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OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS 10/22/2009

State of Oregon
Department of Environmental Quality

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State of Oregon

Department of Environmental Quality — Memorandum

Date: October 9, 2009

To: EQC Members

From: Stephanie Clark, EQC Assistant

Subject: Supplemental mailing for October 22-23, 2009 EQC meeting

Hello commissioners, this mailing includes item B, the status update on the Umatilla depot, item E, a report from one year of toxics monitoring data in the Willamette Basin, and DEQ's key performance measures report, which will part of the discussion for item O.

You will receive a folder on October 22 with a hard copy of the Director's Dialogue, travel reimbursement forms and any updated meeting materials. I also plan to send the Director's Dialogue by email a few days before the meeting.

All public parts of the meeting are in the Mt. Scott room at the OIT college union. We will provide a light breakfast and full lunch both days. Thursday's lunch will include an executive session, and we are requesting a government-to-government meeting with the Klamath Tribes for Friday's lunch. We have a town hall meeting planned for Thursday evening, from 7 to 9 p.m.

As a reminder, we have a block of rooms held until October 14 at the Best Western Olympic Inn. This hotel is approximately four miles south of downtown, and about nine miles south of the college. As we near the meeting date, I will work with you and DEQ staff to arrange carpooling opportunities between the hotel and the college. Rooms are held under reservation code DEQ/EQC, and are the state rate of $88/night for Wednesday, Thursday and Friday. The best contact number there is (541) 882-9665.

If you have any questions please call me at (503) 229-5301. I look forward to seeing you soon.

Sincerely,

Stephanie Clark

State of Oregon

Department of Environmental Quality — Memorandum

Date: October 1, 2009

To: EQC Members

From: Stephanie Clark, EQC Assistant

Subject: EQC Meeting, October 22-23, 2009

Hello commissioners, our next EQC meeting is October 22 and 23 in Klamath Falls. We will hold the meeting at the Oregon Institute of Technology's college union building, located a few miles north of downtown Klamath Falls.

This mailing includes your meeting binder, the most current internal agenda and a memo with updates and follow-up information from the August meeting.

I will send item B, the status update on the Umatilla depot, and item E, a report from one year of toxics monitoring data in the Willamette Basin, in a separate mailing, and anticipate having that material to you by Monday, October 12.

You will receive a folder on October 22 with a hard copy of the Director's Dialogue, travel reimbursement forms and any updated meeting materials. I also plan to send the Director's Dialogue by email a few days before the meeting.

All public parts of the meeting are in the Mt. Scott room at the OIT college union. We will provide a light breakfast and full lunch both days. Thursday's lunch will include an executive session, and we are requesting a government-to-government meeting with the Klamath Tribes for Friday's lunch. We have a town hall meeting planned for Thursday evening, from 7 to 9 p.m.

As I noted in an email earlier this month, we have held a block of rooms at the **Best Western Olympic Inn**. This hotel is approximately four miles south of downtown, and about nine miles south of the college. As we near the meeting date, I will work with you and DEQ staff to arrange carpooling opportunities between the hotel and the college. Rooms are held under **reservation code DEQ/EQC**, and are the **state rate of $88/night for Wednesday, Thursday and Friday.** Please call the hotel directly by **Wednesday, October 14** to make your reservation. The best contact number there is **(541) 882-9665**.

If you have any questions please call me at (503) 229-5301. I look forward to seeing you in a few weeks.

Sincerely,

Stephanie Clark

Oregon

ENVIRONMENTAL
QUALITY
COMMISSION

September 30, 2009

Joe Kirk, Tribal Chair
Klamath Tribes
P.O. Box 436
Chiloquin, OR 97624

Dear Chair Kirk:

On behalf of the Oregon Environmental Quality Commission, I would like to express my appreciation to the Klamath Tribes for all of the great work you do to protect and care for the environment. We appreciate and value your commitment to restoring native fish species, forests and wildlife habitats, and improving the quality of the water and air. We are happy that your nation and the Oregon Department of Environmental Quality are partners in many of these efforts.

The EQC is a five-member citizen panel appointed by the Governor to serve as DEQ's policy and rulemaking board. In addition to adopting rules, the EQC also issues orders, judges appeals of fines or other department actions, and appoints the DEQ director. Each year, we hold some of our regular meetings in different parts of the state so that we can visit with local leaders, hear directly from community members and learn more about local environmental issues. On October 22 and 23, we plan to hold our regular meeting in Klamath Falls, and if you are interested, we would be honored if you and other Council members would join us for lunch on Friday, October 23.

The lunch will be held from noon until 1:30 p.m. in the Mt. Thielsen room of the Student's Union building at the Oregon Institute of Technology, located at 3201 Campus Drive, in Klamath Falls. EQC members and DEQ Director Dick Pedersen will be present. We would welcome this opportunity to get to know you and other Council members, and to hear your thoughts about Oregon's environment and opportunities for us to work more closely together.

Mikell O'Mealy, DEQ's Liaison to Tribal Nations, will contact you in the near future to learn whether you would like to join us. Or, please feel free to contact Mikell directly at 503-229-6590 or omealy.mikell@deq.state.or.us.

We look forward to continuing the positive working relationship between the Klamath Tribes and the DEQ, and we hope for a chance to meet with you on October 23.

Sincerely,

Bill Blosser, Chair
Oregon Environmental Quality Commission

Cc: Will Hatcher, Natural Resources Director, Klamath Tribes
Torina Case, Tribal Council Secretary, Klamath Tribes
Dick Pedersen, DEQ Director

811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696

Lunch with Klamath Tribe representative – October 23

The Klamath Basin is the homeland of the Klamath Tribes, which include the Klamath, Modoc and Yahooskin peoples. In late September, Chair Blosser invited Klamath Tribal leaders to join the EQC for lunch on October 23 to share perspectives about how we can continue working together to protect Oregon's environment. This will be a good opportunity to learn about the Tribe's priorities and interests, as well as opportunities for greater collaboration with DEQ.

