to be open burned when used in conjunction with a tractor.

6 The facility accomplishes pollution control by a method in law.

ORS 468.150, OAR 340-016-0060 (4)(b)

Criteria

As an alternative to open field burning, the facility must reduce or eliminate:

a. Open field burning and it may include **equipment**, facilities, and land **for gathering, densifying, handling**, storing, transporting and incorporating grass straw or straw based products;

b. Air quality impacts from open field burning and it may include propane burners or mobile field sanitizers; or

c. Grass seed acreage that requires open field burning. The facility may include:

- Production of alternative crops that do not require open field burning;
- Production of rotation crops that support grass seed production without open field burning; or
- Drainage tile installations and new crop processing facilities.

Criteria Applied to this Application

The applicant reduces open field burning using the claimed baler in conjunction with a tractor.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria

The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.

Criteria Applied to this Application

The applicant states that the facility and site are in compliance with Department rules and statutes, and with EQC orders. DEQ has not issued any permits for this site. As an air pollution control facility, the facility is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria

The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Criteria Applied to this Application	A retail installment contract documents **$43,722** as the actual cost of the facility. There are **no ineligible costs.** The State of Oregon has issued one Pollution Control Facilities Tax Credit Certificate to the applicant for a wood chipper prior to December 23, 2005. The claimed facility is **not a replacement** of any previously certified facilities.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce air pollution to the entire time the facility is used for any purpose.
Criteria Applied to this Application	The Department determined that the applicant uses the baler 100 percent of the time as an alternative to open field burning; therefore, the baler cost is **100 percent allocable** to pollution control.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.
Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on May 25, 2005, and the certified facility cost does not exceed $200,000.

Reviewers: Maggie Vandehey
John Byers, ODA, Smoke Management Program

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7015, Wendy Coates

1 Recommendation for Certification

According to ORS 468.165(6), **Wendy Coates** timely filed application number **7015** on May 25, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$11,250**
Percentage Allocable	X	**42%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$1,654

2 Applicant Identification

Wendy Coates
6802 Ogle Street SE
Salem, OR 97301

Organized as: Sole Proprietor

3 Air: Field Burning Pollution Control Facility Identification

6802 Ogle Street SE
Salem, Oregon 97301

The EQC certification will identify the facility as:

One – Used John Deere Tractor, Model 2950
Serial No. L02950T579161

4 Technical Information

Wendy Coates, David Elam's daugther, owns a portion of the family's farming operation. The farm owns 220 acres and leases 7,299 acres. The applicant cultivates perennial grass seed on the leased acreage, and provides a custom bailing and stacking service.

The applicant claims a used tractor to process and remove grass seed straw when used in conjunction with the New Holland baler claimed on application number 7047 also presented in this staff report and a tedder (not claimed). The tractor bales straw from the 750 acres identified as:

- 350 acres identified as:
  - Sections 29, 30. Township 9E, Range 3W
  - Sections 23, 25, 26, Township 9S, Range 4W
  - Sections 12, Township 10S, Range 3W
- 400 acres identified as:
  - Sections 9, 14, 21,Township 9S, Range 2W
  - Section 9, Township 8S, Range 2W
  - Sections 29, 30, Township 8S, Range 1W
  - Section 27, Township 8S, Range 2W

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the **new facility** is to reduce air pollution by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). The principal purpose must be the most important or primary purpose of the facility; the facility must have only one primary purpose.

> **Air pollution** is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application: The primary or most important purpose of the claimed facility is to provide an alternative to open field burning as a method for sanitizing grass seed acreage.

6 The facility accomplishes pollution control by a method in law.

ORS 468.150, OAR 340-016-0060 (4)(b)

Criteria: As an alternative to open field burning, the facility must reduce or eliminate:

a. Open field burning and it may include equipment, facilities, and land for gathering, densifying, handling, storing, transporting and incorporating grass straw or straw based products;

b. Air quality impacts from open field burning and it may include propane burners or mobile field sanitizers; or

c. Grass seed acreage that requires open field burning. The facility may include:

- Production of alternative crops that do not require open field burning;
- Production of rotation crops that support grass seed production without open field burning; or
- Drainage tile installations and new crop processing facilities.

Criteria Applied to this Application: The tractor is used to pull the balers and tedders that are part of the process that eliminates the need to open field burn.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria: The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.

Criteria Applied to this Application: The facility is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria	The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.
Criteria Applied to this Application	A paid invoice, made out to the applicant, document **$11,250** as the actual cost of the facility. The State of Oregon has not issued any Pollution Control Facilities Tax Credit Certificates to the applicant at this location. The claimed facility is **not a replacement** of these previously certified facilities. There are **no ineligible costs.**

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce air pollution to the entire time the facility is used for any purpose.
Criteria Applied to this Application	The Department determined the **42 percent** of the facility cost is allocable to pollution control. The applicant uses the tractor to operate a tedder and baler 187.5 hours a year on 750 acres. The standard average annual operating hours for the tractor is 450 hours; therefore, the applicant uses the tractor 42 percent (187.5/450 = 42%) of the time for an alternative to open field burning.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.
Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on May 25, 2005, and the certified facility cost does not exceed $200,000.

Reviewers: Maggie Vandehey
John Byers, ODA, Smoke Management Program

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7045, David Elam

1 Recommendation for Certification

According to ORS 468.165(6), **David Elam** timely filed application number **7045** on July 18, 2005. A Tax Credit application for this and four other facilities was originally filed on May 25, 2005. DEQ requested that an application be filed for each facility individually. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$43,722**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$15,303

2 Applicant Identification

David Elam
6802 Ogle Street SE
Salem, OR 97301

Organized as: Individual

3 Air: Field Burning Pollution Control Facility Identification

Same as the applicant's address.

The EQC certification will identify the facility as:

One – New Holland Baler, Model BB900, Serial No. 3105

4 Technical Information

David Elam, applicant, owns a custom baling and stacking operation and grows grass seed on his 220 acres and 7,299 leased acres. The applicant claims a used baler to process and remove grass seed straw when used in conjunction with the tractor claimed on application number 7009 also presented in this staff report. The equipment bales straw from the 650 acres identified as:

- Sections 30, 31, Township 8S, Range 2W
- Section 36, Township 8S, Range 3W
- Sections 9, 10, 16, Township 9S, Range 2W

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the **new facility** is to reduce air pollution by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). The principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

> Air pollution is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application

The primary or most important purpose of the claimed facility is to reduce air pollution by reducing the number of acres to be open-burned.

6 The facility accomplishes pollution control by a method in law.

ORS 468.150, OAR 340-016-0060 (4)(b)

Criteria

As an alternative to open field burning, the facility must reduce or eliminate:

a. Open field burning and it may include equipment, facilities, and land for gathering, densifying, handling, storing, transporting and incorporating grass straw or straw based products;

b. Air quality impacts from open field burning and it may include propane burners or mobile field sanitizers; or

c. Grass seed acreage that requires open field burning. The facility may include:

- Production of alternative crops that do not require open field burning;
- Production of rotation crops that support grass seed production without open field burning; or
- Drainage tile installations and new crop processing facilities.

Criteria Applied to this Application: The applicant reduces open field burning using the claimed baler in conjunction with a tractor.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria: The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.

Criteria Applied to this Application: The facility is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria: The certified cost is limited to the **actual cost** of the claimed facility and it excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Criteria Applied to this Application: A retail installment contract documents **$43,722** as the actual cost of the facility. There are **no ineligible costs**.

The State of Oregon has issued one Pollution Control Facilities Tax Credit Certificate to the applicant for a wood chipper prior to December 23, 2005. The claimed facility is **not a replacement** of any previously certified facilities.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce air pollution to the entire time the facility is used for any purpose.
Criteria Applied to this Application	The Department determined that the applicant uses the baler 100 percent of the time as an alternative to open field burning; therefore, the baler cost is **100 percent allocable** to pollution control.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on May 25, 2005, and the certified facility cost does not exceed $200,000.

Reviewers: Maggie Vandehey
John Byers, ODA, Smoke Management Program

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7046, David Elam

1 Recommendation for Certification

According to ORS 468.165(6), **David Elam** timely filed application number **7046** on July 18, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$43,722**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$15,303

2 Applicant Identification

David Elam
6802 Ogle Street SE
Salem, OR 97301

Organized as: Individual

3 Air: Field Burning Pollution Control Facility Identification

Same as the applicant's address.

The EQC certification will identify the facility as:

One – New Holland Baler, Model BB900, Serial Number 3114

4 Technical Information

David Elam, applicant, owns a custom baling and stacking operation and is a grass seed grower who owns 220 acres and leases 7,299 acres. The applicant claims a baler to process and remove grass seed straw when used in conjunction with the tractor claimed on application number 7008 also presented in this staff report. The equipment bales straw from the 650 acres identified as:

- Sections 23, 24, 26, 29, Township 9S, Range 3W
- Sections 3,4,9,16, Township 10S, Range 3W

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the **new facility** is to reduce air pollution by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). The principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

> Air pollution is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application

The primary or most important purpose of the claimed facility is to reduce air pollution by reducing the number of acres to be open-burned.

6 The facility accomplishes pollution control by a method in law.

ORS 468.150, OAR 340-016-0060 (4)(b)

Criteria

As an alternative to open field burning, the facility must reduce or eliminate:

a. Open field burning and it may include equipment, facilities, and land for gathering, densifying, handling, storing, transporting and incorporating grass straw or straw based products;

b. Air quality impacts from open field burning and it may include propane burners or mobile field sanitizers; or

c. Grass seed acreage that requires open field burning. The facility may include:

- Production of alternative crops that do not require open field burning;
- Production of rotation crops that support grass seed production without open field burning; or
- Drainage tile installations and new crop processing facilities.

Criteria Applied to this Application: The applicant reduces open field burning using the claimed baler in conjunction with a tractor.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria: The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.

Criteria Applied to this Application: The facility is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria: The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Criteria Applied to this Application: A retail installment contract documents **$43,722** as the actual cost of the facility. There are **no ineligible costs**.

The State of Oregon has issued one Pollution Control Facilities Tax Credit Certificate to the applicant for a wood chipper prior to December 23, 2005. The claimed facility is **not a replacement** of any previously certified facilities.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce air pollution to the entire time the facility is used for any purpose.
Criteria Applied to this Application	The Department determined that the applicant uses the baler 100 percent of the time as an alternative to open field burning; therefore, the baler cost is **100 percent allocable** to pollution control.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on May 25, 2005, and the certified facility cost does not exceed $200,000.

Reviewers: Maggie Vandehey
John Byers, ODA, Smoke Management Program

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7047, David Elam

1 Recommendation for Certification

According to ORS 468.165(6), **David Elam** timely filed application number **7047** on July 18, 2005. A Tax Credit application for this and four other facilities was originally filed on May 25, 2005. DEQ requested that an application be filed for each facility individually. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$43,722**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$15,303

2 Applicant Identification

David Elam
6802 Ogle Street SE
Salem, OR 97301

Organized as: Individual

3 Air: Field Burning Pollution Control Facility Identification

Same as the applicant's address.

The EQC certification will identify the facility as:

One – New Holland Baler, Model BB900, Serial No. 3090

4 Technical Information

David Elam, applicant, owns a custom baling and stacking operation and is a grass seed grower who owns 220 acres and leases 7,299 acres. The applicant claims a baler to process and remove grass seed straw when used in conjunction with the tractor claimed on application number 7015 also presented in this staff report. The tractor bales straw from the 750 acres identified as:

- 350 acres identified as:
  - Sections 29, 30. Township 9E, Range 3W
  - Sections 23, 25, 26, Township 9S, Range 4W
  - Sections 12, Township 10S, Range 3W
- 400 acres identified as:
  - Sections 9, 14, 21,Township 9S, Range 2W
  - Section 9, Township 8S, Range 2W
  - Sections 29, 30, Township 8S, Range 1W
  - Section 27, Township 8S, Range 2W

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the **new facility** is to reduce air pollution by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). The principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

> **Air pollution** is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Applied to this Application

The primary or most important purpose of the claimed facility is to reduce air pollution by providing an alternative to open field burning by baling an average of 750 acres of straw per year.

6 The facility accomplishes pollution control by a method in law.

ORS 468.150, OAR 340-016-0060 (4)(b)

Criteria — As an alternative to open field burning, the facility must reduce or eliminate:

a. Open field burning and it may include equipment, facilities, and land for gathering, densifying, handling, storing, transporting and incorporating grass straw or straw based products;

b. Air quality impacts from open field burning and it may include propane burners or mobile field sanitizers; or

c. Grass seed acreage that requires open field burning. The facility may include:

- Production of alternative crops that do not require open field burning;
- Production of rotation crops that support grass seed production without open field burning; or
- Drainage tile installations and new crop processing facilities.

Applied to this Application — The applicant reduces open field burning using the claimed baler in conjunction with a tractor.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria — The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.

Applied to this Application — As an air pollution control facility, the facility is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria — The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Applied to this Application — A retail installment contract documents **$43,722** as the actual cost of the facility. There are **no ineligible costs**.

The State of Oregon has issued one Pollution Control Facilities Tax Credit Certificate to the applicant for a wood chipper prior to December 23, 2005. The claimed facility is **not a replacement** of any previously certified facilities.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce air pollution to the entire time the facility is used for any purpose.
Applied to this Application	The Department determined that the applicant uses the baler 100 percent of the time as an alternative to open field burning; therefore, the baler cost is **100 percent allocable** to pollution control.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on May 25, 2005, and the certified facility cost does not exceed $200,000.

Reviewers: Maggie Vandehey
John Byers, ODA, Smoke Management Program

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7048, David Elam

1 Recommendation for Certification

According to ORS 468.165(6), **David Elam** timely filed application number **7048** on July 18, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$43,722**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$15,303

2 Applicant Identification

David Elam
6802 Ogle Street SE
Salem, OR 97301

Organized as: Individual

3 Air: Field Burning Pollution Control Facility Identification

Same as the applicant's address.

The EQC certification will identify the facility as:

One – New Holland Baler, Model BB990, Serial No. 3108

4 Technical Information

David Elam, applicant, owns a custom baling and stacking operation and is a grass seed grower who owns 220 acres and leases 7,299 acres. The applicant claims a baler to process and remove grass seed straw when used in conjunction with the tractor (not claimed for a tax credit.) The equipment bales straw from the 900 acres identified as:

- 170 acres
  - Section 1 in Township 9S, Range 2W
  - Sections 5 and 6 in Township 9S, Range 1W
- 420 acres
  - Sections 10 and 11 in Township 9S, Range 1E
  - Sections 22 and 27 in Township 9S, Range 1W
- 310 acres
  - Sections 3, 7, and 8 in Township 9S, Range 2W
  - Section 7 and 8 in Township 9S, Range 1W

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A), OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the **new facility** is to reduce air pollution by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). The principal purpose must be the most important or primary purpose of the facility; the facility must have only one primary purpose.

> Air pollution is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application

The primary or most important purpose of the claimed facility is to reduce air pollution by baling an average of 900 acres of straw per year, thereby reducing the number of acres that the applicant burns.

6 The facility accomplishes pollution control by a method in law.

ORS 468.150, OAR 340-016-0060 (4)(b)

Criteria

As an alternative to open field burning, the facility must reduce or eliminate:

a. Open field burning and it may include equipment, facilities, and land for gathering, densifying, handling, storing, transporting and incorporating grass straw or straw based products;

b. Air quality impacts from open field burning and it may include propane burners or mobile field sanitizers; or

c. Grass seed acreage that requires open field burning. The facility may include:

- Production of alternative crops that do not require open field burning;
- Production of rotation crops that support grass seed production without open field burning; or
- Drainage tile installations and new crop processing facilities.

Criteria Applied to this Application

The applicant reduces open field burning using the claimed baler in conjunction with a tractor.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria

The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.

Criteria Applied to this Application

The facility is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria

The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Criteria Applied to this Application	A retail installment contract documents **$43,722** as the actual cost of the facility. There are **no ineligible costs.** The State of Oregon has issued one Pollution Control Facilities Tax Credit Certificate to the applicant for a wood chipper prior to December 23, 2005. The claimed facility is **not a replacement** of any previously certified facilities.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce air pollution to the entire time the facility is used for any purpose.
Criteria Applied to this Application	The Department determined that the applicant uses the baler 100 percent of the time as an alternative to open field burning; therefore, the baler cost is **100 percent allocable** to pollution control.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on May 25, 2005, and the certified facility cost does not exceed $200,000.

Reviewers: Maggie Vandehey
John Byers, ODA, Smoke Management Program

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7053, LeRoy & Lowell Kropf

1 Recommendation for Certification

According to ORS 468.165(6), **LeRoy & Lowell Kropf** timely filed application number **7053** on July 29, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$277,361**
Percentage Allocable	X	**75%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$72,807

2 Applicant Identification

LeRoy & Lowell Kropf
24305 Powerline Rd
Harrisburg, OR 97446

Organized as: Partnership
Taxpayer ID: 93-0812235

3 Air: Field Burning Pollution Control Facility Identification

Isom Road,
Linn County, Oregon 97446

The EQC certification will identify the facility as:

One – Steel Storage Building,
200' x 128' x 42.6'

4 Technical Information

LeRoy and Lowell Kropf are grass-seed growers who own 60 acres and lease 940 acres. The growers have 718 acres under perennial grass-seed cultivation and 382 acres under annual grass-seed cultivation.

The co-applicants constructed a 128 foot by 200 foot all metal straw-storage building with 33-foot eaves and a 24 foot by 18 foot overhead door. The building is located on Tax Lot 501 in Section 34, Township 14S, Range 4W. The building is capable of storing 2,200 tons (1,170 acres) of grass seed straw. The co-applicants identified the following 880 acres of grass seed straw for storage in the building.

- 220 acres that the co-owners cultivate grass seed identified as:

  T14S R 4W Sec 34 - Tax Lot 500
  T14S R4W Sec 34 - Tax Lot 501
  T14S R4W Sec 26 - Tax Lot 500

- 360 acres of straw from 5M Farms in Harrisburg, Oregon, identified as:

  T14S R4W Sec 23 - Tax Lot 601
  T14S R4W Sec 23 - Tax Lot 600

- 300 acres of straw from Larry Isom's farm in Harrisburg, Oregon identified as:

  T14S R4W Sec 34 – Tax Lot 400
  T15S R4W Sec 03 – Tax Lot 300
  T14S R4W Sec 33 – Tax Lot 100

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the **new facility** is to reduce air pollution by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). The principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

> Air pollution is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application	The primary or most important purpose of the claimed facility is reduce air pollution by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060.

6 The facility accomplishes pollution control by a method in law.

ORS 468.150, OAR 340-016-0060 (4)(b)

Criteria

As an alternative to open field burning, the facility must **reduce** or eliminate:

a. **Open field burning** and it may include equipment, facilities, and land for gathering, densifying, handling, **storing**, transporting and incorporating grass straw or straw based products;

b. Air quality impacts from open field burning and it may include propane burners or mobile field sanitizers; or

c. Grass seed acreage that requires open field burning. The facility may include:

- Production of alternative crops that do not require open field burning;
- Production of rotation crops that support grass seed production without open field burning; or
- Drainage tile installations and new crop processing facilities.

Criteria Applied to this Application	The building stores an average of 2,200 tons of grass seed straw per year. The custom baler requires that farmers protect the straw from inclement weather to maintain its value until a market becomes available, thereby, reducing open field burning.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria	The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.
Criteria Applied to this Application	As an air pollution control facility, the facility is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1), ORS 468.155(3), OAR 340-016-0070(1) and -0070(3)

Criteria

The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

The regulations exclude over 40 items from the definition of a Pollution Control Facility. Items excluded from the definition are ineligible for certification. These items include, in pertenant part, maintenance, parking areas, roadways, and the replacement or reconstruction of all or part of a previously certified pollution control facility.

Criteria Applied to this Application

Invoices and canceled checks document **$280,061** as the actual cost of the facility. The co-applicants certify that 5M Farms and Larry Isom did not reimburse them for any part of the claimed facility.

Section	Description	Facility Cost	
		Claimed	$280,061
8	Ingress and Egress Construction Fabric		-2,700
		Recommended	**$277,361**

For determining if the facility is a replacement facility, the State of Oregon has issued **six** Pollution Control Facilities Tax Credit Certificates to the applicant at this location. In 1989, the applicants sanitized their grass-seed acreage using a 30-foot propane flamer, a tractor with a plow, and a flail chopper to facilitate removing and incorporating straw residue into the soil. In 1995, the applicant added a second tractor and a 21-foot disc to facilitate incorporating the residue into the soil and in 2004, they constructed a straw storage building. The tractors and implements provide field sanitation for 1,125 acres and the building stores 880 acres of straw. The EQC has allowed a grass seed grower to claim straw removal equipment, tillage equipment, and storage buildings to address the same acreage.

The co-applicants currently operate on 1,000 acres and the claimed facility stores the remaining 220 acres (1,000 – 880) of straw from their grass seed operation. Both 5M Farms and Larry Isom provided written agreements acknowledging the removal of their acreage from eligibility for the tax credit for storing straw. 5M Farms has not received a tax credit under the farm name, under the owner's name (Steven P. Malpass) or for the farm location at 25405 Malpass Road, Harrisburg, Oregon. Larry Isom has received one tax credit for implements.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(1)

Criteria

The certified percentage allocable is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of air pollution.

The following factors establish the portion of costs properly allocable to pollution control for facilities that cost more than $50,000.

a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;

b. The estimated annual percent return on the investment in the facility;

c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;

d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and

e. Any other relevant factors.

Criteria Applied to this Application

The certified facility cost **exceeds $50,000**. The Department determined that **75 percent** of the facility cost is allocable to pollution control.

By protecting the straw, a waste product to the grower, the building maintains the straw as a salable or useable commodity. The co-applicants; however, do not sell the straw stored in the building. The company that bales the co-applicant's straw receives the income from the straw in exchange for removing the straw from co-applicant's fields. The useful life of the facility is **20-years**. The applicant did not investigate an alternative technology.