Attendees
Unfortunately, members of the Tribal Council are not able to attend, but they asked Larry Dunsmoor, Tribal Aquatic Biologist, to attend on behalf of the Tribe. We let the Tribal Council's office know that others are welcome to join the lunch if their schedules happen to change.

Areas of collaboration
DEQ managers and staff work with the Klamath Tribes on a number of air, water and land quality issues. Below is a summary of some current areas of collaboration.

- TMDL development – The Klamath Tribes provided valuable early guidance in DEQ's development of a TMDL for the Lost River and Upper Klamath Subbasins. DEQ seeks out and welcomes tribal involvement in all of our TMDL activities.

- Air quality in the Klamath Basin – In 2008 and 2009, DEQ shared early information with the Klamath Tribes about DEQ and EPA air quality planning work for the Klamath Basin (primarily the Urban Growth Boundary of Klamath Falls), and sought feedback from the Tribes about health and air quality. In August 2008, DEQ gave a presentation to the Klamath Tribal Council on the project, invited comments, and committed to involve the Tribe at key milestones in the project. We have continued working with the Tribe on this effort in 2009.

- Increasing the Oregon Fish Consumption Rate for state Water Quality Standards – DEQ has continued to seek feedback from the Klamath Tribes and other tribal nations in developing rules to revise the fish consumption rate that is used to calculate state water quality toxics standards. In October 2008, the Klamath Tribes provided letters of support for revising standards based on a new fish consumption rate of 175 grams per day per person – 10 times higher than the existing rate.

- Klamath Hydroelectric Settlement Agreement – Since 2007, DEQ has worked with the Klamath Tribes and others on the Klamath Hydroelectric Settlement Agreement, which outlines water quality projections for the Klamath Basin.

- Coordinating Clean Water Act 401 Certifications with tribal nations – DEQ has coordinated with the Klamath Tribes on comments related to the proposed Jordan Cove LNG project in Coos Bay.

- Protecting cultural resources during spill response and cleanup – DEQ consults with the Klamath Tribes and other tribal nations to ensure that cultural resources are protected during cleanup activities, spill response and other ground-disturbing work. The tribes helped DEQ develop new cultural resource protection guidance in 2007 and the consultation process is going smoothly.

- Tribal-State Water Forum – Each fall, tribal leaders, the Governor and state agency directors hold a one-day annual summit to "check-in" on the health of our government-to-government relationship. This year, a second day will be added to the summit to focus on water issues – quality and quantity – as part of the state's development of an integrated water resource strategy for Oregon. DEQ is working with tribal leaders and the Oregon Water Resources Department to plan the tribal-state water forum, which will be held in Salem on November 18.

Suggested discussion points

Opening remarks for Bill or Dick to make

- Thank Larry for making the time to meet and talk with the Commission about environmental issues and opportunities.
- Acknowledge that Klamath Tribes have been living in and managing the lands of the Klamath Basin for thousands of years, and express our interest in learning from the knowledge that comes from having such close and long ties to this place. Recognize that in fact *he* (on behalf of the Tribe) is actually welcoming *us* to their homelands, rather than us welcoming them to our luncheon.
- Invite Larry to share some information about himself, his work, and the Klamath Tribes, and then invite EQC members to introduce themselves. Share brief information about the EQC's role.
- Reiterate that the EQC and DEQ are committed to a strong government-to-government relationship with the Klamath Tribes, as envisioned by Senate Bill 770,[1] and Commission members would welcome any observations Larry may have about ways for us to work more closely together to protect the environment and the natural and cultural resources that the Tribe values.
- State that we'd like to do more listening than talking, but we're happy to share perspectives on any issues that Larry would like to discuss.

Discussion questions for Commissioners to raise

- What are some of the current or emerging natural and cultural resource issues that the Klamath Tribes are thinking about or working on right now?
- Do you see opportunities for greater collaboration with the state in addressing these issues?
- How do you feel about the quality of the working relationship between DEQ and the Klamath Tribes right now?
- Do you have any concerns that we should know about?
- Where would you like to see the State of Oregon go in terms of improving relationships with tribal nations, in general or specifically?

Pages 3-6 provide background information about the Klamath Tribes.

[1] SB 770, passed in 2001, directed state agencies to build strong relationships with Oregon's nine federally-recognized tribes and established regular state-tribal consultation forums at the manager and leadership level to address issues and opportunities for collaboration.

Klamath Tribal Council

The Tribal Council is the governing body, elected by the General Council (registered tribal members) to terms of three years. The Council serves to negotiate on the Tribe's behalf with federal, state and local governments, and to make decisions to protect and enhance tribal interests.

Tribal Council officers include


Joseph Kirk
Chairman

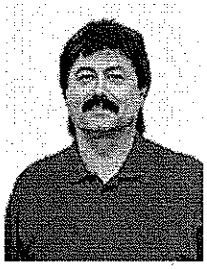

Joe Hobbs
Vice-Chairman

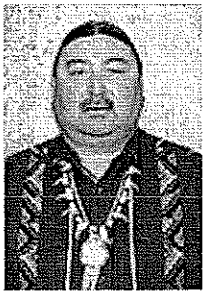

Torina Case
Secretary


Brandi Decker
Treasurer

Tribal Council members include


Allen Forman


William Hatcher

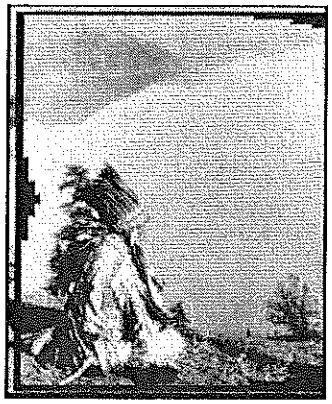

Perry Chocktoot Jr.


Jeff Mitchell


Jeannie McNair


Janice Miller

Klamath Tribes history and culture
(from the Tribe)



We are the Klamath Tribes, the Klamaths, the Modocs and the Yahooskin. We have lived here in the Klamath Basin from time beyond memory. In the old times we believed everything we needed to live was provided for us by our Creator in this rich land east of the Cascades. We still believe this.

The six tribes of the Klamaths were bound together by ties of loyalty and family, they lived along the Klamath Marsh, on the banks of Agency Lake, near the mouth of the Lower Williamson River, on Pelican Bay, beside the Link River, and in the uplands of the Sprague River Valley. The Modoc's lands included the Lower Lost River, around Clear Lake, and the territory that extended south as far as the mountains beyond Goose Lake. The Yahooskin Bands occupied the area east of the Yamsay Mountain, south of Lakeview, and north of Fort Rock. Everything we needed was contained within these lands.

In 1826, Peter Skeen Ogden, a fur trapper from the Hudson's Bay Company, was the first white man to leave his footprints on our lands. One hundred and seventy five years later those footprints have multiplied into the thousands, each leaving their marks on the lands and the Klamath Tribes. The newcomers came first as explorers, then as missionaries, settlers and ranchers. After decades of hostilities with the invaders, the Klamath Tribes ceded more than 23 million acres of land in 1864 and we entered the reservation era. We did, however, retain rights to hunt, fish and gather in safety on the lands reserved for us "in perpetuity" -- forever.



From the first, Klamath Tribal members demonstrated an eagerness to turn new economic opportunities to our advantage. Under the reservation program, cattle ranching was promoted. In the pre-reservation days horses were considered an important form of wealth and the ownership of cattle was easily accepted. Tribal members took up ranching, and were successful at it. Today the cattle industry still remains an important economic asset for many of us. The quest for economic self-sufficiency was pursued energetically and with determination by Tribal members. Many, both men and women, took advantage of the vocational training offered at the Agency and soon held a wide variety of skilled jobs at the Agency, at the Fort Klamath military post, and in the town of Linkville. Due to the widespread trade networks established by the Tribes long before the settlers arrived, another economic enterprise that turned out to be extremely successful during the reservation period was freighting, in August of 1889, there were 20 Tribal teams working year-round to supply the private and commercial needs of the rapidly growing county. A Klamath Tribal Agency - sponsored sawmill was completed in 1870 for the purpose of constructing the Agency.

The Twentieth Century



By 1873, Tribal members were selling lumber to Fort Klamath and many other private parties, and by 1896 the sale to parties outside of the reservation was estimated at a quarter of a million board feet. With the arrival of the railroad in 1911, reservation timber became extremely valuable. The economy of Klamath County was sustained by it for decades. By the 1950's the Klamath Tribes were one of the wealthiest Tribes in the United States. We owned and judiciously managed for long term yield, the largest remaining stand of Ponderosa pine in the west. We were entirely self-sufficient. We were the only tribes in the United States that paid for all the federal, state and private services used by our members.

In 1954, the Klamath Tribes were terminated from federal recognition as a tribe by an act of congress. During the process of termination the elected Tribal representatives consistently opposed termination. There was, in addition, a report from the Bureau of Indian Affairs (BIA) which concluded that the Klamath Tribes were NOT ready for termination and recommended against it. Despite this consistent official opposition from the Tribes and the BIA, congress adopted the Klamath Termination Act. Not only did we see the end of federal recognition and supplemental human services, but tragically our reservation land base of approximately 1.8 million acres was taken by condemnation and the Klamaths were terminated as a Tribe. This single act of Congress had devastating effects on the Klamath Tribes and several other tribes across the country.

Tribes' Position on Termination

In 1974 the Federal Court ruled that we had retained our Treaty Rights to hunt, fish and gather, and to be consulted in land management decisions when those decisions affected our Treaty Rights. In 1986, we were successful in regaining Restoration of Federal Recognition for our Tribes. Although our land base was not returned to us, we were directed to compose a plan to regain economic self-sufficiency. Our Economic Self-sufficiency Plan reflects the Klamath Tribes' continued commitment to playing a pivotal role in the local economy.

During the Economic Self-sufficiency Plan (ESSP) development process, the Planning Department and other committees reviewed hundreds of ideas and concept combinations that would help attain our much-desired goal of long term economic self-sufficiency. After a lengthy analysis process the recommendation was made and accepted by the Tribal Council and the General Council, that the Tribes construct a casino. With our usual energy and determination the Tribes efforts became reality. In 1997, we opened the doors to our first enterprise in 45 years since termination.



The Klamath Tribes today

The Klamath Tribes are serious about achieving economic self-sufficiency which means controlling our own destinies. With characteristic energy, determination and vision, and a commitment to the larger community, the Tribes have created a modern corporate identity and an efficient Tribal organization. At present, with current enrolled membership