The building is capable of holding 1,170 acres of straw and the co-applicants identified 880 acres for storage in the building; therefore, 75 percent (880/1,170 = 75%) of the building is allocable to pollution control.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria

The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.

Criteria Applied to this Application

The **maximum tax credit is 35 percent** because the applicant submitted the application on May 25, 2005, and the certified facility cost does not exceed $200,000.

11 The applicant may not be the taxpayer allowed the full credit.

ORS 315.304(4)

Criteria

The taxpayer who is allowed the credit must be:

a. The owner, including a contract purchaser, of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution; or

b. A person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property.

Criteria Applied to this Application

The EQC does not certify that the Department of Revenue would or would not allow the taxpayer to claim the credit. The DEQ; however, will report the information in this section to the Department of Revenue.

LeRoy and Lowell Kropf are grass seed growers. They constructed a straw storage building to hold 220 acres of straw from their grass seed operation. They are 100 percent owners of building that also stores 360 acres from 5M Farms' grass seed operation and 300 acres from Larry Isom's grass seed operation. 5M Farms and Larry Isom do not pay for storage but have a written agreement with the co-applicants for straw storage. The grass seed acreage requires the pollution control (straw removal) to minimize air pollution resulting from open field burning. Leroy and Lowell Kropf use 25 percent of the eligible building capacity (220/880).

Reviewers: Maggie Vandehey
John O. Byers, ODA, Smoke Management Program

Hazardous Waste

The Department recommends that the EQC certify two aqueous parts washer that use water and a special non-polluting detergent, rather than solvents, to clean auto parts. The claimed facilities meet the definition of hazardous waste facilities. The applicants use the equipment to prevent and reduce a substantial quantity of hazardous waste.

Summary of Hazardous Waste Pollution Control Facilities

App #	Applicant		Certified	% Allocable	Maximum Percent	Tax Credit
7062	M&M Automotive Service Inc		$2,995	100%	35%	$1,048
7080	USA Performance Auto Inc		$2,855	100%	35%	$999
2 Apps		**Sum**	**5,850**			**2,048**
		Average	2,925			1,024
		Minimum	2,855			999
		Maximum	2,995			1,048

References

ORS 468.155[6]

(1)(a) As used in ORS 468.155 to 468.190 and 468.962, unless the context requires otherwise, "pollution control facility" or "facility" means any land, structure, building, installation, excavation, machinery, equipment or device, or any addition to, reconstruction of or improvement of, land or an existing structure, building, installation, excavation, machinery, equipment or device reasonably used, erected, constructed or installed by any person if:

(A) The principal purpose of such use, erection, construction or installation is to comply with a requirement imposed by the Department of Environmental Quality, the federal Environmental Protection Agency ... to prevent, control or reduce ... hazardous waste ...; or

(B) The sole purpose of such use, erection, construction or installation is to prevent, control or reduce a substantial quantity of ... hazardous waste....

[6] Definitions for ORS 468.155 to 468.190 and 468.962

(b) Such prevention, control or reduction required by this subsection shall be accomplished by: ... (E) The treatment, substantial reduction or elimination of or redesign to treat, substantially reduce or eliminate hazardous waste as defined in ORS 466.005.

ORS 466.005 provides the following definition

(7) "Hazardous waste" does not include radioactive material or the radioactively contaminated containers and receptacles used in the transportation, storage, use or application of radioactive waste, unless the material, container or receptacle is classified as hazardous waste under paragraph (a), (b) or (c) of this subsection on some basis other than the radioactivity of the material, container or receptacle. Hazardous waste does include all of the following which are not declassified by the commission under ORS 466.015 (3):

(a) Discarded, useless or unwanted materials or residues resulting from any substance or combination of substances intended for the purpose of defoliating plants or for the preventing, destroying, repelling or mitigating of insects, fungi, weeds, rodents or predatory animals, including but not limited to defoliants, desiccants, fungicides, herbicides, insecticides, nematocides and rodenticides.

(b) Residues resulting from any process of industry, manufacturing, trade or business or government or from the development or recovery of any natural resources, if such residues are classified as hazardous by order of the commission, after notice and public hearing. For purposes of classification, the commission must find that the residue, because of its quantity, concentration, or physical, chemical or infectious characteristics may:

(A) Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or

(B) Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

(c) Discarded, useless or unwanted containers and receptacles used in the transportation, storage, use or application of the substances described in paragraphs (a) and (b) of this subsection.

OAR 340-016-0060 [7]

(4) Eligible Activities. The facility shall prevent, reduce, control, or eliminate: ... (c) Hazardous Waste. The facility shall treat, substantially reduce or eliminate hazardous waste as defined in ORS 466.005 ...

[7] Eligibility

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7062, M & M Automotive Service Inc

1 Recommendation for Certification

According to ORS 468.165(6), **M & M Automotive Service Inc.**, timely filed application number **7062** on August 15, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$2,995**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$1,048

2 Applicant Identification

M & M Automotive Service Inc
21135 SW TV Hwy
Aloha, OR 97006

Organized as: C Corp
Taxpayer ID: 93-0944172

3 Water Pollution Control Facility Identification

Same as the applicant's address.

The EQC certification will identify the facility as:

One – Renegade model TMB 4000 water based parts washer, Serial No. TMB 7862

4 Technical Information

M & M Automotive Service Inc., is an automotive repair business. The applicant claims an aqueous parts washer that uses water and a special non-polluting detergent, rather than solvents, to clean auto parts. The system traps oil in an absorbent pad and it uses a 100-micron cartridge filter to remove particles from the wash water.

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(B), OAR 340-016-0060 (2)(a)

Criteria	The **sole purpose**, meaning the exclusive purpose, of the facility is to prevent, control, or reduce a substantial quantity of hazardous waste pollution. **Hazardous waste** pollution is the presence of residues resulting from any process of industry, manufacturing, trade or business or government or from the development or recovery of any natural resources, if such residues cause or contribute to an increase in mortality or an increase in serious irreversible illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of. ORS 466.005.
Criteria Applied to this Application	The **sole purpose** of the parts washer is to reduce hazardous waste. The applicant replaced a part cleaner that used mineral spirits containing Toluene, Benzene, and Naphtha. Toluene is known to cause birth defects or other reproductive harm. Benzene is known to cause cancer. The new parts washer eliminates the use of solvents. The applicant disposes of the cartridge with NAPA and the oil pads with an oil recycler.

6 The facility accomplishes pollution control by a method in law.

ORS 468.155 (1)(b)(E)

Criteria	The prevention, control, or reduction must be accomplished by the treatment, substantial reduction, or elimination of or redesign to treat, substantially reduce or eliminate hazardous waste as defined in ORS 466.005.
Criteria Applied to this Application	The aqueous parts washer eliminates and replaces a part cleaner that used mineral spirits containing Toluene, Benzene, Naphtha and their associated hazardous waste stream.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria	The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, **466** and 467 and ORS chapters 468, 468A and 468B and rules thereunder.
Criteria Applied to this Application	The water based parts washer is necessary to satisfy the intents and purposes of ORS 466.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria	The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.
Criteria Applied to this Application	A paid invoice, made out to the applicant, documents **$2,995.00** as the actual cost of the facility. There are **no ineligible costs**.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce air pollution to the entire time the facility is used for any purpose.
Criteria Applied to this Application	The certified facility cost **does not exceed $50,000** and the applicant uses the facility **100 percent** of the time for pollution control. The State of Oregon has not issued any Pollution Control Facilities Tax Credit Certificates to the applicant or to this location. The claimed facility is **not a replacement** of any previously certified facility. There are **no ineligible costs.**

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on June 30, 2005, and the certified facility would not exceed $200,000.

Reviewer: Maggie Vandehey

00115

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7080, USA Performance Auto Inc

1 Recommendation for Certification

According to ORS 468.165(6), **USA Performance Auto Inc** timely filed application number **7080** on October 14, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$ 2,855**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$990

2 Applicant Identification

USA Performance Auto Inc
13925 SE Start
Portland, OR 97233

Organized as: C Corp
Taxpayer ID: 93-1260436

3 Hazardous Waste Pollution Control Facility Identification

Same as the applicant's address.

The EQC certification will identify the facility as:

One – TMB 4000 Renegade Parts Washer
Serial No. 6236

4 Technical Information

USA Performance Auto Inc., is an automotive repair business. The applicant claims an aqueous parts washer that uses water and a special non-polluting detergent, rather than solvents, to clean auto parts. The system traps oil in an absorbent pad and it uses a 100-micron cartridge filtration to remove particles from the wash water.

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(B); OAR 340-016-0060 (2)(a)

Criteria	The **sole purpose**, meaning the exclusive purpose, of the facility is to prevent, control, or reduce a substantial quantity of hazardous waste pollution. **Hazardous waste** pollution is the presence of residues resulting from any process of industry, manufacturing, trade or business or government or from the development or recovery of any natural resources, if such residues cause or contribute to an increase in mortality or an increase in serious irreversible illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of. ORS 466.005.
Criteria Applied to this Application	The sole purpose of the parts washer is to reduce hazardous waste. The applicant replaced a part cleaner that used mineral spirits containing Toluene, Benzene and Naphtha. Toluene is known to cause birth defects or other reproductive harm. Benzene is known to cause cancer. The new parts washer eliminates the use of solvents. The applicant disposes of the cartridges with NAPA and the oil pads with an oil recycler.

6 The facility accomplishes pollution control by a method in law.

ORS 468.155 (1)(b)(E)

Criteria	The prevention, control, or reduction must be accomplished by the treatment, substantial reduction, or elimination of or redesign to treat, substantially reduce or eliminate hazardous waste as defined in ORS 466.005.
Criteria Applied to this Application	The aqueous parts washer replaced a part cleaner that used mineral spirits containing Toluene, Benzene and Naphtha and the associated hazardous waste stream.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria	The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, **466** and 467 and ORS chapters 468, 468A and 468B and rules thereunder.
Criteria Applied to this Application	The water based parts washer is necessary to satisfy the intents and purposes of ORS 466.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria	The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.
Criteria Applied to this Application	An invoice marked paid and a canceled check document **$2,855** as the actual cost of the facility. The State of Oregon has not issued any Pollution Control Facilities Tax Credit Certificates to the applicant or to this location. The claimed facility is **not a replacement** of any previously certified facility. There are **no ineligible costs.**

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce water pollution to the entire time the facility is used for any purpose.
Criteria Applied to this Application	The certified facility cost **does not exceed $50,000** and the applicant uses the facility **100 percent** of the time for pollution control.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the facility cost does not exceed $200,000.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on June 30, 2005, and the certified facility would not exceed $200,000.

Reviewer: Maggie Vandehey

Material Recovery Facilities for Approval

The Department recommends the Commission approve the facilities presented in this attachment for certification as material recovery of solid waste facilities.

The claimed facilities meet the definition of material recovery facilities. They may include land, structures, buildings, installations, excavations, machinery, equipment or devices used to prevent, control or reduce solid waste. The sole purpose of these facilities is to reduce a substantial quantity of solid waste.

Summary of Material Recovery Facilities

App #	Applicant	Certified	% Allocable	Maximum Percent	Tax Credit
7049	Bors, Inc.	$411,535	73%	35%	$105,147
7051	East County Recycling Co.	$50,000	100%	35%	$1,750
7054	L & M K Enterprises, LLC	$70,449	100%	35%	$24,657
7070	Newberg Garbage Service Inc	$25,475	100%	35%	$8,916
4 Apps	**Sum**	**531,984**			**131,554**
	Average	177,328			43,851
	Minimum	50,000			1,750
	Maximum	411,535			105,147

References

ORS 468.155[8]

> Such prevention, control or reduction required by this subsection shall be accomplished by the use of a material recovery process which obtains useful material from material that would otherwise be, hazardous waste as defined in ORS 466.005, or used oil as defined in ORS 459A.555.

ORS 459.005 provides the following definition of solid waste.

> All useless or discarded putrescible and non-putrescible materials, including but not limited to garbage, rubbish, refuse, ashes, paper and cardboard, sewage sludge, septic tank and cesspool pumpings or other sludge, useless or discarded commercial, industrial, demolition and construction materials, discarded or abandoned vehicles or parts thereof,

[8] Definitions for ORS 468.155 to 468.190 and 468.962

discarded home and industrial appliances, manure, vegetable or animal solid and semisolid materials, dead animals and infectious waste as defined in ORS 459.386. ORS 459.005(24).

OAR 340-016-0060[9]

(4) Eligible Activities. The facility shall prevent, reduce, control, or eliminate hazardous waste, solid waste and used oil. The facility shall eliminate or obtain useful material from material that would otherwise be solid waste as defined in ORS 459.005, hazardous waste as defined in ORS 466.005, or used oil as defined in ORS 468.850. The facility shall produce an end product of utilization that is an item of real economic value and is competitive with an end product produced in another state. The facility shall produce the end product by mechanical processing, chemical processing; or through the production, processing, pre-segregation, or use of materials which:

(A) Have useful chemical or physical properties which may be used for the same or other purposes; or

(B) May be used in the same kind of application as its prior use without change in identity.

[9] Eligibility

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7049, Bors Inc.

1 Recommendation for Certification

According to ORS 468.165(6), **Bors Inc.** timely filed application number **7049** on July 15, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$411,535**
Percentage Allocable	X	**73%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$105,147

2 Applicant Identification

Bors, Inc.
PO Box 83169
Portland, OR 97283

Organized as: S Corp
Taxpayer ID: 41-2130067

3 Material Recovery Facility Identification

Rivergate Scrap Metal
9645 N Columbia Blvd
Portland, OR 97203

The EQC certification will identify the facility as:

One - New Harris Model 1005-4-12/9 Gorilla Baler, serial number 40089

One - New Krause 60" Steel Hinge Pan Conveyor

4 Technical Information

Bors, Inc., doing business as Rivergate Scrap Metal, collects scrap metal from independent haulers, individuals and from its drop-box collection. The company sorts and bales both ferrous and non ferrous metals.

The applicant claims a baler and a conveyor system to process and compress non-ferrous metal, including stainless steel, aluminum, copper, and brass for easy shipping. The applicant ships the baled metal to domestic and foreign markets.

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(B); OAR 340-016-0060 (2)(a)

Criteria

The **sole purpose**, meaning the exclusive purpose, of the facility is to prevent, control, or reduce a substantial quantity of solid waste, hazardous waste or used oil.

> **Solid waste** as defined by ORS 459.005: All useless or discarded putrescible and non-putrescible materials, including but not limited to garbage, rubbish, refuse, ashes, paper and cardboard, sewage sludge, septic tank and cesspool pumping or other sludge, useless or discarded commercial, industrial, demolition and construction materials, discarded or abandoned vehicles or parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semisolid materials, dead animals and infectious waste as defined by ORS 459.386(b) excludes "Materials used for fertilizing or for other productive purposes or which are salvageable as such material are used on land in agricultural operations and the growing or harvesting of crops and the raising of animals."

Criteria Applied to this Application

The claimed facility reduces, or controls a substantial quantity of mixed wastes that includes ferrous and non-ferrous metals. On the average, the applicant will process approximately **2,080 tons per year** of waste material through the baler system.

6 The facility accomplishes pollution control by a method in law.

ORS 468.155 (1)(b)(D), OAR 340-016-0010(7), OAR 340-016-0060(4)(e)

Criteria

The claimed facility prevents, controls, or **reduces waste material** by using a material recovery process. The process obtains useful material from solid waste, hazardous waste or used oil.

> **Material recovery** means any process, such as **pre-segregation**, for obtaining materials from solid waste, hazardous waste or used oil. The recovered material shall still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for

the same or other purpose. The recovered material shall **have useful physical or chemical properties** that yield a competitive product of real economic value. The material recovery process does not include processes:

a. In which the major purpose is the production of fuel from solid waste, hazardous waste or used oil which can be utilized for heat content or other forms of energy; or

b. That burns waste to produce energy or to reduce the amount of waste. However, it does not eliminate from eligibility a pollution control device associated with a process that burns waste if such device is otherwise eligible for Pollution Control Tax Credit under these rules.

Criteria Applied to this Application: The applicant collects, separates and bales ferrous and non-ferrous metals from independent collectors, from individual and the applicant's drop-box customers. The company then transports the baled metals to mills for incorporation into products that have a competitive end-use.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria: The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, **459A**, 466 and 467 and ORS chapters 468, 468A and 468B and rules there under.

Criteria Applied to this Application: The facility is necessary to satisfy the intents and purposes of reuse and recycling. ORS 459A.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria: The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Criteria Applied to this Application: Paid invoices, made out to the applicant, document **$411,535** as the actual cost of the facility. There are **no ineligible costs**.

The State of Oregon has not issued any Pollution Control Facilities Tax Credit Certificates to the applicant but they have issued a certificate to Bors Rivergate, LLC, and a certificate to Pape' Bors, Inc. The claimed facility is **not a replacement** of any previously certified facility.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(1), OAR 340-016-0075(4)

Criteria

The certified percentage allocable is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of solid waste, hazardous waste or used oil.

The following factors establish the portion of costs properly allocable to pollution control for facilities that cost more than $50,000.

a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;

b. The estimated annual percent return on the investment in the facility;

c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;

d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and

e. Any other relevant factors.

A **facility is integral to the operation of the applicant's business** when the business is unable to operate or is only able to operate at reduced income levels, without the claimed pollution control facility as determined by the Commission. Such instances include, but are not limited to, commercial solid waste and hazardous waste landfills, solid and hazardous waste recycling businesses, and environmental service providers. Factors that the Department may use to determine whether a pollution control facility is integral to the operation of the business include:

a. The facility represents assets that exceed 25 percent of the total assets of the business; or

b. The facility was erected, constructed, or installed in response to market demand for such pollution control facilities. This may occur as the result of requirements imposed by the Department, the Federal Environmental Protection Agency or regional air pollution authority, on parties unaffiliated with the applicant; or

c. Erection, construction, or installation of the facility and any previously certified pollution control facilities, allows the applicant to **generate gross revenues at least 50 percent greater** than would have been generated in the absence of the claimed facility and any previously certified pollution control facilities; or

d. The applicant's **operating expenses** related to operation of the facility and any previously certified pollution control facilities **are at least 50 percent of the operating expenses** of the applicant's business.

Criteria Applied to this Application

The certified facility cost **exceeds $50,000**. The Department determined that **73 percent** of the facility cost is allocable to material recovery.

The claimed facility generates gross revenues at least 50 percent greater than they would have without the claimed equipment and incurs operating expenses for the equipment that represent more than the operating expenses of the applicant's business. The Department calculated the percentage of the facility cost allocable to pollution control according to the integral method in OAR 340-016-0075(4) while considering the factors a through e above, a **10-year** useful life, and the National ROI of 6.7% for the facility's construction **completion year 2004** as shown on the attached Integral Worksheet.

The Department used North American Industry Classification System (NAICS 423930) for Recyclable Material Merchant Wholesalers, which corresponds to code 5093 in the Standard Industrial Classification (SIC) system for completing the Integral Worksheet. (Classifying industries shifted away from using SIC to NAICS. EQC rule; however, still references SIC.)

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(d)

Criteria

The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the facility is used for material recovery or recycling.

Criteria Applied to this Application

The **maximum tax credit is 35 percent** because the applicant submitted the application on July 15, 2005, and the applicant uses the facility in a material recovery process.

Reviewer: Maggie Vanderhey

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7051, East County Recycling Company

1 Recommendation for Certification

According to ORS 468.165(6), **East County Recycling Company** timely filed application number **7051** on July 15, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$50,000**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$17,500

2 Applicant Identification

East County Recycling Company
PO Box 20096
Portland, OR 97294

Organized as: C Corp
Taxpayer ID: 93-0915760

3 Material Recovery Facility Identification

East County Recycling Company
12409 NE San Rafael
Portland, OR 97230

The EQC certification will identify the facility as:

One - Used Komatsu Wheel Loader, Model 180-03L-A80025

4 Technical Information

East County Recycling is a material recovery facility that accepts recyclable materials from private and commercial haulers. The company separates material such as wood, metal, cardboard from the incoming waste stream. The applicant claims a loader to spread commingled materials for easy sorting and to move the sorted material to the appropriate bins.

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(B); OAR 340-016-0060 (2)(a)

Criteria

The **sole purpose**, meaning the exclusive purpose, of the facility is to prevent, control, or reduce a substantial quantity of solid waste, hazardous waste, or used oil.

> **Solid waste** as defined by ORS 459.005: All useless or discarded putrescible and non-putrescible **materials**, including but not limited to garbage, rubbish, **refuse**, ashes, paper and cardboard, sewage sludge, septic tank and cesspool pumping or other sludge, useless or discarded commercial, industrial, demolition and construction materials, discarded or abandoned vehicles or parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semisolid materials, dead animals and infectious waste as defined by ORS 459.386(b) excludes "Materials used for fertilizing or for other productive purposes or which are salvageable as such material are used on land in agricultural operations and the growing or harvesting of crops and the raising of animals."

Criteria Applied to this Application

The claimed facility is part of a process that prevents between 600,000 and 700,000 tons of material a year from landfill disposal.

6 The facility accomplishes pollution control by a method in law.

ORS 468.155 (1)(b)(D), OAR 340-016-0010(7), OAR 340-016-0060(4)(e)

Criteria

The claimed facility prevents, controls, or reduces waste material by using a material recovery process. The process obtains useful material from material that would otherwise be solid waste, hazardous waste or used oil.

> **Material recovery** means any process, such as **pre-segregation**, for obtaining materials from solid waste, hazardous waste or used oil. The recovered material shall still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for the same or other purpose. The recovered material shall have useful physical or chemical properties that yield a competitive product of real economic value. The material recovery process does not include processes:
>
> a. In which the major purpose is the production of fuel from solid waste, hazardous waste or used oil which can be utilized for heat content or other forms of energy; or
>
> b. That burns waste to produce energy or to reduce the amount of waste. However, it does not eliminate from eligibility a pollution control device associated with a process that burns waste if such device is otherwise eligible for pollution control tax credit under these rules.