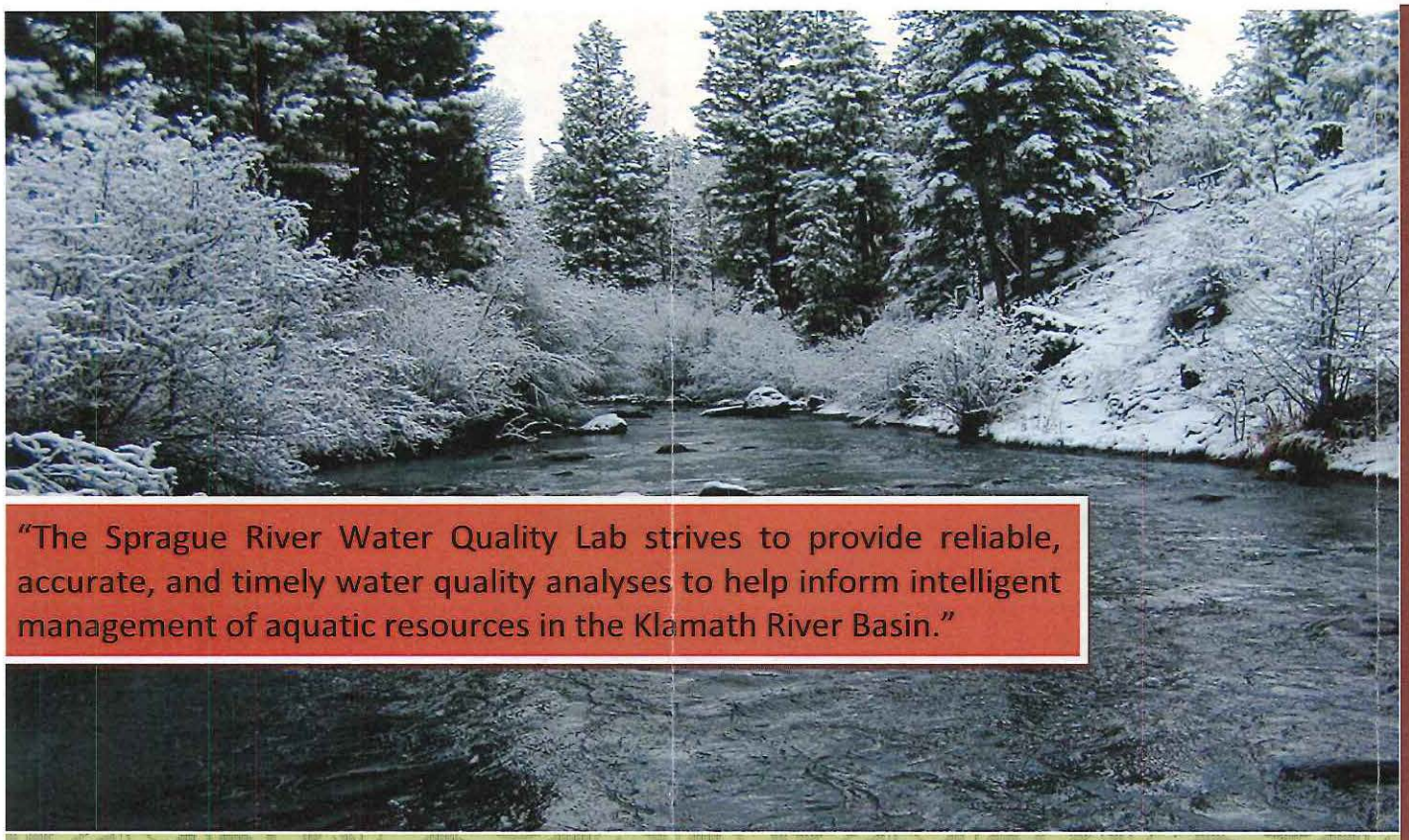
around 3,500, the Klamath Tribes contribute about $25 million per annum to Klamath County's economy in the form of payroll, direct expenses and goods and services. The Klamath Tribes Mission Statement gives clear direction to tribal government and its organization:

"The mission of the Klamath Tribes is to protect, preserve, and enhance the spiritual, cultural, and physical values and resources of the Klamath, Modoc, and Yahooskin Peoples, by maintaining the customs and heritage of our ancestors. To establish a comprehensive unity by fostering the enhancement of spiritual and cultural values through a government whose function is to protect the human and cultural resources, treaty rights, and to provide for the development and delivery of social and economic opportunities for our People through effective leadership."

Did you know...



- The Klamath Tribes signed their Treaty in 1864 with the United States of America.
- At the time of termination in 1954, the Klamath Tribes were the second wealthiest tribe in the nation.
- The Klamath Tribes has over a growth rate of over 5000% in the years since Restoration in 1986.
- The Klamath Tribes contributes upwards of $25 million dollars into the Klamath County economy each year through goods and services.
- The tribes are one of the largest equal-opportunity employers in Klamath County.
- Kla-Mo-Ya Casino is the second largest tourist attraction in Klamath County, with approximately 300,000 visitors each year- Second only to Crater Lake National Park.
- The Klamath Tribes works directly with a multitude of non-Tribal entities providing Treaty Rights information.
- The Tribes employ over 250 taxpaying Klamath County residents.
- The Deer population (while in State and Federal control) went from 60 per sq. mile in the 1950's, to approximately 4 per sq. mile today, in the former reservation area.
- The Klamath Tribes operates a Tribal Language program in Klamath County.
- The Wocus Lilly, which is Traditional to our people, is indigenous to this area.
- The Klamath tribes have a consent decree which establishes an agreement between the Tribes, Oregon Dept. of Fish & Wildlife, and the USA for Tribal Treaty Rights.
- The Klamath Tribes offer services throughout Klamath County in over 50 different departments and programs.
- The Klamath Tribes, if given the opportunity, can help Klamath County rebuild the land and water resources for everyone's benefit.



"The Sprague River Water Quality Lab strives to provide reliable, accurate, and timely water quality analyses to help inform intelligent management of aquatic resources in the Klamath River Basin."

Thermo Fisher Aquakem 250 state-of-the-art automated discrete analyzer technology, the work horse of the SRWQL.

The Thermo Fisher Aquakem 250 is a discrete analyzer using the same technology employed in hospitals throughout the world to analyze blood samples. At the time of development, hospitals needed an analyzer that was fast, reliable and accurate. After years of use in hospitals, Thermo Fisher developed a software package that enabled the environmental world to take advantage of the discrete analyzer technology. Today the SRWQL uses two Aquakem 250 units to complete nutrient analyses. The Aquakem is an automated photometric analyzer performing colorimetric analysis using disposable 12 cell cuvettes with test flows less than 150 µl.