Criteria Applied to this Application	The claimed facility sorts commingled materials into bins. The applicant then sells the material to mills for use as feed stock in the manufacture of a useful products. The applicant disposes of the non-marketable materials in the landfill.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria	The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, **459A**, 466 and 467 and ORS chapters 468, 468A and 468B and rules there under.
Criteria Applied to this Application	The claimed facility is necessary to satisfy the intents and purposes of ORS 459A regarding reuse and recycling.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria	The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.
Criteria Applied to this Application	A paid bill-of-sale, made out to the applicant, documents **$50,000** as the actual cost of the facility. There are **no ineligible costs**. The State of Oregon has issued **six** Pollution Control Facilities Tax Credit Certificates to the applicant and four to this location. The Commission certified two wheel loaders to the applicant at this location and they are still in use; therefore, the facility is **not a replacement** of these previously certified facilities.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduces solid waste, hazardous waste or used oil bears to the entire time the facility is used for any purpose.

Criteria Applied to this Application	The applicant uses the claimed facility 100 percent of the time for material recovery activities; therefore, the facility is **100 percent** allocable to pollution control.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(d)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the facility is used for material recovery or recycling.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on July15, 2005, and the applicant uses the facility in a material recovery process.

Reviewer: Maggie Vandehey

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7054, L & M K Enterprises

1 Recommendation for Certification

According to ORS 468.165(6), **L & M K Enterprises** timely filed application number **7054** on July 29, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$70,449**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$24,657

2 Applicant Identification

L&MK Enterprises
PO Box 17669
Salem, OR 97305-7669

Organized as: LLC
Taxpayer ID: 20-0215126

3 Material Recovery Facility Identification

Pacific Sanitation
3475 Blossom Dr NE
Salem, OR 97305

The EQC certification will identify the facility is:

782 **95-gallon blue wheeled carts with lids, serial numbers 4801 to 5584**
800 **95-gallon green wheeled carts with lids, serial numbers 3541 to 4340**

4 Technical Information

L & M K Enterprises, LLC, leases commercial machinery and equipment primarily to recycling and garbage collection companies. The applicant leases the 1,582 carts to Pacific Sanitation Inc., for use with the lessee's customers in Jefferson, Oregon.

Pacific Sanitation Inc., placed the 782 blue carts with residential customers to collect commingled recyclable materials. The lessee placed the 800 green carts with residential customers to collect yard debris

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(B); OAR 340-016-0060 (2)(a)

Criteria

The **sole purpose**, meaning the exclusive purpose, of the facility is to prevent, control, or reduce a substantial quantity of solid waste, hazardous waste, or used oil.

> **Solid waste** as defined by ORS 459.005: All useless or **discarded** putrescible and non-putrescible **materials**, including but not limited to garbage, rubbish, refuse, ashes, paper and cardboard, sewage sludge, septic tank and cesspool pumping or other sludge, useless or discarded commercial, industrial, demolition and construction materials, discarded or abandoned vehicles or parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semisolid materials, dead animals and infectious waste as defined by ORS 459.386(b) excludes "Materials used for fertilizing or for other productive purposes or which are salvageable as such material are used on land in agricultural operations and the growing or harvesting of crops and the raising of animals."

Criteria Applied to this Application

The sole purpose of the claimed facility is to prevent approximately **122 tons** of discarded materials and **316 tons** of wood waste from landfill disposal each year.

6 The facility accomplishes pollution control by a method in law.

ORS 468.155 (1)(b)(D), OAR 340-016-0010(7), OAR 340-016-0060(4)(e)

Criteria

The claimed facility prevents, controls, or reduces waste material by using a material recovery process. The process obtains useful material from material that would otherwise be solid waste, hazardous waste or used oil.

> **Material recovery** means any process, such as **pre-segregation**, for obtaining materials from solid waste, hazardous waste or used oil. The recovered material shall still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for

the same or other purpose. The recovered material shall have useful physical or chemical properties that yield a competitive product of real economic value. The material recovery process does not include processes:

a. In which the major purpose is the production of fuel from solid waste, hazardous waste or used oil which can be utilized for heat content or other forms of energy; or

b. That burns waste to produce energy or to reduce the amount of waste. However, it does not eliminate from eligibility a pollution control device associated with a process that burns waste if such device is otherwise eligible for pollution control tax credit under these rules.

Criteria Applied to this Application

Pacific Sanitation collects commingled recyclable materials and transports them to Marion Resource Recovery Facility for additional sorting. The materials will be shipped to the appropriate mills for incorporation into useful products. Pacific Sanitation collects and delivers the yard-debris to Wood Waste Reclamation in Aumsville, Oregon for composting.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria

The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, 468A and 468B and rules there under.

Criteria Applied to this Application

As a material recovery facility, by definition, is necessary to satisfy the intents and purposes of ORS 459A regarding reuse and recycling.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria

The certified cost is limited to the **actual cost** of the claimed facility and it excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Criteria Applied to this Application

Paid invoices, made out to the applicant, document **$70,449** as the actual cost of the facility.

The State of Oregon has issued one Pollution Control Facilities Tax Credit Certificate to the lessor and eight to the lessee but none for placement in Jefferson, Oregon. The claimed facility is **not a replacement** of any previously certified facility. There are **no ineligible costs.**

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(1)

Criteria

The certified percentage allocable is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of solid waste, hazardous waste or used oil.

The following factors establish the portion of costs properly allocable to pollution control for facilities that cost more than $50,000.

a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;

b. The estimated annual percent return on the investment in the facility;

c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;

d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and

e. Any other relevant factors.

Criteria Applied to this Application

The certified facility cost **exceeds $50,000**. DEQ determined that **100 percent** of the facility cost is allocable to material recovery.

The applicant and the Department calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering factors a through e above and a **7-year** useful life. The claimed facility does not produce a salable or useable commodity, and there is no revenue or cost savings associated with it. The expenditures exceed the revenue; therefore, the resulting Facility ROI is less than the National ROI for 2004, the facility's construction completion year. The applicant did not investigate an alternative technology.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(d)

Criteria

The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the facility is used for material recovery or recycling.

Criteria Applied to this Application

The **maximum tax credit is 35 percent** because the applicant submitted the application on July 29, 2005, and the applicant uses the facility in a material recovery process.

Reviewer: Maggie Vandehey

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7070, Newberg Garbage Service Inc.

1 Recommendation for Certification

According to ORS 468.165(6), **Newberg Garbage Service Inc.** timely filed application number **7070** on August 29, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$25,475**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$8,916

2 Applicant Identification

Newberg Garbage Service Inc.
PO Box 1000
Newberg, OR 97132

Organized as: S Corp
Taxpayer ID: 93-0625804

3 Material Recovery Facility Identification

Newberg Garbage Service Inc.
2904 S Wynooski Rd
Newberg, OR 97132

The EQC certification will identify the facility as:

- **274 95 gallon roll carts for commingled recycling serial numbers 9009715 to 9009854 and 010485 to 9010618**
- **265 95 gallon roll carts for yard debris recycling serial numbers 9009959 to 9010098 and 9010744 to 9010868**
- **One Model 68 5-yard rear load container for cardboard, serial number 187688**
- **One Model 69 6-yard rear load container for cardboard, serial number 187689**

4 Technical Information

Newberg Garbage Service Inc., provides garbage and recycling service for the City of Newberg, the City of Dundee, East Yamhill County and portions of Washington County.

The applicant claims 539 95-gallon carts placed with residential customers to collect commingled recyclable material (274 carts) and yard debris (265 carts). Addionally, the applicant claims two containers for collecting cardboard from new commercial customers.

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(B); OAR 340-016-0060 (2)(a)

Criteria

The **sole purpose**, meaning the exclusive purpose, of the facility is to prevent, control, or reduce a substantial quantity of solid waste, hazardous waste, or used oil.

> **Solid waste** as defined by ORS 459.005: All useless or discarded putrescible and non-putrescible materials, including but not limited to garbage, rubbish, refuse, ashes, paper and cardboard, sewage sludge, septic tank and cesspool pumping or other sludge, useless or discarded commercial, industrial, demolition and construction materials, discarded or abandoned vehicles or parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semisolid materials, dead animals and infectious waste as defined by ORS 459.386(b) excludes "Materials used for fertilizing or for other productive purposes or which are salvageable as such material are used on land in agricultural operations and the growing or harvesting of crops and the raising of animals."

Criteria Applied to this Application

The sole purpose of the claimed facility is to prevent approximately **106 tons** of discarded materials, **138 tons** of yard debris and **14.5** tons of cardboard from landfill disposal each year.

6 The facility accomplishes pollution control by a method in law.

ORS 468.155 (1)(b)(D), OAR 340-016-0010(7), OAR 340-016-0060(4)(e)

Criteria

The claimed facility prevents, controls, or reduces waste material by using a material recovery process. The process obtains useful material from material that would otherwise be solid waste, hazardous waste or used oil.

> **Material recovery** means any process, such as **pre-segregation**, for obtaining materials from solid waste, hazardous waste or used oil. The recovered material shall still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for the same or other purpose. The recovered material shall have useful physical or chemical properties that yield a competitive product of real

economic value. The material recovery process does not include processes:

a. In which the major purpose is the production of fuel from solid waste, hazardous waste or used oil which can be utilized for heat content or other forms of energy; or

b. That burns waste to produce energy or to reduce the amount of waste. However, it does not eliminate from eligibility a pollution control device associated with a process that burns waste if such device is otherwise eligible for Pollution Control Tax Credit under these rules.

Criteria Applied to this Application

Newberg Garbage Service Inc., collects commingled recyclable materials and transports it to a material recovery facility for additional sorting. The materials will be shipped to the appropriate mills for incorporation into useful products. Pacific Sanitation collects the yard-debris and delivers it to Wood Waste Reclamation in Aumsville, Oregon for composting.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria

The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, **459A**, 466 and 467 and ORS chapters 468, 468A and 468B and rules there under.

Criteria Applied to this Application

The facility is necessary to satisfy the intents and purposes of ORS 459A regarding reuse and recycling.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria

The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Criteria Applied to this Application

Paid invoices, made out to the applicant, document **$25,475** as the actual cost of the facility.

The State of Oregon has not issued any Pollution Control Facilities Tax Credit Certificates to the applicant at this location. The claimed facility is **not a replacement** of any previously certified facility. There are **no ineligible costs.**

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduces solid waste, hazardous waste or used oil bears to the entire time the facility is used for any purpose.
Criteria Applied to this Application	The certified facility cost **does not exceed $50,000** and the applicant uses the facility **100 percent** of the time for pollution control.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(d)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the facility is used for material recovery or recycling.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on August 29, 2005, and uses the facility in a material recovery process.

Reviewer: Maggie Vandehey

Nonpoint Source Pollution Control Facilities for Approval

The Department recommends the Commission approve the following applications for certification as nonpoint source pollution control facility. The facility may include land, structures, buildings, installations, excavations, machinery, equipment or devices used to prevent, control or reduce nonpoint source pollution as defined by the EQC.

Summary of NPS Pollution Control Facilities

App #	Applicant		Certified	% Allocable	Maximum Percent	Tax Credit
6981	Starvation Farms		$40,487	100%	35%	$14,170
6985	Martin Richards		$8,291	100%	35%	$2,902
2 Apps		**Sum**	**48,778**			**17,072**
		Average	24,389			8,536
		Minimum	8,291			2,902
		Maximum	40,487			14,170

References

ORS 468.155[10]

(2)(a) As used in ORS 468.155 to 468.190, "pollution control facility" or "facility" includes a nonpoint source pollution control facility.

(b) As used in this subsection, "nonpoint source pollution control facility" means a facility that the Environmental Quality Commission has identified by rule as reducing or controlling significant amounts of nonpoint source pollution.

[10] Definitions for ORS 468.155 to 468.190 and 468.962

OAR 340-016-0010[11]

(8) "Nonpoint Source Pollution" means pollution that comes from numerous, diverse, or widely scattered sources of pollution that together have an adverse effect on the environment. The meaning includes:

(a) The definition provided in OAR 340-041-0006(17); or

(b) Any sources of air pollution that are:

(A) Mobile sources that can move on or off roads; or

(B) Area sources.

OAR 340-016-0060[12]

(4) Eligible Activities. The facility shall prevent, reduce, control, or eliminate: ... (h) Nonpoint Source Pollution. Pursuant to ORS 468.155(2)(b), the EQC has determined that the following facilities reduce, or control significant amounts of nonpoint source pollution:

(A) Any facility that implements a plan, project, or strategy to reduce or control nonpoint source pollution as documented:

(i) By one or more partners listed in the Oregon Nonpoint Source Control Program Plan; or

(ii) In a Federal Clean Air Act State Implementation Plan for Oregon; or

(B) Any facility effective in reducing nonpoint source pollution as documented in supporting research by:

(i) Oregon State University, Agricultural Experiment Station; or

(ii) The United States Department of Agriculture, Agriculture Research Service; or

(iii) The Oregon Department of Agriculture; or

(C) Wood chippers used to reduce openly burned woody debris; or

(D) The retrofit of diesel engines with a diesel emission control device, certified by the U.S. Environmental Protection Agency.

[11] Definitions
[12] Eligibility

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 6981, Starvation Farms

1 Recommendation for Certification

According to ORS 468.165(6), **Starvation Farms** timely filed application number **6981** on April 11, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$40,487**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$14,170

2 Applicant Identification

Starvation Farms
7269 Little Juniper Lane
Lexington, OR 97839

Organized as: Partnership
Taxpayer ID: 93-0936632

3 Nonpoint Source Pollution Control Facility Identification

Same as the applicant's address.

The EQC certification will identify the facility as:

One - 1998 John Deere model 1810 Airseeder, serial # H01810x670177 with Packer wheels, serial no. H2321

4 Technical Information

Starvation Farms, a family partnership, operates on 5850 acres in Morrow County. The farm plants soft white wheat, hard red winter wheat, dark northern spring wheat, and some oats.

The applicant purchased a used airseeder and installed 51 double shoot openers at 14 inch spacing on a 59 foot arm. The opener delivers a fertilizer shot deeper in the soil and a seed shot closer to the surface. The claimed facility operates in Township 1N, Ranges 25E and 26E, Sections 7, 8, 9, 12, 13, 14, 19, 24, ans 34.

The farm uses GPS units in conjunction with direct seed equipment to prevent overlap and reduce the use of chemicals, fertilizer, seed and water used in spraying.

5 The facility has a pollution control purpose.

ORS 468.155 (2); OAR 340-016-0060 (2)(a), OAR 340-041-0006(17)

Criteria

The purpose of the claimed facility must be to prevent, control, or reduce a substantial quantity of Nonpoint Source Pollution (NPS).

Nonpoint source pollution means pollution that comes from numerous, diverse, or widely scattered sources of pollution that together have an adverse effect on the environment. The meaning includes:

a. The definition provided in OAR 340-041-0006(17); or

b. Any sources of air pollution that are:

- Mobile sources that can move on or off roads; or
- Area sources.

Water pollution means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof. ORS 468B.005

Air pollution is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Facility

The airseeder retains plant residue on the soil surface reducing soil loss through water and wind erosion. This reduces sediment buildup in the rivers and dust in Umatilla and Morrow counties. Less disturbance of the soil means more carbon storage in the soil and reduces the amount of green house gasses (CO_2) released into the atmosphere.

6 The facility accomplished the pollution control by a method in law.

ORS 468.155 (2)(b), OAR 340-016-0060 (4)(h)(B)(i)

Criteria

Nonpoint source pollution must be reduced or eliminated through one of the methods the EQC determined to reduce, or control significant amounts of nonpoint source pollution. ORS 468.155(2)(b).

This includes:

a. Any facility that implements a plan, project, or strategy to reduce or control nonpoint source pollution as documented by one or more partners listed in the Oregon Nonpoint Source Control Program Plan.

b. Any facility effective in reducing nonpoint source pollution as documented in supporting research by:

- Oregon State University, Agricultural Experiment Station; or
- The United States Department of Agriculture, Agriculture Research Service; or
- The Oregon Department of Agriculture.

Nonpoint source pollution means pollution that comes from numerous, diverse, or widely scattered sources of pollution that together have an adverse effect on the environment.

Criteria Applied to this Application

Oregon State University, Morrow County Extension Office, provided the attached letter detailing the benefits of using a no-till cropping system in reducing nonpoint source pollution.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria

The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and **468B** and rules thereunder.

Criteria Applied to this Application	The facility is necessary to satisfy the intents and purposes of ORS 468A and ORS 468B.

8 The actual facility cost represents the applicants own cash investment.

ORS 468.170(1)

Criteria	The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.
Criteria Applied to this Application	Paid invoices, made out to the applicant, document **$40,487** as the actual cost of the facility. There are **no ineligible costs**. The State of Oregon has not issued any Pollution Control Facilities Tax Credit Certificates to the applicant at this location. The claimed facility is **not a replacement** of a previously certified facility.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(1), ORS 468.190 (3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce water pollution to the entire time the facility is used for any purpose.
Criteria Applied to this Application	The certified facility cost **does not exceed $50,000** and the applicant uses the facility **100 percent** of the time for pollution control.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(d)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the facility controls nonpoint source pollution.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on April 11, 2005, and the facility is defined as a nonpoint source pollution control facility.

Reviewer: Maggie Vandehey

00147

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 6985, Martin Richards

1 Recommendation for Certification

According to ORS 468.165(6), **Martin Richards** timely filed application number **6985** on April 15, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$8,291**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$2,902

2 Applicant Identification

Martin Richards
3454 SE Baldwin Drive
Madras, OR 97741

Organized as: Individual
Taxpayer ID:

3 Nonpoint Source Pollution Control Facility Identification

Same as the applicant's address.

The EQC certification will identify the facility as:

360 feet of 18-inch piping and 1,110 feet of 12-inch piping, various mainifolds and fittings, a settling pond, a wetlands/filter strips

4 Technical Information

Martin Richards, doing business as Fox Hollow Ranch, raises peppermint for oil, Kentucky bluegrass seed, hybid carrot seed, grain and hay on approximately 400 irrigated acres within the North Unit Irrigation District in Jefferson County.

The applicant installed irrigation canal piping, a sediment pond, a filter strip and wildlife enhancement as designed by Natural Resource Conservation Service (NRCS) and supported by the Willow Creek Watershed Council. The claimed facility is located on Tax lots 100 and 200 located in Section 30, Township 11S, Range 14E.

The project includes 360 feet of 18 inch piping that replaced an open irrigation canal. A series of minifolds direct water to a pond for irrigation use or for storage or into 1,100 feet of 12 inch pipe to direct overflow into Willow Creek. The pond allows any sediment in the water to settle. The applicant also installed permanent wildlife cover on approximately four and one-half acres; one-half in dryland cover and one-half installed as wetland/filter strip.

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(B); OAR 340-016-0060 (2)(a), OAR 340-041-0006(17)

Criteria

The **sole purpose**, meaning the 'exclusive' purpose, of the claimed facility must be to prevent, control, or reduce a substantial quantity of Nonpoint Source Pollution (NPS).

Nonpoint source pollution means pollution that comes from numerous, diverse, or widely scattered sources of pollution that together have an adverse effect on the environment. The meaning includes:

a. The **definition provided in OAR 340-041-0006(17)**; or

b. Any sources of air pollution that are:

- Mobile sources that can move on or off roads; or
- Area sources.

Nonpoint sources refer to diffuse or unconfined sources of pollution that can cause waste to enter into public waters.

Water pollution means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial,

agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof. ORS 468B.005

Criteria Applied to this Application

The project reduces nonpoint source pollution (sediment, pesticides and nutrients) entering Willow Creek. The project provides additional water quantity, weed control, and wildlife habitate enhancement benefits. The Jefferson Soil and Water Conservation District stated that these benefits did not add to the cost of the project or influence the design.

6 The facility accomplishes pollution control by a method in law.

ORS 468.155 (2)(b), OAR 340-016-0060 (4)(h)(B)(i)

Criteria

Nonpoint source pollution must be reduced or eliminated through one of the methods the EQC determined to reduce, or control significant amounts of nonpoint source pollution. ORS 468.155(2)(b).

This includes:

a. Any facility that implements a plan, project, or strategy to reduce or control nonpoint source pollution as documented by one or more partners listed in the Oregon Nonpoint Source Control Program Plan.

b. Any facility effective in reducing nonpoint source pollution as documented in supporting research by:

- Oregon State University, Agricultural Experiment Station; or
- The United States Department of Agriculture, Agriculture Research Service; or
- The Oregon Department of Agriculture.

Criteria Applied to this Application

The project implements an NRCS plan to reduce nonpoint source pollution. Additionally, it implements tailwater rules in the the Middle Deschutes Agricultural Water Quality Management Area Plan.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria

The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, 468A and **468B** and rules thereunder.

Criteria Applied to this Application	As a water pollution control facility, the facility is necessary to satisfy the intents and purposes of ORS 468B.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria	The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.
Criteria Applied to this Application	Two Oregon Watershed Enhancement Board (OWEB) Small Grants funded claimed facility. Deschutes Resource Conservancy (DRC) and the landowner's in-kind contribution was $9,046. The landowner's contribution includes $755, which the applicant subtracted from the claimed facility cost prior to submitting the application. Jefferson Soil and Water Conservation District was the fiscal agent for the project; they reviewed all bills and provided documentation for **$8,291** as the portion of the project that is eligible for the pollution control facility tax credit. There are **no ineligible costs**. The State of Oregon has not issued any Pollution Control Facilities Tax Credit Certificates to the applicant at this location. The claimed facility is **not a replacement** facility.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce water pollution to the entire time the facility is used for any purpose.
Criteria Applied to this Application	The certified facility cost **does not exceed $50,000** and the applicant uses the facility **100 percent** of the time for pollution control.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(d)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002, and December 31, 2008, inclusively, and the facility controls nonpoint source pollution.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on April 15, 2005, and the facility is defined as a nonpoint source pollution control facility.

Reviewer: Maggie Vandehey

Underground Storage Tanks

The Department recommends that the Environmental Quality Commission approve **one** underground storage tank system. The principal purpose of the upgrade to the retail gas station is to meet the federal Environmental Protection Agency's requirements for underground storage tanks and DEQ's requirements under OAR Chapter 340, Division 150.

Summary of Underground Storage Tank System

App #	Applicant	Certified	% Allocable	Maximum Percent	Tax Credit
6971	Safeway Fuel #2627	$66,764	100%	35%	$23,367

1 Apps

References

Underground and aboveground storage tanks qualify under both air and water pollution control sections of the pollution control facilities tax credit statutes. The definitions of air and water pollution are behind their respective tabs in this attachment.

OAR 340-016-0060[13]

> (4) Eligible Activities. The facility shall prevent, reduce, control, or eliminate: ... g) Spills or Unauthorized Releases. The facility shall be used to detect, defer or prevent spills or unauthorized releases. This does not include any facility installed, constructed or used for cleanup after a spill or unauthorized release has occurred ...

[13] Eligibility

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 6971, Safeway Fuel #2627

1 Recommendation for Certification

According to ORS 468.165(6), **Safeway Fuel #2627** timely filed application number **6971** on April 1, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$66,764**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$23,367

2 Applicant Identification

Safeway Fuel #2627
16300 SE Evelyn
Clackamas, OR 97015

Organized as: S Corp
Taxpayer ID: 94-3019135

3 Underground Storage Tank Pollution Control Facility Identification

Facility ID 4-12171-2004-OPER
3250 Leif Erickson Drive
Astoria, OR 97103

The EQC certification will identify the facility as:

Protected underground petroleum storage tank system

4 Technical Information

Safeway Fuel #2627 is a retail gasoline and diesel station. The applicant installed two double wall steel/fiberglass tanks with a spill containment basin along with 750 feet of double wall flexible piping. Each tank holds 20,000 gallons of fuel. One is a dual compartment tank and the other is a single compartment tank. Each tank has a monitoring well, an automatic tank gauge with leak detection and an overfill alarm, sumps and automatic shutoff valves. The system includes dispenser sumps and Stage I and II vapor recovery equipment, an oil/water separator and dispenser sumps

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the facility complies with a DEQ, the federal Environmental Protection Agency (EPA), or a regional air pollution authority requirement to prevent, reduce, or control air or water pollution. The principal purpose is the most important or primary purpose of the facility; the facility has only one primary purpose.

Pollution or **water pollution** means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof. ORS 468B.005.

Air pollution is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application

The facility, by definition, **meets** the federal **EPA requirements** for underground storage tanks and DEQ's requirements under OAR Chapter 340, Division 150 for controlling air and water pollution.

The EQC determined portions of the cost of underground storage tank systems do not meet the principal purpose requirement. The application guides the applicant through subtracting these costs.

Safeway Fuel #2627, used an older application and did not subtract the estimated cost of the equivalent bare steel tanks (50 percent of the tank cost - $15,837.50), the estimated cost of the equivalent bare steel piping ($1.64 a foot - $1,230), or 10% of the cost ($1,280) of the automatic tank gauge system as shown on the application.

The Department **subtracted $18,347** from the claimed facility cost in section 8 of this report.

6 The facility accomplished the pollution control by a method in law.

ORS 468.155 (1)(b)(A), ORS 468.155 (1)(b)(B), OAR-016-0025 (2)(g)

Criteria

The facility accomplishes the prevention, control or reduction by disposal or elimination of industrial wastewater and the use of a treatment works for industrial waste as defined in ORS 468B.0051.

> **Industrial waste** means any liquid, gaseous, radioactive or solid waste substance or a combination thereof resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources. ORS 468B.005.
>
> **Treatment works** means any plant or other works used for the purpose of treating, stabilizing or holding wastes. ORS 468B.005.

The prevention, control, or reduction must be accomplished by the disposal or elimination of air contaminants, air pollution, or air contamination sources; and the use of an air cleaning device as defined in ORS 468A.005.

> **Air cleaning device** means any method, process or equipment that removes, reduces or renders less noxious air-contaminants prior to their discharge in the atmosphere. ORS 468A.005.

The facility will be used to **detect, deter, or prevent spills** or unauthorized releases.

Criteria Applied to this Application

Released petroleum and petroleum vapors **meet the definition** of industrial waste and air pollution, respectively. The claimed facility meets the definition of a treatment works, an air cleaning device, and a facility used to detect, deter, or prevent spills or unauthorized releases to soil, groundwater or to the atmosphere.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria

The facility, by definition, is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, **466** and 467 and ORS chapters 468, **468A** and **468B** and rules thereunder.

Criteria Applied to this Application

As an underground storage tank system, the facility satisfies the intents and purposes of ORS 466, 468A and 468B.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria

The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Criteria Applied to this Application

A Contractor's Invoice and Cost Statement and vendor invoices document the actual cost of the project and the portion of the cost eligible for the tax credit. Together with Safeway's Check Status Log, the invoices document that the expenditure represents the taxpayer's own cash investment in the underground tank system.

Section	Description	Facility Cost
	Claimed	**$85,111**
5	Costs that have another primary purpose	-18,347
	Recommended	**$66,764**

The State of Oregon has not issued any Pollution Control Facilities Tax Credit Certificates to the applicant at this location. The claimed facility is **not a replacement** of these previously certified facilities.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(1)

Criteria

The certified percentage allocable is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of water pollution.

The following factors establish the portion of costs properly allocable to pollution control for facilities that cost more than **$50,000.**

a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;

b. The estimated annual percent return on the investment in the facility;

c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;

d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and

e. Any other relevant factors.

Criteria Applied to this Application

The certified facility cost **exceeds $50,000**. The Department determined that **100 percent** of the facility cost is allocable to pollution control.

The facility has a **10-year** useful life. It does not produce a salable or useable commodity, and there is no revenue or cost savings associated with it. The expenditures exceed the revenue; therefore, the resulting Facility ROI is less than the National ROI for **2004**, the facility's construction completion year.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(h)

Criteria

The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002, and December 31, 2008, inclusively, and the facility is located within an area that has been designated a distressed area, as defined in ORS 285A.010, by the Economic and Community Development Department.

Criteria Applied to this Application

The **maximum tax credit is 35 percent** because the applicant submitted the application on April 1, 2005, and the facility is located in Astoria, which is designated as a **distressed area**.

Reviewer: Maggie Vandehey

Water Pollution Control Facilities

The Department recommends the Commission approve the following **five** facilities for certification as water pollution control facility.

The claimed facilities meet the definition of water pollution control facilities. They may include land, structures, buildings, installations, excavations, machinery, equipment or devices. The water pollution control facilities accomplish the prevention, control, or reduction by:

- the disposal or elimination of industrial waste, and
- the use of treatment works for industrial waste

Summary of Water Pollution Control Facilities

App #	Applicant		Certified	% Allocable	Maximum Percent	Tax Credit
7043	Conrad Wood Preserving Co, Inc.		$69,976	100%	35%	$24,492
7061	West Linn Paper Company		$106,681	100%	35%	$37,338
7075	Tidewater Barge Lines, Inc.		$2,231,009	56%	35%	$437,278
7084	Hampton Lumber Mills, Inc.		$165,339	95%	35%	$54,975
7087	Ronald C Selis, DMD		$850	100%	35%	$298
5 Apps		**Sum**	**2,573,855**			**554,380**
		Average	514,771			110,876
		Minimum	850			298
		Maximum	2,231,009			437,278

References

ORS 468.155[14]

(1)(a) As used in ORS 468.155 to 468.190 and 468.962, unless the context requires otherwise, "pollution control facility" or "facility" means any land, structure, building, installation, excavation, machinery, equipment or device, or any addition to, reconstruction of or improvement of, land or an existing structure, building, installation, excavation, machinery, equipment or device reasonably used, erected, constructed or installed by any person if:

(A) The principal purpose of such use, erection, construction or installation is to comply with a requirement imposed by the Department of Environmental Quality, the federal Environmental Protection Agency or regional air pollution authority to prevent, control or reduce ... water ...pollution...; or

[14] Definitions for ORS 468.155 to 468.190 and 468.962

(B) The sole purpose of such use, erection, construction or installation is to prevent, control or reduce a substantial quantity of ... water ... pollution ...

(1)(b) Such prevention, control or reduction required by this subsection shall be accomplished by: ... (B) The disposal or elimination of or redesign to eliminate industrial waste and the use of treatment works for industrial waste as defined in ORS 468B.005 ...

ORS 468B.005 provides the following pertinent definitions.

Industrial waste means any liquid, gaseous, radioactive or solid waste substance or a combination thereof resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources.

Treatment works means any plant or other works used for the purpose of treating, stabilizing or holding wastes.

Wastes means sewage, industrial wastes, and all other liquid, gaseous, solid, radioactive or other substances that will or may cause pollution or tend to cause pollution of any waters of the state.

Water pollution means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof.

OAR 340-016-0060(4)[15]

Eligible Activities. The facility shall prevent, reduce, control, or eliminate industrial waste. The facility shall dispose of, eliminate or be redesigned to eliminate industrial waste and the use of treatment works for industrial wastewater as defined in ORS 468B.005.

[15] Eligibility

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7043, Conrad Wood Preserving

1 Recommendation for Certification

According to ORS 468.165(6), **Conrad Wood Preserving** timely filed application number **7043** on July 11, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$69,976**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$24,492

2 Applicant Identification

Conrad Wood Preserving
68765 Wildwood Rd.
North Bend, OR 97459

Organized as: S Corp
Taxpayer ID: 93-0747636

3 Water Pollution Control Facility Identification

Same as the applicant's address.

The EQC certification will identify the facility as:

One – 6 foot by 12 foot concrete filter vault
One – 8 foot by 16 foot concrete filter vault

4 Technical Information

Conrad Wood Preserving treats lumber and plywood to protect it from insects, decay and fire. The process loads the material onto trams or carts to transport it to one of six pressure vessels containing chromium, arsenic, copper, and zinc. After treating the material, the applicant

moves the material to a drip pad. Once dry, the applicant moves the material to a packaging area where the applicant wraps the treated material or moves it to the yard or to a covered storage area.

Stormwater Management, Inc., manufactured a stormwater system with siphon-actuated and self-cleaning filters. The applicant installed:

- A 6 foot by 12-foot vault on the southwest end of the property. The vault contains eleven filters to treat approximately 7.5 gallons of stormwater a minute. A 10 inch pipe connects the vault to seven catch basins (not claimed) to capture approximately 25 percent of the stormwater entering the system from the storage yard. This system protects a wetlands and an unnamed creek to the west and the North Slough to the south.

- An 8 foot by 16-foot vault on the southeast end of the property. This larger vault has 26 filters to handle approximately 7.5 gallons of stormwater a minute. A 12 inch pipe connects the vault to 10 catch basins (not claimed) to capture approximately 75 percent of the stormwater entering the system from the paved areas of the site. This vault and its collection system are located outside a bermed area that separates the storage area and a second wetland area to the south and the North Slough to the south.

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the facility complies with a DEQ or the federal Environmental Protection Agency (EPA) requirement to prevent, reduce, or control water pollution. The principal purpose is the most important or primary purpose of the facility. The facility has only one primary purpose.

> Pollution or **water pollution** means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, **turbidity**, **silt** or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof. ORS 468B.005.

Criteria Applied to this Application

The primary or most important purpose of the storm water vaults is to reduce the discharge of toxic materials in the storm water as required by Schedule C of the applicant's NPDES Permit 101901. The permit requires reduction of pollutant loading to receiving water through Best Management Practices. This includes passive treatment systems such as bioswales and retention ponds. The vaults are also a form of passive treatment that can be employed as part of the overall Best Management Practice Plan

The claimed facility reduces the potential for contaminated storm water to flow to wetlands, an unnamed creek and the North Slough, which are adjacent to the wood treatment plant.

6 The facility accomplishes pollution control by a method in law.

ORS 468.155 (1)(b)(A)

Criteria

The facility **accomplishes** the prevention, control or reduction by disposal or elimination of industrial wastewater **and the use of a treatment works for industrial waste** as defined in ORS 468B.005.

> **Industrial waste** means any liquid, gaseous, radioactive or solid waste substance or a combination thereof resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources. ORS 468B.005.
>
> **Treatment works** means any plant or other works used for the purpose of treating, stabilizing or holding wastes. ORS 468B.005.

Criteria Applied to this Application

Contaminated storm water generated at this facility is a liquid substance that results from the process of wood treating. Therefore, the storm water vaults meet the definition of treatment works for industrial waste.

Storm water could become contaminated with trace chemicals through material handling, such as through receiving, storage, incising the wood, moving it to the preparation area, loading the material onto trams, moving the treated wood from the drip pad to the packaging area or from loading/unloading trucks, or if the packaging material rips.

The claimed facility provides a removal efficiency of 39% Total Copper, 17% Total Chromium, 25% Total Suspended Solids, and 21% Total Arsenic from storm water entering the vault. The vaults prevent approximately four wet tons of fine sediment and debris from entering the unnamed tributary to the North Slough.

Before installing the storm water vaults, the applicant immediately cleaned up any oil or hydraulic fluid leaked from a forklift. They used 15 catch basins to trap debris and some sediment. Additionally, the applicant paved the entire plant and installed an earth-berm around the southeast to southwest ends of the plant.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria — The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, 468A and **468B** and rules thereunder.

Criteria Applied to this Application — The facility is necessary to satisfy the intents and purposes of ORS 468B.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria — The certified cost is limited to the **actual cost** of the claimed facility and it excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Criteria Applied to this Application — Paid invoices, made out to the applicant, and in house labor claimed at the employees actual pay rate plus fringe benefits document **$69,976** as the actual cost of the facility. The Department subtracted undocumented labor from the claimed facility cost.

Section	Description	Facility Cost
	Claimed	$70,210
8	Undocumented Labor	-233.70
	Recommended	**$69,976**

The State of Oregon has issued two Pollution Control Facilities Tax Credit Certificates to the applicant at this location. The claimed facility is **not a replacement** of these previously certified facilities.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(1)

Criteria — The certified percentage allocable is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of water pollution.

The following factors establish the portion of costs properly allocable for facilities that cost more than $50,000.

a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;

b. The estimated annual percent return on the investment in the facility;

c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;

d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and

e. Any other relevant factors.

Criteria Applied to this Application

The certified facility cost **exceeds $50,000**. The Department determined that **100 percent** of the facility cost is allocable to pollution control.

The applicant and the Department calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering the factors a through e above and a **20-year** useful life. The claimed facility does not produce a salable or useable commodity, and there is no revenue or cost savings associated with it. The expenditures exceed the revenue, therefore the resulting Facility ROI is less than the National ROI for 2004, the facility's construction completion year. The applicant did not investigate an alternative technology.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria

The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.

Criteria Applied to this Application

The **maximum tax credit is 35 percent** because the applicant submitted the application on 7/11/2005, and the certified facility cost does not exceed $200,000.

Reviewer: Maggie Vandehey

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7061, West Linn Paper Company

1 Recommendation for Certification

According to ORS 468.165(6), **West Linn Paper Company** timely filed application number **7061** on August 10, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$106,681**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$37,338

2 Applicant Identification

West Linn Paper Company
4800 Mill Street
West Linn, OR 97068

Organized as: C Corp
Taxpayer ID: 93-1227493

3 Water Pollution Control Facility Identification

The EQC certification will identify the facility as

Reroute outfall to the mill effluent system

4 Technical Information

West Linn Paper Company, is a small independent paper mill that purchases pulp to manufacture coated free-sheet paper. The mill is located at the foot of Willamette Falls.

Each day, the applicant draws approximately 6,000,000 gallons of water from the Willamette River, directing it to seven sand-bed filters located on a bluff above the mill. The applicant then gravity feeds the water to the mill for use as process water. To operate at optimum efficiency, the system routinely feeds water back through the filter beds from a 122,500-gallon wash water tank at a rate of 8,000 to 9,000 gallons per minute.

The applicant claims a 14-inch piping to reroute the filter plant backwash into holding tanks. The claimed facility includes the upgrade of blow pits numbered 4 and 5 to hold the backwash water. The backwash water flows from holding tanks by gravity to the main effluent sump at a controlled rate of 500 gallons per minute. The claimed facility includes the connections from the holding tanks to the existing mill wastewater treatment system, a level transmitter, and a flow control valve and flow controller to monitor and control the flow.

The company previously discharged into the Willamette River below the falls. The mill effluent system treats the filter plant backwash and the process wastewater in a clarifier and aeration lagoon prior to discharge into the river.

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the facility complies with a DEQ or the federal Environmental Protection Agency (EPA) requirement to prevent, reduce, or control water pollution. The principal purpose is the most important or primary purpose of the facility; the facility has only one primary purpose.

> Pollution or **water pollution** means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof. ORS 468B.005.

Criteria Applied to this Application	DEQ and the applicant suspected unacceptable levels of TSS, Copper, Lead and Zinc were present in the backwash effluent. In a Memorandum of Agreement dated May 21, 2004, both parties agreed to either control pollutants from the outfall or eliminate the outfall altogether. The mill chose to eliminate the outfall and reroute the filter plant backwash to the mill's wastewater treatment system for treatment prior to discharge.

6 The facility accomplishes pollution control by a method in law.

ORS 468.155 (1)(b)(A)

Criteria

The facility accomplishes the prevention, control or reduction by disposal or elimination of industrial wastewater and the use of a treatment works for industrial waste as defined in ORS 468B.005.

> **Industrial waste** means any liquid, gaseous, radioactive or solid waste substance or a combination thereof resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources. ORS 468B.005.
>
> **Treatment works** means any plant or other works used for the purpose of treating, stabilizing or holding wastes. ORS 468B.005.

Criteria Applied to this Application

The backwash effluent **meets the definition** of industrial waste and the rerouting of the effluent through existing tanks for controlled discharge to the mills wastewater treatment system meets the definition of a treatment works for industrial waste.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria

The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, 468A and **468B** and rules thereunder.

Criteria Applied to this Application

The facility is necessary to satisfy the intents and purposes of ORS 468B.

8 The actual facility cost represents the applicant's own cash investment.
ORS 468.170(1)

Criteria

The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Criteria Applied to this Application

The applicant claimed $107,593 as the facility cost but paid invoices substantiated $106,681 as the actual facility cost.

Section	Description	Facility Cost
	Claimed	$107,593
8	Eligible Freight	84.24
8	Undocumented North Coast Electric	-996.41
	Recommended	**$106,681**

The State of Oregon has not issued any Pollution Control Facilities Tax Credit Certificates to the applicant or to this location. The claimed facility is **not a replacement** of a previously certified facility.

9 The facility cost is properly allocable to pollution control.
ORS 468.170(1), ORS 468.190(1)

Criteria

The certified percentage allocable is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of water pollution.

The following factors establish the portion of costs properly allocable to for facilities that cost more than $50,000.

a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;

b. The estimated annual percent return on the investment in the facility;

c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;

d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and

e. Any other relevant factors.

Criteria Applied to this Application

The certified facility cost **exceeds $50,000**. The Department determined that **100 percent** of the facility cost is allocable to pollution control.

The applicant and the Department calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering factors a through e above and a **20-year** useful life. The claimed facility does not produce a salable or useable commodity, and there is no revenue or cost savings associated with it. The expenditures exceed the revenue; therefore, the resulting Facility ROI is less than the National ROI for 2005, the facility's construction completion year. The applicant did not investigate an alternative technology.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria

The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.

Criteria Applied to this Application

The **maximum tax credit is 35 percent** because the applicant submitted the application on August 10, 2005, and the certified facility cost does not exceed $200,000.

Reviewers: Maggie Vandehey
Rob Burkhart, ODEQ Northwest Region

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7075, Tidewater Barge Lines, Inc.

1 Recommendation for Certification

According to ORS 468.165(6), **Tidewater Barge Lines, Inc.** timely filed application number **7075** on September 2, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$2,231,009**
Percentage Allocable	X	**56%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$437,278

2 Applicant Identification

Tidewater Barge Lines, Inc.
PO Box 1210
Vancouver, WA 98666

Organized as: C Corp
Taxpayer ID: 93-0278300

3 Water and Air Pollution Control Facility Identification

The barge transports petroleum on the Columbia and Snake river systems. It is moored periodically at:

6305 NW Old Lower River Road
Vancouver, WA 98660

The EQC certification will identify the facility as:

A double hull on the New Dawn (Barge 701), vapor recovery equipment, high-level alarms and spill response equipment

4 Technical Information

Tidewater Holdings, Inc. and Subsidiaries provide tug, barge and marine transportation services. The company's operations include terminal storage and handling services, marine vessel repair and construction services.

Tidewater Barge Lines, Inc., converted Barge 701, a dual-use petroleum and grain hauling barge, into a double hulled barge (New Dawn) for exclusive hauling of petroleum products according to Elliott Bay Design Group's engineering plans. Sundail Marine Construction and Repair provided labor, material and equipment to convert into a double hulled barge and Tidewater Barge Lines, Inc., provided labor to weld the new metal bottom, steel framing and new structural bulkheads. The company also installed vapor recovery equipment, high-level alarms and spill response equipment.

The New Dawn transports approximately 26,000 barrels of petroleum products. The company installed plate steel and steel beams to create a void between the cargo tanks and the water. The barge is 282 feet long, 42 feet at the beam with a depth of 16 feet 6 inches to the main deck and 21 feet to the cargo tank. In the event of a collision or grounding, the double hull provides a buffer to protect the cargo tanks. If the cargo tank were to fail, the secondary hull would contain the potroleum product and prevent it from entering the waterway.

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(B); OAR 340-016-0060 (2)(a)

Criteria

The **sole purpose**, meaning the exclusive purpose, of the claimed facility must be to prevent, control, or reduce a substantial quantity of water and air pollution.

Pollution or **water pollution** means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof. ORS 468B.005.