The Aquakem 250's greatly reduced test volume creates other efficiencies, including decreased field sample collection volumes (<125 ml), decreased reagent use (sample and reagent volumes <150 µl), decreased waste production, and the capacity to complete 200 tests per hour. Currently the SRWQL only performs nutrient tests (TP, PO_4, TN, NO_2, NO_{2+3}, NH_4, SiO_2) on the Aquakem, but other test methods are under development. Test methods performed on other instrumentation include Total Suspended Solids (TSS), Suspended Sediment Concentration (SSC), Chlorophyll *a*, Phaeophyton, and Turbidity.

E-friendly Methods Employed at the SRWQL...

Enzymatic NO_3 vs. Cadmium reduced NO_3.

SRWQL uses a non-EPA certified enzymatic NO_3 method, which uses AtNaR2 from *Arabidopsis thaliana* (common name; water cress or mouseear cress) produced by recombinant expression in the yeast *Pichia pastoris* — to reduce nitrate to nitrite. This eliminates the need to use toxic cadmium and completely removes it from our waste stream, while producing results that are not only similar but in most cases more accurate, especially when samples are collected from sources where tannins are present (i.e. marshes and wetlands). This method has already been certified in Australia and Canada, we anticipate certification by EPA and APHA in the near future.

Total Kjeldahl Nitrogen (TKN) vs Alkaline Persulfate Total Nitrogen and Phosphorus.

TKN digests use harsh chemicals including potassium sulfate (K_2SO_4), and cupric sulfate ($CuSO_4$) as a catalyst in the presence of sulfuric acid to reduce nitrogen. SRWQL uses alkaline persulfate which uses potassium persulfate and sodium hydroxide to reduce nitrogen and phosphorus simultaneously, reducing the need to do an extra digest for phosphorus. Once the digest is complete we simply run enzymatic NO_3 and a standard phosphoantimonyl-molybdenum blue phosphate test (PO_4). The alkaline persulfate digest reduces the need for toxic chemicals and also reduces the volume of waste produced by combining the digestion of both TN and TP.



The Klamath Tribe's Sprague River Water Quality Lab's (SRWQL) Mission...

The Klamath Tribes' Aquatics Program has been involved in the Upper Klamath Basin's water quality monitoring since the late 1980's, when we first started monitoring water quality of Upper Klamath Lake. During the first decade of monitoring we observed that lab analysis was very expensive, and as a result often limited the amount of data that was collected, usually to the detriment of the project and the questions being asked about the ecosystem. In 2002, we started exploring the idea of developing a water quality lab that could produce results quicker and cheaper, while using state-of-the-art analyzer technology and employing test methods that are environmentally friendly. The SRWQL facilitates the collection and use of water quality data in the hope that we are enabling improved management of aquatic resources in the Klamath Basin, while holding down costs and never compromising data quality.

OUR HISTORY

The Sprague River Water Quality Lab (SRWQL) has analyzed Klamath Tribal water quality samples for seven years. Our first contractual agreements were with USGS beginning in 2007, when the SRWQL analyzed duplicate samples that were split and also analyzed by the United States Geological Survey National Water Quality Lab (NWQL) in Denver, Colorado. Before the USGS could continue using the SRWQL the following year (2008), they were required to complete a laboratory evaluation project (LEP) comparing the data split between the two labs. In 2009, the USGS continued using the lab, as well as other Upper Basin Agencies including USGS, USFWS, BLM, BOR, EPA and TNC. The SRWQL continues to work closely with the NWQL and continues to participate in the Standard Reference Sample Project (SRS) bi-annually.

5671 Sprague River Highway
Chiloquin, OR 97624

(541) 783-2149 ext. 22



Sprague River Water Quality Lab

Oregon Environmental Quality Commission Meeting
October 22-23, 2009
Oregon Institute of Technology
Klamath Falls, OR

Thursday, October 22 — Regular meeting begins at 8:30 a.m.

A. Preliminary Commission Business: Adoption of minutes of the August 20-21, 2009 regular meeting
The Environmental Quality Commission will review, amend if necessary and approve draft minutes of the August 20-21, 2009 regular EQC meeting.

B. Informational Item: Update on the status of the Umatilla Chemical Agent Disposal Facility
An update on the status of the agent disposal program at the Umatilla Chemical Agent Disposal Facility.
Joni Hammond and Rich Duval, Department of Environmental Quality

C. Item has been postponed until December 2009

D. Informational item: DEQ's toxics reduction strategy
Staff members from the land, air and water quality divisions will present information on the agency-wide toxics reduction strategy at DEQ. The presenters will focus on three specific projects as they relate to an integrated approach to toxics reduction.
Wendy Wiles, Neil Mullane, and staff members from the air, land and water quality divisions, DEQ

Lunch and Executive Session
The EQC will meet in executive session over lunch from approximately 12:20 to 1:35 p.m. to consult with counsel concerning legal rights and duties regarding current or potential litigation against DEQ. Only representatives of the media may attend and media representatives may not report on any deliberations during the session. This executive session will be held pursuant to ORS 192.660(2)(f), (h).

E. Informational and Discussion Item: Oregon Toxics Report Year One
Staff members from DEQ's Laboratory and Environmental Assessment Division will present a draft report of the first-year findings from a toxics project in the Willamette Basin. The commission will review the report, discuss key questions, and recommend next steps for the program's communications and outreach plan.
Greg Pettit and Dennis Ades, DEQ

F. Informational and Discussion Item: Draft Willamette Rivers and Streams Assessment Report
Staff members from DEQ's Laboratory and Environmental Assessment Division will present a draft of the Willamette Rivers and Streams Assessment Report. The commission will review the report, discuss key questions, and suggest feedback for the draft report and presentation.
Greg Pettit and Aaron Borisenko, DEQ

G. Informational Item: Air Quality Attainment Plan in Klamath Falls
The U.S. EPA sets the federal air quality standard for small particulate matter, known as PM 2.5. Klamath Falls is one of two communities in Oregon currently not achieving this standard, and is considered in nonattainment based on the past three years of monitoring data. DEQ is working to develop an attainment plan and associated rules over the next three years. As part of this informational item, a representative from Klamath County will discuss the county ordinance and relevant local actions for air quality attainment in Klamath Falls.
Mitch Wolgamott, Rachel Sakata and Larry Calkins, DEQ; John Elliot, Klamath County