Air pollution is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application

On September 13, 1999, the EQC determined that double hulls on barges have a **sole purpose** of reducing a substantial quantity of water pollution and the vapor recovery equipment has the sole purpose of reducing a substantial quantity of air pollution.

The applicant claimed the deck and the safety railing. They do not have the sole purpose of reducing a substantial quantity of water or air pollution. DEQ subtracted the $59,327 from the claimed facility cost under section 8.

6 The facility accomplishes pollution control by a method in law.

ORS 468.155 (1)(b)(A)

Criteria

The prevention, control or reduction must be accomplished by disposal or elimination of industrial wastewater and the use of a treatment works for industrial waste as defined in ORS 468B.005.

Industrial waste means any liquid, gaseous, radioactive or solid waste substance or a combination thereof resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources.

Treatment works means any plant or other works used for the purpose of treating, stabilizing or holding wastes.

Criteria Applied to this Application

The double hull meets the definition of treatment works in ORS 468B.005. Petroleum meets the definition of industrial wastewater as defined by ORS 468B.005 if it were to spill.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria

The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and **468B** and rules there under.

Criteria Applied to this Application

As a water pollution control facility, the double hull, high-level alarms and spill response equipment, is necessary to satisfy the intents and purposes of ORS 468B. The vapor recovery equipment is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.
ORS 468.170(1)

Criteria

The certified cost is limited to the **actual cost** of the claimed facility. Any ineligible costs are described under Subtractions below. The certified cost may not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Ineligible Costs ORS 468.155(3), OAR 340-016-0070(1) and -0070(3)
The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:

a. the salvage value of a pre-existing facility if the applicant is replacing a facility;

a. the amount of any government grants received to pay part of the facility cost;

b. the present value of any other state tax credits for which the investment is eligible; and

c. ineligible costs as set forth in **ORS 468.155(3)** and OAR 340-016-0070(3).

The regulations exclude over 40 items from the definition of a Pollution Control Facility including replacement facilities and "Any distinct portion of a pollution control facility that makes an **insignificant contribution to** the principal or **sole purpose** of the facility". ORS 468.155(3)(d).

Criteria Applied to this Application

The company claimed allowable direct labor rates and fringe benefits. Time sheets document the labor and pay summaries document the claimed labor of $21,639. Invoices, made out to the applicant, document the remaining project costs. Prior to claiming **$2,290,336** as the eligible facility cost, the applicant subtracted $88,978 for ineleligible costs. The Department subtracted $59,327 for portions of the installation that makes an insignificant contribution to the sole purpose of the facility discussed in section 5.

The State of Oregon has issued **five** Pollution Control Facilities Tax Credit Certificates to the applicant at this location. The claimed facility is **not a replacement** of these previously certified facilities.

Section	Description	Facility Cost	
		Claimed	$2,290,336
5	Deck and safety rails		-59,327
		Recommended	**$2,231,009**

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(1)

Criteria

The certified percentage allocable is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of water pollution.

The following factors establish the portion of costs properly allocable to pollution control for facilities that cost more than $50,000.

a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;

b. The estimated annual percent return on the investment in the facility;

c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;

d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and

e. Any other relevant factors.

Criteria Applied to this Application

The barge operates in Oregon and Washington waters. Revenue analysis shows the New Dawn hauls approximately **56 percent** of its tonnage to ports within the state of Oregon.

The applicant and the Department calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering factors a through e above and a **ten-year** useful life. The double hull and the vapor recovery equipment do not produce a salable or useable commodity and there is not revenue associated with the claimed facility. The EQC, in 1999, determined there are no cost savings associated with these components. The expenditures exceed the revenue; therefore, the resulting Facility ROI is less than the National ROI for 2004, the facility's construction completion year. The applicant did not investigate an alternative technology.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(g)

Criteria

The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively; and construction or installation of the facility is **entirely voluntary** and no portion of it is required in order to comply with a federal law administered by the United States Environmental Protection Agency, a state law administered by the Department of Environmental Quality or a law administered by a regional air pollution authority.

Criteria Applied to this Application

The **maximum tax credit is 35%** because the applicant submitted the application on September 2, 2005, and the applicant voluntarily constructed or installed the facility.

The Oil Pollution Act of 1990 provides timetables for double-hulling barges that carry petroleum based on tonnage and construction dates. The Act does not require the double hull of Barge 701 until January 1, 2015. The barge, constructed in 1980 as a dual-use (petroleum and grain) barge, had a single-hull and weighed less than 5,000 gross tons. The barge had no major conversions until the applicant converted it into the double-hulled vessel. OPA-90 (46 U.S.C. 3703a(c)), item 2(a)(3)(b) of Appendix G to Part 157.

Reviewer: Maggie Vandehey

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7084, Hampton Lumber Mills, Inc.

1 Recommendation for Certification

According to ORS 468.165(6), **Hampton Lumber Mills, Inc.,** timely filed application number **7084** on September 26, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$165,339**
Percentage Allocable	X	**95%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$54,975

2 Applicant Identification

Hampton Lumber Mills, Inc.
9600 SW Barnes Rd.
Ste 200
Portland, OR 97226

Organized as: C Corp
Taxpayer ID: 93-0589650

3 Water Pollution Control Facility Identification

Tillamook Lumber Company
311 Third Street
Tillamook, OR 97141

The EQC certification will identify the facility as:

One - Clean Earth Systems High Efficiency Vacuum Sweeper Truck, model No. LV-10-0 GMC, serial # T1406V351610AEA04

4 Technical Information

Hampton Lumber Mills, Inc., manufactures kiln-dried lumber at its Tillamook Lumber Company site. The company temporarily stores and scales logs on a paved surface. The Commission certified pavement on the scale yard and the settling pond on June 23, 2005.

Log trucks and process equipment pulverize bark, dirt and woody debris on the paved surface creating a fine dust. Storm water entrains the dust as it flows to the holding pond. The fine dust is less susceptibile to settling in the pond, which increases the possibility of its discharge into Holden Creek and contributing to elevated TSS (total suspended solids) levels in the company's storm water discharge.

Hampton Lumber Mill claims a Clean Earth Systems High Efficiency Vacuum Sweeper Truck (Model No. LV-10-0 GMC) to minimize entrained dust in the storm water. The sweeper has an 8 ½ foot wide path and the pick-up nozzel is 48 inches wide. The sweeper has a 16,500 CFM centrifugal blower and a 12-inch diameter intake tube. The 50,000-pound capacity hydraulic cylinder tips the 10-cubic-yard collection body. The engine is a 120 HP Cummins diesel. Prior to using the new sweeper, the applicant cleaned the area with a broom sweeper.

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the facility complies with a DEQ or the federal Environmental Protection Agency (EPA) requirement to prevent, **reduce**, or control water pollution. That principal purpose is the most important or primary purpose of the facility; the facility has only one primary purpose.

> Pollution or **water pollution** means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof. ORS 468B.005.

Criteria Applied to this Application

The facility reduces TSS in the company's stormwater consistant with the written direction given by DEQ its Order outlining the steps recommended to meet the benchmarks and Storm Water Pollution Control Plan (SWPCP) requirements in the site's NPDES (National Pollutant Discharge Elimination System) Storm Water Permit No. 100497, issued on July 26, 2002.

While the paving and settling pond project was a significant improvement, TSS levels remained over benchmarks. If TSS levels are above the bench marks, the NPDES Storm Water Permit requires that the applicant review the SWPCP to "*identify any additional technically and economically feasible site controls that need to be implemented to further improve the quality of storm water discharges.*". The sweeper enchances the mill's ability to achieve benchmarks at the scaling yard.

6 The facility accomplishes pollution control by a method in law.

ORS 468.155 (1)(b)(A)

Criteria

The facility accomplishes the **prevention**, control or reduction by disposal or elimination of industrial wastewater and the use of a treatment works for industrial waste as defined in ORS 468B.0051.

> **Industrial waste** means any **liquid**, gaseous, radioactive or **solid waste** substance or a combination thereof resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources. ORS 468B.005.
>
> **Treatment works** means any plant or other works used for the purpose of treating, **stabilizing** or **holding wastes**. ORS 468B.005.

Criteria Applied to this Application

The sweeper removes bark, dirt, and woody debris from the log and scaling areas, along with the paved areas of the mill that collect wood waste, preventing increased TSS levels in storm water.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria

The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, 468A and **468B** and rules thereunder.

Criteria Applied to this Application

The facility is necessary to satisfy the intents and purposes of ORS 468B.

8 The actual facility cost represents the applicant's own cash investment.
ORS 468.170(1)

Criteria

The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Criteria Applied to this Application

A paid invoice, made out to the applicant, and a canceled check document **$165,339** as the actual cost of the facility.

The regulations exclude over 40 items from the definition of a Pollution Control Facility, which includes replacement facilities. One of the items excluded from the definiton is "Any distinct portion of a pollution control facility that makes an **insignificant contribution to** the **principal** or sole **purpose** of the facility". ORS 468.155(3)(d). Consistent with section 5, DEQ subtracted 5 percent from the claimed facility cost.

The State of Oregon has issued **one** Pollution Control Facilities Tax Credit Certificate to the applicant at this location. The claimed facility is **not a replacement** of any previously certified facility.

Section	Description	Facility Cost
	Claimed	$165,339
5	5% of cost – maintenance use	-8,267
	Recommended	**$157,072**

9 The facility cost is properly allocable to pollution control.
ORS 468.170(1), ORS 468.190(1)

Criteria

The certified percentage allocable is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of water pollution.

The following factors establish the portion of costs properly allocable to for facilities that cost more than $50,000.

a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;

b. The estimated annual percent return on the investment in the facility;

c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;

d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and

e. Any other relevant factors.

Criteria Applied to this Application	The certified facility cost **exceeds $50,000**. The Department determined that **95 percent** of the facility cost is allocable to pollution control. The applicant uses the sweeper the other 5 percent of the time for general maintenance purposes on non-industrial areas of plant. The applicant and the Department calculated the percentage of the facility cost allocable to pollution control according to the standard method in OAR 340-016-0075(3) while considering factors a through e above and a **10-year** useful life. The claimed facility does not produce a salable or useable commodity, and there is no revenue or cost savings associated with it. The applicant did investigate alternative technologies and this investigation resulted in the purchase of claimed facility.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified cost of the facility does not exceed $200,000.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on September 26, 2005, and the recommended facilty cost does not exceed $200,000. Reviewer: Maggie Vandehey

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7087, Ronald C Selis, DMD

1 Recommendation for Certification

After reviewing application number **7087**, the Department of Environmental Quality (DEQ) recommends that the Environmental Quality Commission (EQC) approve the facility described in sections 3 and 4 of this report:

- As meeting the definition of a pollution control facility as described in sections 5 and 6 of this report; and
- As necessary to satisfy the intents and purposes of DEQ regulations as listed in section 7 of this report.

The DEQ also recommends that the EQC certify the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit. Sections 8, 9 and 10, respectively, expand on these three components.

Facility Cost		**$ 850**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$ 298

2 Applicant Identification

Ronald C Selis, DMD
2422 NE Fremont
Portland, OR 97212

Organized as: S Corp
Taxpayer ID: 48-1302888

3 Water Pollution Control Facility Identification

Same as the applicant's address.

The EQC certification will identify the facility as:

One – REBEC Amalgam and Mercury Separation and Collection System, Part No. CATCH 400, Serial No. J401165, J30010597-04

4 Technical Information

Ronald C Selis, DMD, generates amalgam waste particles that can be suctioned into the vacuum line and discharged into the public sewer system. Amalgam contains mercury and an alloy of silver, tin and copper. The applicant installed an amalgam separator in the water and vacuum lines to remove amalgam waste particles from wastewater.

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(B); OAR 340-016-0060 (2)(a)

Criteria

The **sole purpose**, meaning the exclusive purpose, of the facility is to prevent, control, or reduce a substantial quantity of water pollution.

> Pollution or **water pollution** means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof. ORS 468B.005.

Criteria Applied to this Application

The amalgam separator prevents a substantial quantity of amalgam from discharge to the sanitary sewer. Amalgam contains mercury and an alloy of silver, tin and copper. If the dental practice does not remove this material, it could contaminate rivers and streams and may be absorbed by fish and their predators. The primary environmental route of human exposure to mercury is from eating fish.

6 The facility accomplishes pollution control by a method in law.

ORS 468.155 (1)(b)(A)

Criteria

The facility accomplishes the prevention, control or reduction by disposal or elimination of industrial wastewater and the use of a treatment works for industrial waste as defined in ORS 468B.005.

> **Industrial waste** means any liquid, gaseous, radioactive or solid waste substance or a combination thereof resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources. ORS 468B.005.
>
> **Treatment works** means any plant or other works used for the purpose of treating, stabilizing or holding wastes. ORS 468B.005.

Criteria Applied to this Application	Mercury **meets the definition** of industrial wastewater and amalgam separators meet the definition of treatment works in ORS 468B.005.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria	The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, **466** and 467 and ORS chapters 468, 468A and **468B** and rules thereunder.
Criteria Applied to this Application	Amalgam separators are necessary to satisfy the intents and purposes of ORS 466 and ORS 468B.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria	The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.
Criteria Applied to this Application	Paid invoices, made out to the applicant, document **$850** as the actual cost of the facility. There are **no ineligible costs**. The State of Oregon has not issued any Pollution Control Facilities Tax Credit Certificates to the applicant at this location. The claimed facility is **not a replacement** of any previously certified facility.

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce water pollution to the entire time the facility is used for any purpose.
Criteria Applied to this Application	The certified facility cost **does not exceed $50,000** and the applicant uses the facility **100 percent** of the time for pollution control.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the facility cost does not exceed $200,000.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on June 30, 2005, and the certified facility would not exceed $200,000.

Reviewer: Maggie Vandehey

Attachment C
Certificate Administration

Two taxpayers notified the Department of the change in the status of their Pollution Control Facilities Tax Credit Certificates. Based on these notifications, the Department recommends that the Commission take the following actions.

Reissue (old certificate format)	3092	From: Precision Castparts Corp. To: PCC Structurals, Inc.
	3615 in conjunction with the approval of application number 6965	From: 1991 Freeman 3-Tie baler, Model 370 To: One - Hesston 4690 3-Tie rectangular baler, Serial No. B469 00615

00195

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

POLLUTION CONTROL FACILITY CERTIFICATE

Certificate No: 3092
Date of Issue: 6/10/93
Application No: T-3941

ISSUED TO: Precision Castparts Corp.
Investment Foundry
4600 SE Harney Drive
Portland, OR 97206

LOCATION OF POLLUTION CONTROL FACILITY:
5001 SE Johnson Creek Blvd.
Milwaukie, OR

AS: ( ) LESSEE ( ) OWNER ( ) INDIV ( ) PARTNER (x) CORP ( ) NON-PROFIT ( ) CO-OP

DESCRIPTION OF POLLUTION CONTROL FACILITY:
The water pollution control facility is designed to reduce the discharge of radioactive thorium 232 into the sanitary sewer, and includes monitoring and control systems for pH, flow, pressure, conductivity, and temperature measurements.

TYPE OF POLLUTION CONTROL FACILITY:
( ) AIR ( ) NOISE (x) WATER ( ) SOLID WASTE ( ) HAZARDOUS WASTE ( ) USED OIL

DATE FACILITY COMPLETED: 5/1/92 PLACED INTO OPERATION: 2/25/91

ACTUAL COST OF POLLUTION CONTROL FACILITY: $1,919,257.00

PERCENT OF ACTUAL COST PROPERLY ALLOCABLE TO POLLUTION CONTROL: 100%

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

Therefore, this Pollution Control Facility Certificate is issued this date subject to compliance with the statutes of the State of Oregon, the regulations of the Department of Environmental Quality and the following special conditions:

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

NOTE: The facility described herein is not eligible to receive tax credit certification as an Energy Conservation Facility under the provisions of Chapter 512, Oregon Law 1979, if the person issued the Certificate elects to take the tax credit relief under ORS 316.097 or 317.072.

Signed: _____ (William W. Wessinger, Chairman)

Approved by the Environmental Quality Commission on the 10th day of June, 1993.

CERTIFICATE TRANSFER

From:	To:

Signed: _____ (William W. Wessinger, Chairman)

Approved by the Environmental Quality Commission on the ___ day of _____, 1993.

Staff:DTJ

MY106590 (5/93)

00197

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

POLLUTION CONTROL FACILITY CERTIFICATE

Certificate No: 3615
Date of Issue: 5/17/96
Date of Reissue: 7/12/96
Application No: 4596

ISSUED TO:	LOCATION OF POLLUTION CONTROL FACILITY:
McKee Farms 22450 SW McKee Road Amity, Oregon 97101 ATTENTION: Bruce McKee	22450 SW McKee Road Amity

AS: ( ) LESSEE (X) OWNER ( ) INDIV (X) PARTNER ( ) CORP ( ) NON-PROFIT ( ) CO-OP
( )Excise ( ) Ad Valorem

DESCRIPTION OF POLLUTION CONTROL FACILITY:
1991 Freeman 3-Tie baler, Model 370

TYPE OF POLLUTION CONTROL FACILITY:
(X) AIR ( ) NOISE ( ) WATER ( ) SOLID WASTE ( ) HAZARDOUS WASTE ( ) USED OIL

DATE FACILITY COMPLETED: 7/1/95 PLACED INTO OPERATION: 7/1/95

ACTUAL COST OF POLLUTION CONTROL FACILITY: $22,200.00

PERCENT OF ACTUAL COST PROPERLY ALLOCABLE TO POLLUTION CONTROL: 100%

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

Therefore, this Pollution Control Facility Certificate is issued this date subject to compliance with the statutes of the State of Oregon, the regulations of the Department of Environmental Quality and the following special conditions:

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

NOTE: The facility described herein is not eligible to receive tax credit certification as an Energy Conservation Facility under the provisions of Chapter 512, Oregon Law 1979, if the person issued the Certificate elects to take the tax credit relief under ORS 316.097 or 317.072.

Signed: _____ (Henry Lorenzen, Chairman)

Approved by the Environmental Quality Commission on the 12th day of July, 1996.

Staff: Jim Britton, Department of Agriculture

The 1075 NH Stackwagon which was damaged & the old Freeman 370 baler are no longer being used after the 2004 summer harvest. The above mentioned purchases are not intended to replace the acreage that the two items were previously certified for.

The three new pieces of equipment in my application for tax relief will allow us to do more of our own straw removal that we previously had baled by custom operators who @ times, were not very reliable.

Sincerely.
Bruce McKee

Attachment D
Requests for Extensions of Time to File an Application

The dates when an applicant completes construction of a pollution control facility determine if the applicant submitted the application within the appropriate filing period. ORS 468.165(6). Two applicants submitted requests for extensions of time to file their applications under the provision in the law.

The Department recommends the following EQC action.

- For Truax Harris Energy LLC's,
  - Approve the extension of time to file the application, and
  - Approved application 7018 for certification as presented in this attachment.

- For David Vanasche,
  - Deny the extension of time to file the application, and
  - Approved application 7034 for the installation that met the one-year filing requirement as presented in this attachment.

Truax Harris Energy LLC requests an extension of time to file an application for the certification of an underground storage tank system. As stated in Exhibit A to the review of application 7018, the applicant relied on the one-year filing period in Department rule and the directions in a 2001 application retrieved from their files.

State law provides that an applicant must file an application within one year from the construction completion date to be eligible for the pollution control facilities tax credit. ORS 468.165(6). Though the application documents, Fact Sheets, and all program documents reflected the one-year filing period, the Department rule (OAR 340-016-0055) provided the two-year filing period that was inconsistent with the 2001 law.

The specific circumstances for application 7018 are:

- Construction completion – January 2004
- EQC aligns rule (2-year filing period) with the state law (1-year) – May 21, 2004
- Application submittal – May 25, 2005

EQC Action Options
Request for an Extension of Time to File an Application

EQC Action	Applicant	Facility Cost	% Allocable	Maximum Percent	Tax Credit
Approve	Truax Harris Energy LLC	$320,899	100%	15%	$48,135
Deny	Truax Harris Energy LLC	0			0

David Vanasche, a grass seed grower, installed drainage tile on contiguous acreage in four discrete installations. In application number 7034, the applicant claimed all four installations as one project. The applicant does not consider the project complete until they installed drainage tile on the entire field as stated in Exhibit A to the review. Additionally, the applicant states that drainage tile needs to settle before they can plant or harvest a profitable crop.

The specific circumstances for application 7034 are:

- 1st installation – August 13, 2003
- 2nd installation – October 4, 2004
- 3rd installation – January 5, 2004
- 4th installation – September 24, 2004 – meets filiing requirement
- Application submittal – June 28, 2005

The Department recommends the Commission deny the extension of time to file application number 7034. Each drainage tile installation was substantially complete and capable of providing drainage as of the date of its installation. Any one installation does not rely on a subsequent installation to function properly.

EQC Action Options
Request for an Extension of Time to File an Application

EQC Action	Applicant	Certified	% Allocable	Maximum Percent	Tax Credit
Approve	David Vanasche	$62,365	100%	35%	$21,828
Deny	David Vanasche	28,643	100%	35%	10,025

References

ORS 468.165(6) The application shall be submitted after construction of the facility is substantially completed and the facility is placed in service and within one year after construction of the facility is substantially completed[16]. Failure to file a timely application shall make the facility ineligible for tax credit certification. An application may not be considered filed until it is complete and ready for processing. The commission may grant an extension of time to file an application for circumstances beyond the control of the applicant[17] that would make a timely filing unreasonable. However, the period for filing an application may not be extended to a date beyond December 31, 2008.

[16] "Substantial Completion" means the completion of the erection, installation, modification, or construction of all elements of the claimed facility which are essential to perform its purpose. OAR 340-016-0010 (12).

[17] "Circumstances Beyond the Control of the Applicant" means facts, conditions and circumstances which the applicant's due care and diligence would not have avoided. OAR 340-016-0010(2)

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7018, Truax Harris Energy LLC

1 Recommendation for Certification

According to ORS 468.165(6), **Truax Harris Energy LLC** timely filed application number **7018** on May 25, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that it meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7). DEQ recommends that the Environmental Quality Commission (EQC) certify the facility.