H. Action Item: Clean Water State Revolving Fund Rulemaking
The proposed rules, if approved, will make minor refinements to the temporary administrative rules for the Clean Water State Revolving Fund adopted in April 2009. These refinements would be permanent and govern the use of American Recovery and Reinvestment Act funds when those funds are utilized within the Clean Water State Revolving Fund loan program and will define the use of the funds, the types of eligible projects and activities, the allocation of the funds and specific financial terms. The proposed rules would also clarify language used for design or construction loans, and allow DEQ to more frequently update the Clean Water State Revolving Fund Intended Use Plan when necessary.
Neil Mullane and Judy Johndohl, DEQ

I. Town hall meeting on local environmental issues.
The commission will open a town hall-style meeting with residents, stakeholders, local officials and other interested persons to address issues of local concern.

Recess until Friday, Oct. 23, 2009

Friday, October 23 — Regular meeting begins at 10:30 a.m.

J. Tour
Mitch Wolgamott, Eastern Region Administrator, will lead the commission on a tour of sites and projects of interest in the Klamath Falls area.

The commissioners will be on the tour from approximately 8:30 to 10:30 a.m., and will reconvene the public meeting at 10:30 a.m.

K. Informational item: Director's dialogue
Director Pedersen will update the commission on current and anticipated issues at DEQ.

L. Public Forum
At approximately 11:30 a.m., the EQC will provide members of the public an opportunity to speak to commission members on environmental issues. Individuals wishing to speak to the EQC must sign a request form at the meeting and limit presentations to five minutes. The EQC may discontinue public forum after a reasonable time if a large number of speakers wish to appear. In accordance with ORS 183.335(13), no comments may be

presented on rule adoption items for which public comment periods have closed.

Lunch Break
The commission will recess for lunch from approximately noon to 1:30 p.m. and have a government-to-government meeting with representatives from the Klamath Tribes.

M. Action item: Mills contested case
The EQC will hear DEQ's contested case regarding Mr. Mills' septic system. The EQC has the authority to hear this appeal under OAR 340-011-0575, and will hear arguments from DEQ Office of Compliance and Enforcement staff and Mr. Mills before making a decision.
Leah Koss and Bryan Smith, DEQ

N. Informational Item: Upcoming legislative sessions and budget
Greg Aldrich, DEQ's government relations manager, will update the commission on the 2010 interim legislative session and initial planning for the 2011-2013 legislative session and budget.
Greg Aldrich, DEQ

O. Informational and Discussion item: Key performance measures report
Greg Aldrich, DEQ's government relations manager, will update the commission on DEQ's 2009 Key Performance Measures report and status. The commissioners will discuss the report and their self-evaluations on performance measures.
Greg Aldrich, DEQ

P. Informational and Discussion Item: EQC retreat and Strategic Directions update
Joan Stevens-Schwenger, Office of Communications and Outreach manager, and Greg Aldrich, government relations manager, will discuss with the commission ideas and proposals for moving ahead with a planning session and retreat plan.
Joan Stevens-Schwenger and Greg Aldrich, DEQ

Q. Informational item: Annual performance evaluation for DEQ director
Joan Stevens-Schwenger, Office of Communications and Outreach manager, will introduce the process for the DEQ director's annual performance evaluation. The Oregon Legislature passed a bill in 2007 to require annual reports on key performance measures from all state agencies. DEQ's key performance measures include fifteen performance measures for the EQC, which included conducting a review of the director. Director Pedersen started June 2008, and the commission agreed to evaluate him after at least one year in the position. The proposed evaluation timeline will allow for full review by internal and external stakeholders, and a final document will be issued in early 2010.
Joan Stevens-Schwenger, DEQ

R. Commissioner Reports
Commissioners will present information and updates not covered in the regular meeting agenda.

Adjourn

Future Oregon Environmental Quality Commission meeting dates include:
December 10 – 11, 2009: Portland

Agenda Notes

Staff Reports: Staff reports for each item on this agenda can be viewed and printed from DEQ's Web site at http://www.deq.state.or.us/about/eqc/eqc.htm. To request a particular staff report be sent to you in the mail, contact the EQC Assistant, Department of Environmental Quality, Director's Office, 811 SW Sixth Avenue, Portland, Oregon 97204; telephone 503-229-5301, toll-free 1-800-452-4011 extension 5301, or 503-229-6993 (TTY). Please specify the agenda item letter when requesting reports. If special physical, language or other accommodations are needed for this meeting, please advise the EQC assistant as soon as possible, but at least 48 hours in advance of the meeting.

Public Forum: The commission will provide time in the meeting during the morning of Friday, October 23, for members of the public to speak to the commission. Individuals wishing to speak to the commission must sign a request form at the meeting and limit presentations to five minutes. The commission may discontinue the public forum after a reasonable time if a large number of speakers wish to appear. In accordance with ORS 183.335(13), no comments may be presented on rule adoption items for which public comment periods have closed.

Note: Because of the uncertain length of time needed for each agenda item, the commission may hear any item at any time during the meeting. If a specific time is indicated for an agenda item, an effort will be made to consider that item as close to that time as possible. Scheduled times may be modified if participants agree. Those wishing to hear discussion of an item should arrive at the beginning of the meeting to avoid missing the item.