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. DEQ recommends that the EQC certify these three components as bolded below.

Facility Cost		**$320,899**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**15%**
Tax Credit		$48,135

2 Applicant Identification

Truax Harris Energy LLC
PO Box 607
Wilsonville, OR 97070

Organized as: LLC
Taxpayer ID: 93-1083912

3 Underground Storage Tank Pollution Control Facility Identification

Pacific Pride Cardlock
205 Columbia Street NE
Salem, OR 97303

The EQC certification will identify the facility as

EPA upgrade for underground petroleum storage tank system

4 Technical Information

Truax Harris Energy LLC, operates retail and cardlock gas stations. The applicant upgraded an existing facility by installing two double wall fiberglass tanks and 500 feet of secondary containment flexible piping. Both tanks have dual compartments and hold 20,000 gallons of fuel. The applicant installed monitoring wells, automatic tank gauges with leak detection, overfill alarms, sumps and automatic shutoff valves. The system includes dispenser sumps and Stage I vapor recovery equipment, and an oil/water separator.

The applicant decommissioned five known and fourteen phantom underground storage tanks. The contractor removed approximately 7,500 tons of soil and disposed of as non-hazardous waste at the Coffin Butte Landfill in Benton County.

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the facility complies with a DEQ, the federal Environmental Protection Agency (EPA), or a regional air pollution authority requirement to prevent, reduce, or control air or water pollution. The principal purpose is the most important or primary purpose of the facility; the facility has only one primary purpose.

> Pollution or **water pollution** means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof. ORS 468B.005.
>
> **Air pollution** is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application

The facility **meets** the federal **EPA requirements** for underground storage tanks and DEQ's requirements under OAR Chapter 340, Division 150 for controlling air and water pollution.

00209

The EQC determined portions of the cost of underground storage tank systems do not meet the principal purpose requirement. The applicant appropriately subtracted these costs according to the application guidelines.

6 The facility accomplishes pollution control by a method in law.

ORS 468.155 (1)(b)(A), ORS 468.155 (1)(b)(B), OAR-016-0025 (2)(g)

Criteria

The facility accomplishes the prevention, control or reduction by disposal or elimination of industrial wastewater and the use of a treatment works for industrial waste as defined in ORS 468B.0051.

> **Industrial waste** means any liquid, gaseous, radioactive or solid waste substance or a combination thereof resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources. ORS 468B.005.
>
> **Treatment works** means any plant or other works used for the purpose of treating, stabilizing or holding wastes. ORS 468B.005.

The prevention, control, or reduction must be accomplished by the disposal or elimination of air contaminants, air pollution, or air contamination sources; and the use of an air cleaning device as defined in ORS 468A.005.

> **Air cleaning device** means any method, process or equipment that removes, reduces or renders less noxious air-contaminants prior to their discharge in the atmosphere. ORS 468A.005.

The facility will be used to detect, deter, or prevent spills or unauthorized releases.

Criteria Applied to this Application

Released petroleum and petroleum vapors **meet the definition** of industrial waste and air pollution, respectively. The claimed facility meets the definition of a treatment works, an air cleaning device, and a facility used to detect, deter, or prevent spills or unauthorized releases to soil, groundwater or to the atmosphere.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria

The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, **466** and 467 and ORS chapters 468, **468A** and **468B** and rules thereunder.

Criteria Applied to this Application

As an underground storage system, the facility is necessary to satisfy the intents and purposes of ORS 466, ORS 468A and ORS 468B.

8 The actual facility cost represents the applicant's own cash investment.
ORS 468.170(1)

Criteria

The certified cost is limited to the **actual cost** of the claimed facility and it excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Ineligible Costs ORS 468.155(3), OAR 340-016-0070(1) and -0070(3)

The applicant must provide documents that substantiate the claimed facility cost. The claimed cost may not include:

a. the salvage value of a pre-existing facility if the applicant is replacing a facility;

b. the amount of any government grants received to pay part of the facility cost;

c. the present value of any other state tax credits for which the investment is eligible; and

d. ineligible costs as set forth in ORS 468.155(3) and OAR 340-016-0070(3).

The regulations exclude over 40 items from the definition of a Pollution Control Facility. Items excluded from the definition are ineligible for certification.

One of the excluded items is the replacement or reconstruction of all or part of a previously certified pollution control facility. The regulations provide two exceptions.

a. If the cost to replace or reconstruct the facility is greater than the like-for-like replacement cost of the original facility due to a requirement imposed by the DEQ, the federal Environmental Protection Agency or a regional air pollution authority, then the facility may be eligible for tax credit certification up to an amount equal to the difference between the cost of the new facility and the like-for-like replacement cost of the original facility.

b. If a facility is replaced or reconstructed before the end of its useful life then the facility may be eligible for the remainder of the tax credit certified to the original facility.

Criteria Applied to this Application

The applicant claimed **$11,217 for permit costs**. In agreement with the applicant, the Department subtracted **$6,169 for permit fees** unrelated to the claimed facility.

The State of Oregon has issued **two** Pollution Control Facilities Tax Credit Certificates to the applicant at this location.

The EQC approved application number 2552 on May 25, 1990, for spill containment manholes with recovery vessels by issuing certificate number 2156.

On June 3, 1994, when the entity changed to a Limited Liability Company, the EQC reissued the certificate. The applicant claimed **$3,381 for spill buckets** that replaced the previously certified recovery vessels.

The EQC approved application number 3198 on May 11, 1991, for the installation of leak detection, overfill prevention, in the form of automatic tank gauges, and overfill alarms on four underground storage tanks. The EQC reissued certificate number 2394 on June 3, 1994, when the entity changed to a Limited Liability Company. The applicant accurately excluded the costs to replace these components.

Criteria Applied to this Application

Paid invoices, made out to the applicant, document **$330,449** as the actual cost of the facility.

Section	Description	Facility Cost
	Claimed	**$330,449**
8	Replacement: Spill buckets	-3,381
	Fees unrelated to pollution control	-6,169
	Recommended	**$320,899**

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(1)

Criteria

The certified percentage allocable is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of water pollution.

The following factors establish the portion of costs properly allocable to for facilities that cost more than $50,000.

a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;

b. The estimated annual percent return on the investment in the facility;

c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;

d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and

e. Any other relevant factors.

Criteria Applied to this Application	The certified facility cost **exceeds $50,000**. The Department determined that **100 percent** of the facility cost is allocable to pollution control. The facility has a **20-year useful life**. It does not produce a salable or useable commodity and there is no revenue or other costs savings associated with it. The expenditures exceed the revenue; therefore, the Facility ROI is less than the National ROI for 2004, the facility's construction completion year. The applicant did not investigate an alternative technology.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(2)(b)

Criteria	The maximum tax credit is 15 percent if the applicant submitted the application between January 1, 2002, and December 31, 2008, inclusively; construction or installation of the facility commenced after December 31, 2003, and before January 1, 2005; and the facility/applicant/location do not qualify for the 35 percent tax credit.
Criteria Applied to this Application	The **maximum tax credit is 15 percent** because the applicant submitted the application on May 25, 2005, and the applicant commenced construction on February 2, 2004.

Reviewer: Maggie Vandehey

TRUAX HARRIS ENERGY LLC

25115 S.W. Parkway
Post Office Box 607
Wilsonville, Oregon 97070-0607
Telephone (503) 682-3865
WATS: 1-800-367-3835
FAX: (503) 682-8726

June 10, 2005

Ms. Maggie Vandehey
Department of Environmental Quality
811 SW Sixth Avenue
Portland, Or 97252

RE: Request for Extension of Time for Filing
Pollution Control Facility Tax Credit Application
Cardlock Fuel Site 11426 NE Sandy Blvd., Portland, Oregon

Dear Maggie Vandehey;

We would like to request an extension of time to file our Pollution Control Facility Tax Credit Application for our underground fuel storage tank system at our cardlock station located at 11426 NE Sandy Blvd., Portland, Oregon.

We present the following information and explanation for your consideration in granting the filing extension.

Our application was submitted on May 23, 2005 and the facility was opened on January 16, 2004. The Application was submitted under the Department of Environmental Quality previous rules and belief that the Tax Credit Application had to be submitted within two years of completion of the facility. On June 1, 2005, I was advised that we had missed the one year filing requirement.

Our company in the 1990's and up through the year 2001 submitted several Pollution Control Facility Tax Credit Applications for our underground fuel storage tank systems; however, we did not upgraded or rebuilt any sites or submit any Tax Credit Applications in 2002 or 2003. The site in question was rebuilt in late 2003 and completed in January 2004. The Company was going through some extensive changes during this period of time including selling our retail service station business in 2003. These changes also included extensive cut back in personnel which included the individuals that prepared the Tax Credit Applications for our company. As we were expanding the duties and training employees in this area, I called the Department of Environmental Quality on February 9, 2004 to verify that the Tax Credit Program was still available and was advised it was available. Using the application and instructions, we found that we had two years to prepare and submit our Application, page 6 of Underground and Aboveground Storage Tanks Pollution Control Facility Tax Credit Application Instructions and Guidelines, Application Element 12, copy attached. The Department of Environmental Quality rules were subsequently amended and approved by the Environmental Quality Commission on May 21, 2004.

We continued to proceed under the two year time filing requirement even to the extent of submitting the application. The individual who prepared the actual documentation and application, did use the new Application form that she down loaded from the Department of Environmental Quality web page in 2005; however, we did not even notice that the wording on the application had been changed above the date for opening the site.

Upon submission of the Tax Credit Application, we were advised that we had missed the one year filing requirement for Tax Credit Applications.

The Pollution Control Facility Tax Credit Application for our cardlock Site at 11426 NE Sandy Blvd., Portland, Oregon fully qualifies for the tax credit except for that it was filed a few months late due our mistaken belief that we had two years for filing after the completion of the facility. Therefore, as in the case of Far West Fibers, Inc. in which an extension of filing time was granted on July 16, 2004, we should also not be unduly penalized and request that a one time extension for filing for this application be granted and Department of Environmental Quality accept the above referenced application for processing.

Additionally, we request that the following information be considered in our situation:

- Truax Harris Energy LLC has always strived and worked very hard to make sure that we are in full compliance with all the Department of Environmental Quality Regulations and we believe the Departments personnel will concur.

- Our sites have always been in full compliance well before required regulation dates. We pride ourselves on being an environmentally conscience company.

- Our company continually provides individuals to work on the industry advisor groups with the Department of Environmental Quality and assisted in drafting various regulations.

I thank you in advance for your consideration of this request for extension time for filing the Pollution Control Facility Tax Credit Application. If you have any, questions please do not hesitate to contact me.

Sincerely;

Larry Petrjanos
Chief Financial Officer

00215

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Approve Final Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7034, David A Vanasche

1 Recommendation for Certification

According to ORS 468.165(6), **David A Vanasche** timely filed one of three projects in application number **7034** on June 28, 2005. The Department of Environmental Quality (DEQ) reviewed the facility and determined that one project meets the definition of a pollution control facility and that it is necessary to satisfy the intents and purposes of DEQ regulations (see sections 3 through 7).

DEQ presents its analysis of the facility cost, the percentage of the facility cost allocable to pollution control, and the maximum allowable percentage used to calculate the amount of the tax credit in sections 8, 9 and 10, respectively. According to the EQC's decision, DEQ recommends the approval of the corresponding three components bolded below that decision.

Facility Cost		**$28,643**
Percentage Allocable	X	**100%**
Maximum Allowable Percentage	X	**35%**
Tax Credit		$10,025

2 Applicant Identification

David A Vanasche
36130 NW Wren Rd
Cornelius, OR 97113

Organized as: Individual
Taxpayer ID:

3 Air: Field Burning Pollution Control Facility Identification

9065 NW Milne Rd
Cornelius, Oregon 97113

The EQC certification will identify the facility as:

Drainage tile installation on Tax Lot No. INR3W, Section 11-TL1500

4 Technical Information

David A Vanasche, the applicant cultivates perennial grass-seed on 1,950 acres. Of this acreage, the applicant owns 481 acres and leases 1,869 acres. The applicant installed drainage tile on 250 acres.

5 The facility has a pollution control purpose.

ORS 468.155 (1)(a)(A); OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the **new facility** is to reduce air pollution by reducing the maximum acreage to be open-burned in compliance with OAR 340-266-0060 (Acreage Limitations, Allocations). The principal purpose must be the most important or primary purpose of the facility. The facility must have only one primary purpose.

> Air pollution is the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.

Criteria Applied to this Application

The primary or most important purpose of the claimed facility is to provide an alternative to open field burning as a method for sanitizing grass-seed acreage.

6 The facility accomplishes pollution control by a method in law.

ORS 468.150, OAR 340-016-0060 (4)(b)

Criteria

As an alternative to open field burning, the facility must reduce or **eliminate**:

a. Open field burning and it may include equipment, facilities, and land for gathering, densifying, handling, storing, transporting and incorporating grass straw or straw based products;

b. Air quality impacts from open field burning and it may include propane burners or mobile field sanitizers; or

c. **Grass seed acreage** that requires open field burning. The facility may include:

- Production of alternative crops that do not require open field burning;
- Production of rotation crops that support grass seed production without open field burning; or
- **Drainage tile installations** and new crop processing facilities.

Criteria Applied to this Application

The applicant installed tiling and drainage as an alternative to open field burning. The installation allows the applicant to select crops that do not require flame sanitation as rotation crops with grass seed production. This crop rotation provides for non-thermal sanitation following a grass seed stand.

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria	The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, **468A** and 468B and rules thereunder.
Criteria Applied to this Application	As an air pollution control facility, by definition, the facility is necessary to satisfy the intents and purposes of ORS 468A.

8 The actual facility cost represents the applicant's own cash investment.

ORS 468.170(1)

Criteria	The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.
Criteria Applied to this Application	Paid invoices, made out to the applicant, document **$62,365** as the actual cost of the facility. The applicant tiled the tax lot in sections beginning in August of 2003 and ending in September of 2004. The applicant waited to file the application until all four discrete projects were completed and missed the one-year filing deadline for three of the projects according to ORS 468.165(6). DEQ subtracted the cost of these projects from the claimed facility cost. The State of Oregon has issued four Pollution Control Facilities Tax Credit Certificates to the applicant at this location: 1) No. 4522 Drainage Tile removing 90 acres of the taxpayer's own acreage; 2) No. 4523, JD8400 Tractor & 30' Flail Shredder removing 1,270 acres; 3) No. 3425, JD Tractor and Loader; and 4) No. 3424, Rears Propane Mobil field burner w/tandem disk. The claimed facility is **not a replacement** of these previously certified facilities.

Section	Description		Facility Cost
		Claimed	**$62,365**
8	Untimely Filing		-33,722
		Recommended	$28,643

9 The facility cost is properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(3)

Criteria	If the cost of the facility (or facilities certified under one certificate) does not exceed $50,000, the portion of the actual costs properly allocable is the ratio of the time the applicant uses the facility to prevent, control or reduce air pollution to the entire time the facility is used for any purpose.
Criteria Applied to this Application	The certified facility cost **does not exceed $50,000** and the applicant uses the facility **100 percent** of the time for pollution control.

10 The facility qualifies for the maximum allowable percentage.

ORS 468.173(3)(f)

Criteria	The maximum tax credit is 35 percent if the applicant submitted the application between January 1, 2002 and December 31, 2008, inclusively, and the certified facility cost does not exceed $200,000.
Criteria Applied to this Application	The **maximum tax credit is 35 percent** because the applicant submitted the application on May 25, 2005, and the certified facility cost does not exceed $200,000.

Reviewer: Maggie Vandehey

October 21, 2005

State of Oregon
Department of Environmental Quality
Management Services
Tax Credit Program
811 SW 6th Avenue
Portland, OR 97204

Attn: Maggie Vandehey

Dear Maggie,

Please consider this my request for an extension of time to file a Pollution Control Facility Tax Credit Application with the Department of Environmental Quality under ORS 469.165.

With reference to our recent telephone conversation regarding my application for credit for alternatives to open field burning. I would like you to consider that the project is still not fully complete. The reason I make this statement is due to the fact that the tiling installed on any parcel of ground will take a minimum of 1 year for the lines to settle. The ground is not usable for any productive purpose until that settling has taken place and the ground can be smoothed over with tractor work. Any crop planted on these sites are a temporary crop to avoid soil erosion until we get heavy rains. If we don't get enough rain in a given year then it may take up to two years for the ground to settle. The total drainage system was installed on one farm. Until the entire field had the drainage lines installed, the ground had settled and the field was again tilled it was not economical to plant or harvest a profitable crop.

Please take these circumstances into consideration before making you final decision.

Thank you for your assistance and for allowing me to make additional comments regarding my application.

Sincerely,

David A Vanasche

David A Vanasche
Vanasche Farms
36130 NW Wren Rd
Cornelius, OR 97113
503-648-1589

Attachment E
Background and References for Preliminary Certification

Boise White Paper, LLC, submitted the **optional** preliminary application (number 7088) requesting that the EQC pre-certify a 500-foot outfall extension and new diffusers. According to ORS 468.167, the applicant filed the preliminary application before completing construction.

Background

To be eligible for the pollution control facilities tax credit, the outfall and diffuser must meet the definition of a pollution control facility. The definition has two parts:

- Part 1 The primary and most important purpose of the outfall and diffuser must have a water pollution control purpose[18].
- Part 2 The outfall and the diffuser must accomplish the water pollution prevention, control or reduction by:
  - The disposal or elimination of industrial wastewater, and
  - the use of a treatment works for industrial waste as defined in ORS 468B.005[19].

Applicant's Interpretation

The applicant states that the outfall extension and diffusers meet the definition of a pollution control facility by increasing dilution at the edge of the mixing zone, thereby reducing temperatures at the edge of the mixing zone.

The applicant has not, and does not plan to provide analysis detailing the temperature or the turbidity reduction within the outfall extension or at the diffusers.

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[18] See section 5 of the attached review report for application 7088.
[19] See section 6 of the attached review report for application 7088.

Department Recommendation Consistent with EQC Direction

The Department's recommendation to deny preliminary certification is consistent with the tax credit regulations and the Commission's direction over past ten years as listed below.

The EQC last approved a diffuser added to an existing outfall to comply with applicant's National Pollutant Discharge Elimination System permit in 1995. Since then, based on a narrower interpretation of the components that actually provide pollution control, the EQC considered the purpose of items such as diffusers, and collection and discharge piping/ductwork is material handling.

EQC Decisions on Material Handling

App. #/Applicant	EQC Action	Type	Discussion
6712, Tillamook County Creamery Association	Approved 9/9/04 Treatment Works	Outfall Piping	Three components provide temperature reductions to meet discharge requirements. They are a cooling tower connected to a 1,500–foot outfall into a wetland area that provides evaporative cooling prior to discharge to the Wilson River. Analysis supports a temperature drop within each component.
5856 Willamette Industries	Denied 5/ 9/03 Material Handling	Discharge Piping	The sewer upgrade, including piping, directs waste to the sewer.
6292, Medallion Cabinetry, Inc.	Denied 5/9/03 Material Handling	Discharge Piping	The piping directs water from the storm water settling pond to the city sewer system.
5587, Darigold, Inc.	Denied 12/13/02 Material Handling	Discharge Piping	The piping connects the wastewater pH neutralization system to the sanitary service.
5140, Wacker Siltronic Corporation	Denied 12/1/01 Material Handling	Collection Piping	The piping collects waste from the Process Building, Central Utilities Building, and from Oil/Seal Water functions.
4687, Intel Corporation	Denied 6/25/99 Material Handling	Collection Piping	The piping collects industrial waste from factory tools and acid waste areas.
4461, PGE	Denied 7/12/96 No reduction or elimination of air pollution	Discharge ductwork	The applicant claimed a stack extension on an auxiliary boiler stack for additional emission dispersion.

Background on Preliminary Certification

The Commission's pre-certification is limited to the technical aspects of the claimed facility. The attached report describes the facility's technical qualifications for preliminary certification. The Commission's preliminary certification does not:

- exempt the applicant from submitting their final application within the required filing period.
- include the eligible facility cost, percentage of the facility cost allocated to pollution control, or the maximum allowable percentage.
- address the proposed facility's compliance with DEQ rules and regulations.

The Commission's approval of the application provides prima facie evidence that the facility is qualified for tax relief under ORS 468.170. The pre-certification does not ensure that the facility represented on the preliminary application would receive final certification according to the law. The pre-certification assures the applicant, as provided by OAR 340-016-0055(1), that the facility meets the technical qualification of a pollution control facility if they construct the facility according to the pre-certification.

State of Oregon
Department of
Environmental
Quality

Pollution Control Facility Tax Credit

Deny Preliminary Certification

ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0080

Application No. 7088, Boise White Paper LLC

1 Recommendation for Preliminary Certification

According to ORS 468.167, Boise White Paper, LLC, applied for pre-certification of a water pollution control facility before the completion of the project. The Department of Environmental Quality (DEQ) recommends that the Environmental Quality Commission (EQC) deny the preliminary certification.

After reviewing application number **7088**, the DEQ recommends that the EQC **deny preliminary certification** of the facility described in sections 3 and 4 of this report.

- The claimed facility does not meet the definition of a pollution control facility. See sections 5 and 6 of this report;
- The facility is necessary to satisfy the intents and purposes of DEQ regulations as listed in section 7 of this report.

2 Applicant Identification

Boise White Paper LLC
St. Helens White Paper
1300 Kaster Road
St. Helens, OR 97051

Organized as: LLC
Taxpayer ID: 20-1529327

3 Water Pollution Control Facility Identification

Same as the applicant's address.

The applicant requests preliminary certification of:

A 560-foot outfall extension and diffuser, and navigational aids

4 Technical Information

The Boise White Paper, LLC, is a pulp and paper mill that produces paper products for consumer use. The Waste Water Treatment Plant (WWTP), owned and operated by the City of St. Helens, is located on the west bank of Multnomah Channel in St. Helens, Oregon. The WWTP treats process and cooling waters, storm water runoff, and filter backwash from operaton and maintenance activities at the mill. The WWTP also treats wastewater from the cities of St. Helens and Columbia City.