For more information, visit the EQC homepage:
http://www.deq.state.or.us/about/eqc/eqc.htm

Please Sign In

Environmental Quality Commission Meeting
Klamath Falls, Oregon – Department of Environmental Quality
October 22-33, 2009

Name	Affiliation or Interest	Phone or Email
Peter Ruffier	City of Eugene/ LOC	541.682.8606
Rick George	Conf. Tribes Umatilla	541 966-2351
Kathleen Feehan	"	966-2357
Kathryn VanNatta	NWPPA	503-844-9510
Charles Logue	Clean Water Services/ACWA	503 681-3604
Janet Gillaspie	ACWA	
Don Gentry	The Klamath Tribes	(541)783-2219, EXT. 126
Eric Nigg	DEQ	
Mark Fisher	DEQ	
CARRIE CAPP	DEQ	(503) 229-5035
Peter Brewer	JELD-WEN	peterb@jeld-wen.com
John E Elliott	Klamath Co Commissioner	541-883-5100
Delbert Bell	Klamath Co. Public Health	541-883-5147
SANDRA ZAIDA	CITY OF KFALLS	541-883-5361
Larry Calkins	DEQ	541-567-8297 x225
Corey Penning	Rogue Disposal + Recycling	541-210-1405
CLIFF WALKEY	DEQ	541 633 2003
Bryan Smith	DEQ	503.229.5395

Please Sign In

Name	Affiliation or Interest	Phone or Email

Draft X
Approved ___
Approved with corrections ___

Minutes of the Three Hundred and Fifty-first Oregon Environmental Quality Commission Meeting
August 20-21, 2009

Best Western Agate Beach Inn
Newport, OR

Thursday, August 20

Chair Blosser convened the meeting at 9:02 a.m.

A. Preliminary Commission Business: Adoption of minutes of the June 18-19, 2009 regular meeting and July 10, 2009 special meeting

The Environmental Quality Commission reviewed the draft minutes of the June 18-19, 2009, regular EQC meeting and July 10, 2009, special EQC meeting.

Action – Adopt both sets of minutes as presented
Move: Commissioner O'Keffe
Second: Commissioner Dodson
Passed unanimously

B. Informational Item: Update on the status of the Umatilla Chemical Agent Disposal Facility

Joni Hammond and Rich Duval, Department of Environmental Quality

Mr. Duval updated the commission on the mustard agent ton container trial burn at the Umatilla facility. He explained that the facility burned the first mercury-containing ton container on June 30, 2009, and the detection system reported mercury emissions. The facility shut down for seven days to investigate the incident, and found that the bypass valve around the carbon filter had a small gap that allowed some emissions to escape. The gap was fixed and the facility burned 20 more mercury-containing containers without any mercury emissions detected.

Mr. Duval gave an update on lawsuits related to incineration of chemical weapons, though not at the Umatilla facility, noting that a federal judge dismissed a 2003 suit and ruled incineration a safe disposal strategy for regulatory use and the public. Mr Duval also gave an update on the status of the Title V air quality permit application from the facility, noting that the permit is in the first of two public comment periods, and DEQ might grant the permit in fall 2009 if no significant issues or comments emerge and all permit conditions are met.

Commissioner Dodson asked about the schedule for the end of the demilitarization campaign, especially as it relates to the jobs that will be displaced when the facility closes. Mr. Duval explained that the Army has offered six months of post-closure retraining for facility staff, and the land re-use authority is still investigating re-use options for the facility.

C. Informational Item: Director's Dialogue
Dick Pedersen, Department of Environmental Quality director

Director Pedersen welcomed the commission to Newport, and noted that the meeting is a great opportunity to hear resident and staff feedback on local issues for the mid-coast region.

Director Pedersen explained the updates provided in the Director's Dialogue staff report, and answered clarifying questions from the commission. The commission discussed the new advisory committee structure and process, as proposed by Director Pedersen. Vice Chair Williamson noted that Oregon State University has a good model for teleconference facilities and he would like to connect with DEQ to allow broader geographic representation on committees using technology.

Director Pedersen invited the commission members to a toxics workshop hosted by DEQ on Nov. 17, 2009, at the Portland headquarters and encouraged them to widely distribute the information to all interested parties. He also stated that DEQ's lab staff will bring the Willamette Basin water quality assessment report for feedback at the October 2009 meeting.

Toxics workshop page: http://www.deq.state.or.us/wq/SB737/toxicsworkshop.htm

D. Action Item: Morsman waiver contested case
Leah Koss, Department of Environmental Quality

Commission counsel Larry Knudsen polled the commission for ex parte contacts and conflicts of interest, and commissioners reported none. He gave a brief overview of the background of the case and clarified two procedural issues. He noted that DEQ believes that the new materials submitted by Mr. Sheehan on behalf of the Morsmans during the briefing process are not allowed under administrative hearing and EQC rules and procedures. He explained that the options for EQC action are slightly different than the ones presented in the staff report, and submitted the three revised options in the form of a new paper handout that the commission assistant distributed to all parties and entered into the official meeting record.

Mr. Sheehan presented the Morsmans' argument in the contested case and clarified that the new materials he submitted were in direct response to questions asked by the commission at the June 2009 contested case hearing related to the Morsmans' requirement to connect to the city sewer system. He stated that the Morsmans have always intended to apply for a temporary waiver of the requirement and that the language of the waiver request may not have indicated this intent.

Leah Koss presented DEQ's argument for the contested case. She noted that Mr. Sheehan's submission of new evidence is not proper according to the Oregon Administrative Rules and process to submit new material, but Mr. Sheehan did not follow

those provisions. She also explained that Director Pedersen based his decision on EQC policies and DEQ's obligation to protect water. Ms. Koss stated that Judge Gutman ruled that Director Pedersen did not abuse his discretion in denying the Morsmans' request for a waiver, and asked the EQC to uphold Judge Gutman's proposed order.

Mr. Sheehan and Ms. Koss, respectively, offered their rebuttal arguments and Chair Blosser closed all testimony before inviting the commission to ask questions for Mr. Sheehan and Ms. Koss. The commissioners asked clarifying questions about the process and allowable options under the contested case process.

Action – Affirm Judge Gutman's decision, as presented in the DEQ staff report.
Move: Vice Chair Williamson
Second: Commissioner Dodson
Discussion: Commissioner Uherbelau commented on the process of contested cases and voiced her opposition to the EQC hearing these appeals without legal expertise. She specifically noted that she intends to vote no on all contested case hearings.