From the WWTP, the treated water currently flows from the secondary treatment lagoon to Outfall 001. The existing 48-inch concrete-coated steel pipe extends approximately 3,000 feet under the Multnomah Channel, across Sauvie Island, and into the Columbia River at River Mile 86.9 in approximately 20 feet of water. The last 96-feet of the outfall is a diffuser section. This section consists of 24, 6 ½-inch diameter vertical ports spaced at 4-foot intervals on the pipe's crown. Sized for flow peaks from both Boise and the City at 45 MGD (million gallons per day), the system easily handles the combined average discharge flow of 28 MGD.

The claimed facility extends the existing outfall by 500 feet, removing the existing wastewater discharge from the shallow near-shore region to a deeper location away from major Endangered Species Act salmon runs. The new discharge will be in approximately 30 feet of water at low river flow. The claimed facility includes:

- **Pipe** The applicant will install a new 48-inch mortar-coated steel pipe that will extend 560 feet east beyond the existing outfall. The 40-foot sections of pipe will connect using Carnegie-type bell and spigot rings with o-ring gaskets and stainlees steel thrust ties.

- **Old/New Pipe Connections** The applicant will remove a 32-foot section of the existing outfall pipe and connect it to the new 48-inch steel pipe using a Carnegie-type bell and spigot ring with o-ring gaskets and stainless steel thrust ties.

- **Diffuser** The applicant will plug the old discharge ports, thereby, retiring the existing outfall diffuser upon installing a new outfall extension diffuser section. The section will include seven 24-inch inside diameter vertical risers spaced 24-feet on center. Each risers will be topped with a 24-inch, 80-degree elbow fitted with a 14.25-inch diameter orifice plate and Tideflex® diffuser check valves (TFDs). The pipe invert elevation in the diffuser section will be no more than 12 to 15-feet below the riverbed surface.

- **Endgate Structure** The applicant will install a new outfall terminus fitted with a 45-degree angle, and a hinged steel bulkhead that will be fitted, sealed, and bolted in place.

- **Navigation Aid** The new outfall will extend within approximately 175-feet of the navigable channel subject to dredging. The applicant will anchor a navigation buoy approximately 50-feet from the end of the new outfall diffuser. The buoy will meet the United States Coast Guard (USCG) standards.

5 The facility must have a pollution control purpose.

ORS 468.155 (1)(a)(A), OAR 340-016-0060 (2)(a)

Criteria

The **principal purpose** of the facility complies with a DEQ or the federal Environmental Protection Agency (EPA) requirement to prevent, reduce, or control water pollution. The principal purpose is the most important or primary purpose of the facility; the facility has only one primary purpose.

> Pollution or **water pollution** means such alteration of the physical, chemical or biological properties of any waters of the state, including change in **temperature**, taste, color, **turbidity**, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof. ORS 468B.005.

Criteria Applied to this Application

The DEQ issued the joint National Pollutant Discharge Elimination System Waste Discharge Permit, numbered 101173, on February 6, 2004 to the City of St. Helens/Boise Cascade Corporation. Schedule C of the permit requires a temperature and turbidity reduction to receiving water through Best Management Practices.

The effluent from the WWTP meets water quality standards. The claimed facility transports the WWTP effluent to the Columbia River at River Mile 86.9. The applicant claims the outfall extension and the diffusers will allow them to meet instream water quality standards at the edge of the mixing zone.

The Department recommends the denial of the preliminarily certification of the the claimed facility. The primary and most important purpose of the facility is:

- to protect the outfall from dredging equipment by using a **navigational aid**, and
- material handling by transporting the treated WWTP effluent through a 500-foot outfall extension into the river and dispersing it through the diffusers. The applicant has not provided quantifiable analysis showing that the pipe and the diffusers would reduce temperature or turbidity without considering the dilution at the edge of the mixing zone.

6 The facility must accomplish pollution control by a method in law.

ORS 468.155 (1)(b)(A)

Criteria

The facility accomplishes the prevention, control or reduction by:

a. disposal or elimination of industrial wastewater, **and**

b. use of a treatment works for industrial waste as defined in ORS 468B.005.

Industrial waste means any liquid, gaseous, radioactive or solid waste substance or a combination thereof resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources. ORS 468B.005.

Treatment works means any plant or other works used for the purpose of treating, stabilizing or holding wastes. ORS 468B.005.

Criteria Applied to this Application

The effluent discharge to the Columbia River is treated wastewater from the joint City of St Helens/Boise Cascade WWTP. The WWTP treats the wastewater to meet permit requirements prior to discharge. As discussed in section 5, the outfall extension and the diffusers do not provide additional treatment of the effluent. The extension and diffusers do provide for better mixing of the effluent with the Columbia River; however, the department does not consider better mixing and dilution as "treating wastes."

7 The facility is necessary to satisfy DEQ regulations.

ORS.468.170 (4)(a)

Criteria

The facility is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.505 to 454.535, 454.605 to 454.755, ORS chapters 459, 459A, 466 and 467 and ORS chapters 468, 468A and **468B** and rules thereunder.

Criteria Applied to this Application

The claimed facility is necessary to satisfy the intents and purposes of ORS 468B.

8 The actual facility cost must represent the applicant's own cash investment.

ORS 468.170(1)

Criteria

The certified cost is limited to the **actual cost** of the claimed facility and excludes any ineligible costs. The certified cost does not exceed the **taxpayer's own cash investment** in the facility or portion of the facility.

Criteria Applied to this Application

The applicant estimates the project will cost approximately **$3,026,000**. In the final application, the applicant will document the actual cost of the facility and the portion that represent the company's own cash investment in the facility. In a final application review, DEQ would subtract any ineligible cost according to pollution control facilities tax credit regulations, including ORS 468.155(3), OAR 340-016-0070(1) and -0070(3). For example, DEQ would subtract any costs associated with demolition, spare parts, and the cost of preparing the application.

The State of Oregon has issued **21** Pollution Control Facilities Tax Credit Certificates to Boise Cascade Corporation at this location. Eight of the certificates approved water pollution control equipment. The claimed facility would **not be a replacement** of these previously certified facilities.

9 The facility cost would be properly allocable to pollution control.

ORS 468.170(1), ORS 468.190(1)

Criteria

The certified percentage allocable is limited to the portion of the actual facility cost that is properly allocable to the prevention, control, or reduction of water pollution. Additionally, the cost must represent the applicant's own cash investment.

The following factors establish the portion of costs properly allocable to pollution control for facilities that cost more than $50,000.

a. The extent to which the applicant uses the facility to recover and convert waste products into a salable or usable commodity;

b. The estimated annual percent return on the investment in the facility;

c. Any alternative methods, equipment, and costs for achieving the same pollution control objective;

d. Any related savings or increase in costs that occur or may occur as a result of the installation of the facility; and

e. Any other relevant factors.

Criteria Applied to this Application

The Department would analyze the percentage of the facility cost that will be allocable to pollution control according to the pollution control facilities tax credit regulations. In its determination, the Department would consider that the City of St Helens contributes approximately 5% and the applicant contributes approximately 95% of the volume of waste load flowing through the outfall extension.

10 The facility must qualify for an allowable percentage.

ORS 468.170(10), ORS 468.172, ORS 468.173

Criteria	The maximum tax credit would be 35 percent if the applicant submits the final application between January 1, 2002 and December 31, 2008, inclusively and the applicant is certified under International Organization for Standardization (ISO) standard 14001, or the applicant demonstrates to the Department of Environmental Quality that the applicant uses an Environmental Management System (EMS) at the facility.
Criteria Applied to this Application	The applicant states they have a pending ISO 14001 certification and they use an EMS at the facility. The applicant would have to provide the finalized ISO 14001 certification or document the EMS according to ORS 468.172 and ORS 468.173(i) with a final application.

11 The applicant may not be the taxpayer allowed the full credit.

ORS 315.304(4)

Criteria — The taxpayer who is allowed the credit must be:

a. The owner, including a contract purchaser, of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution; or

b. A person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property.

Criteria Applied to this Application — The EQC does not certify that the Department of Revenue would or would not allow the taxpayer to claim the credit. The DEQ; however, will report the information in this section to the Department of Revenue.

The City of St. Helens owns and operates the Waste Water Treatment Plant that discharges through the outfall and diffusers. Boise White Paper LLC paid the entire cost of extending the outfall and the company owns the business that produces approximately 95% of the volume of waste load flowing through the outfall and difussers.

Reviewer: Maggie Vandehey
Rob Burkhart, ODEQ, NWR
Neil Mullane, ODEQ, NWR WQ Manager

Attachment F
Tax Expenditure Liability Report

When the Environmental Quality Commission issues a Pollution Control Facilities Tax Credit Certificate, the State of Oregon incurs a tax expenditure liability. The table in this attachment shows the maximum potential fiscal impact associated with the Commission's decision to certify the facilities presented in this staff report and for the current biennium.

This report shows the maximum amount of credit that each applicant may use to reduce their Oregon taxes in any one year if the Commission certifies their facility. The annual limitation is equal to the tax credit divided by the remaining useful life of the facility but no more than ten years. The remaining useful life is the useful life of the facility less the expired period between the date the applicant placed the facility into operation and the Commission approved certification.

Attachment F
Tax Expenditure Report

App #	Tax Credit	Placed in Operation	UL	Remaining UL	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
6965	2,233	2004	12	10	223	223	223	223	223	223	223	223	223	226
6966	5,768	2004	12	10	577	577	577	577	577	577	577	577	577	575
6967	23,940	2004	12	10	2,394	2,394	2,394	2,394	2,394	2,394	2,394	2,394	2,394	2,394
6971	23,367	2004	10	9	2,596	2,596	2,596	2,596	2,596	2,596	2,596	2,596	2,599	0
6981	14,170	2005	7	7	2,024	2,024	2,024	2,024	2,024	2,024	2,026	0	0	0
6983	15,153	2004	20	10	1,515	1,515	1,515	1,515	1,515	1,515	1,515	1,515	1,515	1,518
6985	2,902	2004	15	10	290	290	290	290	290	290	290	290	290	292
7008	1,785	2004	7	6	298	298	298	298	298	295	0	0	0	0
7009	1,723	2004	7	6	287	287	287	287	287	288	0	0	0	0
7010	3,552	2004	7	6	592	592	592	592	592	592	0	0	0	0
7012	7,088	2004	20	10	709	709	709	709	709	709	709	709	709	707
7013	17,443	2004	10	9	1,938	1,938	1,938	1,938	1,938	1,938	1,938	1,938	1,939	0
7014	15,320	2004	7	6	2,553	2,553	2,553	2,553	2,553	2,555	0	0	0	0
7015	1,654	2004	7	6	276	276	276	276	276	274	0	0	0	0
7018	48,135	2004	10	9	5,348	5,348	5,348	5,348	5,348	5,348	5,348	5,348	5,348	0
7020	1,798,561	2004	15	10	179,856	179,856	179,856	179,856	179,856	179,856	179,856	179,856	179,856	179,857
7026	80,183	2004	30	10	8,018	8,018	8,018	8,018	8,018	8,018	8,018	8,018	8,018	8,021
7034	10,025	2004	10	9	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,113	0
7036	3,905	2004	10	9	434	434	434	434	434	434	434	434	433	0
7043	24,492	2004	20	10	2,449	2,449	2,449	2,449	2,449	2,449	2,449	2,449	2,449	2,451
7045	15,320	2004	7	6	2,553	2,553	2,553	2,553	2,553	2,555	0	0	0	0
7046	15,320	2004	7	6	2,553	2,553	2,553	2,553	2,553	2,555	0	0	0	0
7047	15,320	2004	7	6	2,553	2,553	2,553	2,553	2,553	2,555	0	0	0	0
7048	15,320	2004	7	6	2,553	2,553	2,553	2,553	2,553	2,555	0	0	0	0
7049	105,147	2004	10	9	11,683	11,683	11,683	11,683	11,683	11,683	11,683	11,683	11,683	0
7051	17,500	2005	7	7	2,500	2,500	2,500	2,500	2,500	2,500	2,500	0	0	0
7053	277,361	2004	20	10	27,736	27,736	27,736	27,736	27,736	27,736	27,736	27,736	27,736	27,736
7054	24,657	2005	7	7	3,522	3,522	3,522	3,522	3,522	3,522	3,525	0	0	0
7061	37,338	2005	15	10	3,734	3,734	3,734	3,734	3,734	3,734	3,734	3,734	3,734	3,732
7062	1,048	2005	1	1	1,048	0	0	0	0	0	0	0	0	0
7070	8,916	2004	5	4	2,229	2,229	2,229	2,229	0	0	0	0	0	0
7072	69,727	2004	10	9	7,747	7,747	7,747	7,747	7,747	7,747	7,747	7,747	7,751	0
7075	437,278	2004	10	9	48,586	48,586	48,586	48,586	48,586	48,586	48,586	48,586	48,590	0

00236

Attachment F
Tax Expenditure Report

App #	Tax Credit	Placed in Operation	UL	Remaining UL	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
7080	999	2004	1	1	999	0	0	0	0	0	0	0	0	0
7084	54,975	2004	10	9	6,108	6,108	6,108	6,108	6,108	6,108	6,108	6,108	6,111	0
7087	298	2004	1	1	298	0	0	0	0	0	0	0	0	0
Dec '05	**3,197,923**				**341,898**	**339,554**	**339,555**	**339,556**	**337,328**	**337,335**	**323,117**	**315,067**	**315,081**	**229,523**
Oct '05	312,916				66,715	66,450	66,450	66,449	27,060	7,671	3,880	2,747	2,747	2,747
WC	71,502				30,911	18,382	12,821	7,011	2,027	0	0	0	0	0
Total	**$3,582,341**				**$439,524**	**$424,386**	**$418,826**	**$413,016**	**$366,415**	**$345,006**	**$326,997**	**$317,814**	**$317,828**	**$232,270**

WC = wood chippers biennium to date

00237

Attachment G
Certified Wood Chipper Report
9/01/05 – 11/15/05

On October 4, 2002, the Commission adopted OAR 340-016-0009. The rule delegates the Commission's authority to certify wood chippers for tax credit purposes to the Department. The Commission requested that the Department periodically provide a listing of the wood chipper certifications.

The Department presented the last Certified Wood Chipper Report to the EQC on October 21, 2005. The Department certified **19** wood chippers from the date of the last report to the date of this report for certificates issued from September 1, 2005 through November 15, 2005.

Reference

OAR 340-016-0009[20]

For the purpose of subdelegating authority to approve and issue final certification of pollution control facilities under OAR 340-016-0080(2):

1) The Environmental Quality Commission authorizes the Director of the Department of Environmental Quality or the Director's delegate to certify wood chippers as provided in OAR 340-016-0060(4)(h)(C) if:
   a) The Department determines the facility is otherwise eligible under OAR 340-016-0060; and
   b) The claimed facility cost does not exceed $50,000 as set forth in OAR 340-016-0075(1).
2) The Department may elect to defer certification of any facility to the Environmental Quality Commission.
3) If the Department determines the facility cost, the percentage of the facility cost allocable to pollution control, or the applicable percentage under ORS 468.173 is less than the applicant claimed on the application then the Department shall:
   a) Notify the applicant in writing; and
   b) Include a concise statement of the reasons for the proposed certification of a lesser amount or percentage; and
   c) Include a statement advising the applicant of their rights under section (4).
4) Applicants that receive a notification under section (3) may elect to defer certification to the Environmental Quality Commission by notifying the Department within 30 days of the notification date.
5) The Department shall defer certification to the Environmental Quality Commission according to sections (2) and (4).
6) The Director or the Director's delegate shall certify facilities that otherwise qualify under this rule and have not been deferred according to sections (2) or (4).

Adopted 10-4-02; effective 11-01-02

[20] Certification of wood chippers

Attachment G
Certified Wood Chippers
9/01/05 - 11/15/05

Action Date	App #	Applicant	Claimed	Certified	Difference	% Allocable	Maximum Percent	Tax Credit
10/17/2005	7092	Leonard F. Hensel	$1,599	$1,599	$0	100%	35%	$560
10/17/2005	7064	Stephen D Sichau	1,600	1,600	0	100%	35%	560
10/17/2005	7066	Haywood Banks	6,299	6,299	0	100%	35%	2,205
10/17/2005	7067	Herbert L Randall	1,889	1,889	0	100%	35%	661
10/17/2005	7078	Nick G Orfanakis	2,999	2,999	0	100%	35%	1,050
10/17/2005	7079	Kenneth Imamura	999	999	0	100%	35%	350
10/17/2005	7069	Elmer L Brink	1,550	1,550	0	100%	35%	543
10/17/2005	7081	William E Plumeau	1,425	1,425	0	100%	35%	499
10/17/2005	7060	David Horine	850	850	0	100%	35%	298
10/17/2005	7090	Stephen W. Turner	1,699	1,699	0	100%	35%	595
10/17/2005	7095	Lanny Pitts	700	700	0	100%	35%	245
10/17/2005	6921	Jean M. Hester	596	596	0	100%	35%	209
10/17/2005	7071	H. Bryce Holonen	3,995	3,995	0	100%	35%	1,398
10/17/2005	7073	John Myers	2,600	2,600	0	100%	35%	910
10/17/2005	7074	Ronald L. Bonner	1,000	1,000	0	100%	35%	350
10/17/2005	7076	Brent H. Rhule	11,000	11,000	0	100%	35%	3,850
10/17/2005	7077	Allen Forbes	4,708	4,708	0	100%	35%	1,648
10/17/2005	7085	Steve Edson	599	599	0	100%	35%	210
10/17/2005	7082	Norman G Smith	1,000	1,000	0	100%	35%	350
19 certificates issued		Sum	$47,106	$47,106				$16,487
		Average	$2,479	$2,479				$868
		Minimum	$596	$596				$209
		Maximum	$11,000	$11,000				$3,850

State of Oregon
Department of Environmental Quality Memorandum

To: Environmental Quality Commission **Date:** December 23, 2005

From: Stephanie Hallock, Director S. Hallock

Subject: Director's Dialogue

DEQ in the News

As you may have been reading in the newspapers and hearing on Oregon Public Broadcasting, DEQ has been getting a lot of attention from the media lately on many topics, including the California Low Emission Vehicle requirements (Cal-LEV), air quality in the Columbia River Gorge, DEQ's proposed turbidity standard, enforcement action against the City of Portland for combined sewer overflows, and more. Media and environmental organizations have also submitted a number of public record requests on many of those issues. Some of the media coverage has been balanced, but a few stories have omitted information or presented information out of context. Many of the issues the agency is grappling with now are highly complex and controversial, and while it can be challenging to deal with the notoriety, it all helps to inform the debate. We are actively pursuing an aggressive campaign for the upcoming year to better position the agency to tell its story and draw attention to the good things DEQ is doing in communities around the state. You'll be hearing more about our communication efforts in coming months.

City of Portland Combined Sewer Overflow Update

On November 21, DEQ issued penalties totaling $449,800 against the City of Portland for numerous incidents in which raw sewage overflowed from the city's sewage collection system into the Willamette River and its tributaries. The combined sewer overflows (CSOs) resulted from blockages in the city's sewer pipes during dry weather. In 67 incidents, between March 2001 and November 2005, nearly two million gallons of sewage was discharged at multiple locations in Portland. In addition to the current penalties, DEQ has fined the City of Portland seven times since 1998 for water quality violations. (Previous fines totaled $41,700.) Sewer overflows during wet weather also impact the Willamette but are not subject to DEQ enforcement action, due to a 1994 EQC Amended Stipulation and Final Order (ASFO). The City of Portland has met all the requirements of the ASFO and DEQ has worked closely with the city to take a holistic look at its stormwater management and sewage collection system maintenance problems to address water quality issues.

EQC to replace Air Toxics Science Advisory Committee member

The air toxics rules adopted by the EQC in October 2003 established the Air Toxics Science Advisory Committee (ATSAC), a five to seven-member standing committee that provides scientific advice on the developing air toxics program. ATSAC must include members with expertise in specific disciplines, including toxicology, environmental science, risk assessment,

epidemiology, public health and air pollution sciences. Based on stakeholder recommendations, the air toxics rules specify that ATSAC members will be appointed by the DEQ Director with concurrence by the EQC. At its May 2004 meeting, the EQC concurred with appointment of ATSAC's seven initial members (list attached), and the committee began meeting in September 2004.

In April 2005, one ATSAC member, Dr. Patti Toccalino (a toxicologist), resigned to accept a position in California. DEQ has identified Dr. David Stone, a toxicologist with the Department of Human Services, as a replacement for Dr. Toccalino. I would now like to seek EQC concurrence with my appointment of Dr. David Stone to the Air Toxics Science Advisory Committee. A resume and brief biographical sketch of Dr. Stone are attached.

Environmental Protection Agency Targeted Watershed Grant Project

The Environmental Protection Agency recently awarded an $800,000 grant to the Willamette Partnership to develop the Willamette Ecosystem Marketplace. The Willamette Partnership (formerly the Willamette Restoration Initiative) is a 501(c)(3) organization composed of conservation, municipal, industry, policy, and academic leaders who develop consensus on innovative conservation policy. The Willamette Ecosystem Marketplace will allow buyers and sellers to trade in "conservation credits," a form of "currency" earned by taking action that produces quantifiable improvements to watershed health. The conservation credits may, in turn, be purchased by entities seeking cost-effective means for off-setting environmental impacts. The exchange will create a ready source of funding for targeted watershed improvement in Oregon.

Initially, the Marketplace will focus on creating trades to help achieve the goal of the Willamette Temperature TMDL. Cities and industries that discharge hot water into rivers and streams will be able to purchase credits offered by landowners who plant streamside shade and reconnect floodplains that cool water naturally. These trades are expected to be especially useful in the future as these entities consider strategies for managing growth. The long-term objective of the Marketplace is to accommodate trades addressing multiple ecological values, such as wildlife habitat preservation, wetland restoration and endangered species protection.

The Willamette Partnership will develop and oversee the Marketplace. DEQ will continue to work closely with the Partnership to implement the program and to create an effective mechanism for tracking the conservation credits by incorporating them into DEQ wastewater permits.

DEQ Taking Steps to Ensure Service Stations Meet Requirements

The Oregon Department of Environmental Quality (DEQ) has begun the final phase of an enhanced enforcement effort to ensure that owners of underground storage tanks have the financial means necessary to respond quickly when tank systems leak. When petroleum contamination is not cleaned up quickly, it can contaminate groundwater or create hazardous vapors.

State and federal regulations require that underground storage tank owners and operators comply with financial responsibility requirements by carrying pollution liability insurance or another financial mechanism designed to cover the costs of cleaning up leaks and compensating third-parties for bodily injury and property damage caused by leaking tanks. Although current tank

safeguards greatly reduce leaks and spills, they do not eliminate them. DEQ has spent $5.7 million in state funds to clean up petroleum contamination at uninsured facilities.

Insurance coverage costs tank owners about $500 per tank per year. Nearly 97% of Oregon tank facilities have provided proof of financial coverage. The remaining tank facilities must acquire tank insurance by January 2006 or DEQ will revoke their operating certificates effective mid-February 2006, making it illegal for those facilities to receive or dispense fuel. Currently, 38 facilities have not complied—eight in DEQ's Eastern Region, 13 in the Northwest Region, 17 in the Western Region.

DEQ has contacted all non-compliant businesses at least three times by letter and at least twice by phone to notify them of the need to comply with the regulations. Additionally, warning letters were sent in November and, if necessary, will be followed by a pre-enforcement notice and then a legal order to obtain insurance or stop dispensing fuel. Compliance with the requirements has increased steadily in response to DEQ warning letters. Those facilities that do not comply by the deadline will receive DEQ guidance about how to decommission their tanks or how to provide the documentation necessary to demonstrate adequate financial responsibility, so their operating certificate can be reinstated.

Water Quality Toxics

We continue to work with EPA and Oregon tribes, including the Confederated Tribes of the Umatilla Indian Reservation (CTUIR), to develop opportunities to address toxics. This work has focused on two paths: water quality standards for toxics and pollution control of toxics.

Regarding standards, our understanding from EPA is that the EQC-adopted human health criteria will be approved this month or next. CTUIR remains opposed to EPA approval of criteria based on a fish consumption rate of 17.5 g/day, as not being protective of tribal members and others who consume fish at higher rates. I have committed the Department to reviewing the human health criteria during the next triennial standards review beginning no later than mid-July 2008.

As we proceed with that review, the Department will be discussing with the EQC major policy questions such as whether statewide water quality criteria should focus on the general population or on sensitive sub-populations, and identifying data needs and implementation issues. The Department will also need significant commitment from EPA to support this review.

Regarding pollution control of toxics, the Department has been participating in EPA's Columbia River Toxics Initiative, which is part of the Region's commitment to EPA's national strategic plan. Work plans and performance measures are being developed, and we are optimistic that this process will lead to meaningful toxics reduction, especially for some of the contaminants of particular concern to tribal members (e.g., PCBs). Supporting this Regional priority will mean an investment of resources by DEQ that may take away from other work.

Air Quality PM2.5 Standards

This week, EPA is expected to propose a revision to federal air quality health standards for fine particulate (PM2.5). EPA will take public comment and make a final proposal in September 2006.

Early indications are that EPA may propose keeping the current annual PM2.5 standard the same but lower the daily (24-hr average) standard. Most of Oregon will remain in compliance; however, some areas like Klamath Falls and Medford may have trouble meeting a lower PM2.5 standard. We expect many groups will try to influence EPA's final standards, and so we will need to wait for EPA's final action before knowing what areas in Oregon are potential new nonattainment areas. Oregon will likely have a number of areas on the borderline of a new PM2.5 health standard, so 2006 will be a time to engage with these communities on pollution prevention. Staff are tracking this and will work with other western states to evaluate and respond to EPA's proposal.

New Executive Support Specialist in Director's Office

I am pleased to announce that Toneasha Kelly has been selected as the Executive Support Specialist in the DEQ Office of the Director. She will replace Day Marshall, who will leave DEQ on December 30 to return to college full-time. Toneasha will be the key support and scheduler for the Director and Deputy Director and will assist with EQC meetings and other duties. Toneasha comes to us from DEQ's Vehicle Inspection Program. Toneasha's first day in the Director's Office was Monday, December 19. Please join me in welcoming Toneasha!

Strategic Planning Process

DEQ is launching the strategic planning process in January. Our goal is to publish a revised five-year strategic plan by June 30. This revision is not intended to be a wholesale change in our strategic plan, but rather an update. In February and March, I will lead the Executive Management Team in a series of three workshops to select the right strategic priorities, key actions and measures. We plan to involve stakeholders in April to get their contribution and feedback. The April 27-28 EQC meeting will include a half-day retreat, during which we will describe our vision and ask for Commission guidance and participation in shaping the final strategic plan. Throughout the process, we will provide DEQ employees with opportunities to participate. Division Administrators have already completed rigorous planning and priority-setting with staff and will be well-prepared to inform the overall agency strategic plan.

Our plan for involving the public in the planning process is to have personal contact with selected stakeholders, and to attend meetings of various organizations. Today, I would like to get your views on the public involvement process, and find out about your interest in participating in that process.

Air toxics science advisory committee (ATSAC)

Biographies of Members

Update: In September 2004, a member of the first ATSAC, Dr. Catherine Neumann, resigned due to unexpected professional and academic demands. DEQ's Director, with the concurrence of the Environmental Quality Commission, replaced Dr. Neumann with Dr. Staci Simonich, a candidate previously identified to the Commission as an alternate. In April 2005, Dr. Patti Toccalino, also a member of the first ATSAC, resigned to accept a position with the USGS in California. Her position will remain open until a qualified replacement is identified.

(1) Staci Simonich, Ph.D.

Dr. Simonich is currently an Assistant Professor at Oregon State University with a joint appointment in the Department of Environmental and Molecular Toxicology and Department of Chemistry. Dr. Simonich received her Ph.D. in Chemistry from Indiana University in 1995. Her graduate research focused on the global and regional atmospheric transport of persistent organic pollutants and their removal from the atmosphere by natural vegetation. This research resulted in publications in the journals Science, Nature, and Environmental Science and Technology. Following graduate school, Dr. Simonich worked for six years as a Senior Environmental and Atmospheric Chemist for the Procter & Gamble Company in Cincinnati, Ohio. Her research there focused on the environmental and atmospheric fate of high production volume fragrance materials that are used in consumer products, and resulted in publications in the journals Environmental Science and Technology and Environmental Toxicology and Chemistry. She joined Oregon State University in 2001.

Dr. Simonich's expertise is primarily in the area of air pollution monitoring and environmental science. Her 10-member research group at OSU is focused on studying the trans-Pacific and regional atmospheric transport and deposition of air toxics (primarily persistent organic pollutants) to high elevation ecosystems. Her laboratory's air monitoring research sites include Marys Peak in Oregon's Coast Range, the Olympic Peninsula of Washington, and a site on Mt. Bachelor. The air monitoring research sites are funded through a 5-year grant from the National Science Foundation. Dr. Simonich's laboratory is also studying the atmospheric deposition of air toxics to high elevation ecosystems located in eight Western U.S. National Parks.

Dr. Simonich is also experienced in the fields of toxicology and risk assessment because of her past employment at the Procter & Gamble Company in Consumer Product Safety and her appointment in OSU's Department of Environmental and Molecular Toxicology. Dr. Simonich is actively involved in the Society of Environmental Toxicology and Chemistry and has served on several committees, including the planning committee for the World Congress meeting in Portland, Oregon in 2004.

(2) William Lambert, Ph.D.

Dr. Lambert is an associate professor in the Department of Public Health and Preventive Medicine at Oregon Health and Science University and a scientist at the Center for Research on Occupational and Environmental Toxicology (CROET). He holds a Ph.D. from the Department of Epidemiology and Environmental Analysis at the University of California, Irvine and a BA degree from the Department of Biology at the University of California, Los Angeles. His areas of expertise are air pollution epidemiology, biostatistics, and toxicology. He has served on a number of advisory/regulatory committees, including:

1991-1994, City of Albuquerque/Bernalillo County Air Quality Control Board (Member, Vice-Chair, and Chair)
1993-1996, American Thoracic Society, Environmental Health Committee, primary author of State-of-Science review on ambient air pollution health effects
1997-2000, American Cancer Society Southwest Division, Skin Cancer Core Team (Chair)
1990-2000, American Lung Association, New Mexico Chapter, Air Quality Committee (Member and Chair)
1998-2000, Childhood Lead Poisoning Taskforce (Member)
1999-2000, Children's Indoor Environment Improvement Project (Member)
1999-2000, New Mexico Turning Point Environmental Health Initiative (Member)
2003-Present, Citizen's Advisory Group for Viewmaster Plant (invited expert)

Dr. Lambert is supported by grants from the NIEHS (National Institute of Environmental Health Sciences), ATSDR/CDC (Agency for Toxic Substances and Disease Registry), NIOSH (National Institute for Occupational Safety, NCI (National Cancer Institute) and Northwest Portland Area Indian Health Board.

(3) Brian Patterson, Ph.D.

Dr. Patterson is currently employed as an environmental consultant with SECOR International Incorporated in Tualatin, Oregon. He holds a bachelor's degree in Chemistry and a doctorate degree in Physical Chemistry. His areas of expertise include risk assessment, air dispersion modeling, air receptor modeling, environmental regulatory review, and air quality permitting.

Dr. Patterson is currently finishing a year-long air emission risk assessment for the Lawrence Berkeley National Laboratory which has focused on dispersion modeling and risk/hazard assessment. He worked with Oregon DEQ and public stakeholders to complete a similar study for the Swan Island area in Portland in 1997, and completed a graduate-level Risk Assessment and Toxicology course earlier this year.

(4) Candice Hatch, P.E.

Ms. Hatch is an environmental engineer with more than 27 years of experience in air quality. Her work involves direction and performance of the technical analyses necessary for project evaluations. In addition, she has experience in task and project management for both industrial and governmental projects.

Ms. Hatch's air quality experience focuses on permitting of new and modified industrial facilities. She has prepared permit applications and obtained permits for facilities under Title V, prevention of significant deterioration (PSD), new source review, and state construction and operation permitting requirements. She has performed computer modeling, calculated emission inventories, and prepared air pollutant control equipment evaluations (i.e., BACT, RACT, and LAER) as required to satisfy these regulations. An understanding of regulations and the industry-agency negotiation process complements her technical skills. Examples of the variety of clients for whom she has performed air quality permitting services include steel mills, pulp and paper mills, wood products plants, aggregate mining and processing plants, asphalt refineries, petroleum terminals, silver mines, electronics manufacturers, magnetic tape manufacturers, biomass power plants, wood-treating plants, coal-fired power plants, and coal distribution facilities.

Ms. Hatch has prepared environmental impact statements (EIS) for a mix of projects. She has evaluated several transportation projects, a gold mine, an oil pipeline system, an oil refinery, a hazardous waste treatment storage facility, solid waste landfills, wastewater treatment facilities, power plants and other

industrial developments under national and individual state EIS requirements. Ms. Hatch has also written the air quality evaluations of proposed rocket launch facilities in Florida and Kwajalein.

She holds a BS degree in Environmental Engineering from California Polytechnic State University and is a Registered Professional Engineer in Oregon and Ohio.

(5) Vacant

(6) Kent Norville, Ph.D.

Dr. Norville is an Associate Atmospheric Scientist and project manager at Air Sciences Inc. in Portland, Oregon. He specializes in air quality dispersion modeling, data analysis, and model development. He has considerable experience with a wide variety of models for a number of different public and private sector modeling applications. Applications include regulatory permit modeling, risk assessments, and environmental impact statements; dust fall and deposition studies; accidental release dispersion modeling; visibility modeling; water vapor cloud assessments; odor assessments; transportation conformity and hot spots dispersion modeling; meteorological data processing and assessments; specialized modeling; and custom model development. He has provided modeling assistance to a number of industrial clients, including aluminum producers, wood product facilities, pulp and paper facilities, metal processors, cement plants, mining operations, food producers, electric power producers, composting facilities, and waste treatment facilities.

Dr. Norville is experienced with risk assessment methods and applications. He has worked on a variety of different risk and toxics projects, including EPA superfund sites, public municipalities, and private industries across the United States. He has conducted modeling analyses of many toxic compounds, including: BTEX compounds associated with refinery and fuel depots, lead and zinc impacts from contaminated road dust, particulate emissions from open-pit cement operations, PAH and HF emissions from smelters, vinyl chloride and TEC emissions from treatment plants, solvent emissions from semiconductor facilities, and dioxin and heavy metal emissions from hazardous waste incinerators. Much of the modeling work has been used to show compliance with Acceptable Source Impact Levels (e.g., Washington State), 1-in-a million cancer risks, chronic and acute hazard indexes (e.g., California's AB2588 program), and direct threshold levels used to access both public and on-site worker health. He holds a Ph.D. degree in geophysics from the University of Washington and a B.S. degree in physics from the California Polytechnic University, San Luis Obispo.

(7) Natalia Kreitzer, P.E.

Ms. Kreitzer received a B.S. degree in chemical engineering from Oregon State University and has been employed as an air quality engineer, first as a consultant and more recently as an air quality regulator. Her relevant engineering experience includes knowledge of sources of toxic emissions to the air, emission control strategies and current and future EPA regulations affecting toxics air emissions.

For the past six years she has worked for the Southwest Clean Air Agency (SWCAA) in Vancouver, Washington and has been the air toxics coordinator at SWCAA since 2000. In addition, her duties include writing Air Discharge Permits for industrial facilities, inspecting industrial facilities and determining compliance with all applicable air regulations including Washington's toxic rule "Controls for New Sources of Toxic Air Pollutants." In 2002, she participated as a member of Washington's Mercury Chemical Action Plan Advisory Committee and assisted in the development of a plan to reduce mercury in the state of Washington.

Biographical Sketch: Dr. David Stone

November 1, 2005

Dr. Dave Stone is a public health toxicologist employed by the Oregon Department of Human Services-Health Services. Dr. Stone received his Ph.D. in Environmental and Molecular Toxicology from Oregon State University in 2002. He received a M.S. in Applied Environmental Sciences from the University of North Texas in 1996 and a B.S. in Zoology from the University of Texas in 1993.

His areas of expertise include risk assessment and toxicology. Dr. Stone has authored several public health assessments and consultations for contaminated sites throughout Oregon. He has served on the Oregon Environmental Council Tiny Footsteps advisory committee, the USEPA Harmful Algal Bloom-Cyanobacteria expert panel and the Oregon Chemical Preparedness and Emergency Response Planning workgroup. He is a member of the Society of Environmental Toxicology and Chemistry, the Society for Risk Analysis and the Oregon Collaborative on Health and the Environment. Recent grant sources include the Agency for Toxic Substances and Disease Registry and City of Portland for work in the Portland Harbor Superfund Site and an Environmental Public Health Tracking grant for biomonitoring of mercury levels in fish from Jackson County.

Dave Stone, Ph.D.

Human Health and Environmental Toxicology
Dave.Stone@state.or.us 971-673-0444

Education

1997-2001 **Oregon State University** (Corvallis, OR)
Environmental and Molecular Toxicology
Ph.D., 2002

1994-1996 **University of North Texas** (Denton, TX)
Applied Environmental Sciences
M.S., 1996

1989-1993 **University of Texas** (Austin, TX)
Zoology
B.S., 1993

Research & Professional Experience

2004- ***Public Health Toxicologist***
Oregon Health Services (Portland, Oregon)
Technical consultant for human health and environmental toxicology programs; coordinator of statewide health advisories; risk communication & exposure evaluation; emergency response planning; project management

2002-2005 ***Principle Health Assessor***
Oregon Dept. of Human Services (Portland, Oregon)
Risk assessor/toxicologist for ATSDR-cooperative program; exposure evaluation; fate & transport of chemicals; risk communication & education; development of public health assessments & consultations

2000-2002 ***Instructor***
Coconino Community College (Flagstaff, AZ)
Instructor of Human Anatomy & Physiology, Microbiology & Environmental Biology; curriculum development; student advising

1997-2000 ***Pesticide specialist***
National Pesticide Information Center (Corvallis, OR)
Pesticide toxicology evaluation; fate & transport; risk communication; fact sheet development; database access

Publications

Stone D & Bress W (2005). Public health challenges for cyanobacteria in recreational waters: a tale of two states. *American Journal of Public Health* (submitted).

Stone D (2005). Polybrominated diphenyl ether (PBDE) and polychlorinated biphenyl (PCB) congeners in different tissue samples in chinook salmon (*Oncorhynchus tshawytscha*) from Oregon, USA. *Bulletin of Environmental Toxicology & Contamination* (in press).

Stone D (2005). Public Health Assessment for the Portland Harbor Superfund Site. U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry.

Shuler C, Scott M, DeBess E and Stone D (2004). Retrospective case series of suspected intentional paraquat poisonings: diagnostic findings and risk factors for death. *Veterinary & Human Toxicology* **46**, 313-314.

Stone D (2003). Public Health Assessment for Taylor Lumber and Treating, Inc., U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry.

Stone D, Jepson P and Laskowski R (2002). Trends in detoxification enzyme and heavy metal accumulation in ground beetles (Coleoptera: Carabidae) inhabiting a gradient of pollution. *Comparative Biochemistry and Physiology C* **132**, 105-112.

Stone D, Jepson P, Kramarz P and Laskowski R (2001). Time to death response in carabid beetles exposed to multiple stressors along a gradient of heavy metal pollution. *Environmental Pollution* **113**, 239-244.

Stone D, Dickson K, and Cairns S (1997). Comparison of direct and indirect "panning" techniques for clarification of *Cryptosporidium parvum* from aqueous samples. *Letters in applied microbiology* **25**, 415.

Abstracts

Stone, D (2005). **Perchlorates: A Simple Salt Gone Awry.** Western Region Epidemiology Network Annual Meeting, Ashland, OR May 20, 2005.

Stone, D, Davoli, D & Kissinger, L (2004). **Persistent Organic Pollutants in Fish from Portland Harbor, Oregon**. Society of Environmental Toxicology and Chemistry World Congress, Portland, OR, November 19, 2004.

Stone, D (2004). **Contamination of Migratory and Non-Migratory Fish in Portland Harbor, OR.** ATSDR Partners in Health Annual Meeting, Atlanta, GA, March 29, 2004.

Stone, D and Jepson P (2001). **Biomarkers of stress in ground beetles (Coleoptera: Carabidae) inhabiting a metal polluted gradient.** Entomological Society of America, San Diego, CA, Dec. 9, 2001.

Grants/Fellowships/Awards

2005: Environmental Public Health Tracking Grant
Oregon Health Services – Environmental & Occupational Epidemiology

2003: Administrator's Inspirational Award
Oregon Health Services - Office of Public Health Systems

2001: Faculty of the Year nomination
Coconino Community College (Flagstaff, AZ)

2001: Honorable Mention Award – oral presentation
Entomological Society of America annual conference (San Diego, CA)

1997-2000: National Institute of Environmental Health Toxicology Fellowship
Environmental and Molecular Toxicology (Corvallis, OR)

1999-2000: NATO Linkage Grant participant
Jagellonian University (Krakow, Poland)

Panels/Training/Memberships

Project Manager: Biomonitoring & Tracking Project, Jackson County, Oregon

Project Manager: Migratory Fish Contamination Investigation, Portland Harbor

Project Manager: Oregon Sport Fish & Cyanobacteria Advisory Programs

Expert Panel: Oregon Environmental Council Tiny Footprints Project

Expert Panel: EPA International Harmful Algal Bloom Workgroup

Expert Panel: Oregon Acute Chemical Exposure Response Workgroup

Training: Human Health, Air and Ecological Risk Assessment

Training: Media Spokesperson & Risk Communication

Training: 40 Hour HAZWOPER certified (current)

Member: Society of Environmental Toxicology and Chemistry

Member: Society for Risk Analysis

Member: Oregon Collaborative on Health and the Environment

Presentations

Invited Speaker: Environmental Protection Agency Air Toxics Summit – **When Your Neighbor is a Wood Treatment Facility**, Portland, OR, October 19, 2005.

Invited Speaker: Oregon Drinking Water Conference – **Arsenic and Health Effects**, Silver Falls State Park, OR, May 19, 2005.

Invited Speaker: Tribal Fish Health Forum – **Salmon, sturgeon and lamprey**, Kennewick, WA, November 16, 2004.

Invited Speaker: Environmental Protection Agency - *Mercury: Medical and Public Health Issues* symposium, **Mercury Concentrations in West Coast Fish: Sport Caught and Store Bought**, Tampa, FL, April 29, 2004.

Invited Speaker: Oregon Health and Science University - *Trichloroethylene from the Ground Up, Contaminated Sites, Health Effects, and Remediation Strategies*, **Public Health Perspective on TCE Exposure**, Portland, OR, May 21, 2004.

Invited Speaker: Oregon Lakes Association – 2004 Annual Meeting, **Cyanobacteria and their Toxins**, Bend, OR, September 15, 2004.

Invited Speaker: Tribal Quarterly Meeting, **About Fish: Contamination, Dredging and Your Health**, Salem, OR, August 20, 2003.

Organizer & Speaker: ATSDR Regional Conference, **Mega-Sites: Portland Harbor**, Portland, OR, January 30, 2003.

Invited Speaker: Oregon Environmental Health Association Annual Meeting, **Heavy Metal in Oregon: A Human Health Perspective**, Bend, OR, April 30, 2003.

Invited Speaker: Physicians for Social Responsibility Training, **Mercury in the Home**, Portland, OR, November 6, 2003.

Invited Speaker: Southern Willamette Valley Groundwater Conference, **Nitrates and Health Effects**, Junction City, OR, February 4, 2003.