Yes – 4: Chair Blosser, Vice Chair Williamson, Commissioner Dodson and Commissioner O'Keeffe
Opposed – 1: Commissioner Uherbelau
Abstain – 0
Passed with four commissioners in support and one in opposition.

E. Action Item: Title V air permitting fees temporary rulemaking

Andy Ginsburg and Andrea Curtis, Department of Environmental Quality

Andy Ginsburg introduced the proposed temporary rule and Andrea Curtis explained the proposal in detail. She noted that the proposed temporary rulemaking incorporates a legislatively approved correction of the dates used to assess the consumer price index increases, and aligns the program with EPA requirements. She also explained that DEQ is proposing a temporary rule now in order to issue one invoice for 2009, rather than waiting for a permanent rulemaking and having to issue two separate invoices for permitted sources and require extra work of the sources and DEQ staff.

Ms. Curtis discussed a letter, submitted to all parties and entered into the official meeting record, from Blue Heron Paper Company. The letter expressed concern for doing temporary rule without a formal public comment period and several other technical and specific issues related to rate increases and payments. Ms. Curtis explained that DEQ does prefer permanent rules but doing this temporary rule is efficient and allows for simplified invoicing. She stated that DEQ intends to propose permanent rulemaking in 2010, and will have a full public comment period.

The commission asked clarifying questions about the rate increases and Mr. Ginsburg and Ms. Curtis addressed the technical and specific questions on rates and payments as required by rule.

Action – Approve the temporary rules by adopting the staff recommendation as presented in the staff report.
Move: Commission O'Keeffe
Second: Vice Chair Williamson
Passed unanimously.

[Item taken out of order]
G. Action Item: Issuance of DEQ pollution control bonds
Greg Aldrich, Department of Environmental Quality

Greg Aldrich presented information on the proposed rules and explained how DEQ uses bonds. He noted that these bond funds would allow DEQ to access money from the Clean Water Act State Revolving Fund. He explained the request and the information used to determine the bonds needed for DEQ. Mr. Aldrich explained that this bond request affects only the normal, annual Clean Water Act State Revolving Fund capitalization grants that are bond-matched by rule, and not the $45 million federal stimulus grants.

Action – Adopt the staff recommendation, as presented in the staff report.
Move: Commissioner Dodson
Second: Vice Chair Williamson
Passed unanimously

[Item taken out of order]
F. Informational Item: Update on DEQ budget and Legislative session
Greg Aldrich, Department of Environmental Quality

Greg Aldrich submitted talking points for the item, which the commission assistant distributed to all parties and entered into the official meeting record. He explained the item's agenda and process and gave an update on the 2009 Legislative session's outcomes. He explained legislation that related to DEQ's air, land and water programs and the ways that bills would affect DEQ's regulatory authority, rulemakings and general processes necessary to fulfill the legislative intent.

Vice Chair Williamson noted that a new iPhone application, developed by a professor at UC Berkeley, allows a consumer to read barcodes with the phone and immediately download information on toxics in the product. He noted that it would be a great collaboration for DEQ to get the Senate Bill 737 toxics into this application and would like to see information on this idea when it is available.

Commissioner Uherbelau noted that DEQ should do more outreach regarding consumer awareness of polluting and illegal products, especially related to phosphate-containing detergents. Mr. Aldrich responded that DEQ is working with distributors and stores to make sure these products are not on the store shelves in Oregon, rather than requiring consumers to know what products to avoid.

Lunch and Executive Session

The EQC met in executive session over lunch from approximately 12:30 to 2 p.m. to consult with counsel concerning legal rights and duties regarding current or potential litigation against DEQ. This executive session was held pursuant to ORS 192.660(2)(f), (h).

Item F – *continued from before lunch*
Greg Aldrich, Department of Environmental Quality

Greg Aldrich explained the DEQ budget and answered specific questions related to the legislatively approved budget for DEQ over the next biennium. Commissioner Dodson noted that the reductions in agency management-related money could make it difficult for DEQ to accomplish the large amount of work required during the next biennium.

Mr. Aldrich discussed the operating budget and the commission asked specific questions on funding structures and the allocation of certain fees when received by DEQ. He also discussed available staffing levels under the legislatively approved budget. Director Pedersen noted that DEQ is developing an operating budget much earlier than ever before as a best management of limited resources, and all staff members are working to keep spending as close to the revenue line as possible.

Mr. Aldrich explained the budget fact sheet, budget omnibus bill and funding implications for DEQ over the next two years. He noted that the Legislature will hold a special session in 2010 and each senator can have two bills and two per committee, each house member can have one bill but none from state agencies or the governor. DEQ does not anticipate any direct-impact bills, and will know more in the next few months.

Mr. Aldrich explained that DEQ staff members are preparing for the 2010 special session and the 2011 regular session, and expect to participate in interim legislative committees as asked and appropriate. Director Pedersen noted that he will be visiting DEQ offices across Oregon and invited the commission to meet with him and environmental committee, or other interested, legislators in the regions.

H. Action Item: Compost rulemaking
Wendy Wiles and Charlie Landman, Department of Environmental Quality

Wendy Wiles gave background on the rulemaking and noted her compliments to Charlie Landman for his leadership on a difficult rulemaking that has been in process for many years and faced a major stakeholder impasse in 2008. She explained the stakeholder and outreach process and noted that proposed rules would have good environmental outcomes that will be accepted by the stakeholders.

Charlie Landman discussed the risk assessment for compost facilities, and the process for directing low-risk sources to a registration and simpler process, and high-risk sources to a permitting and closer management and inspection process. Both kinds of sources have a 10-year permit, with annual compliance fees and an approved management plan required for high-risk sources.

The commission asked questions about the requirements and management practices for the composting operations under the proposed rules and DEQ's ability to screen the facilities and best management strategies. Mr. Landman explained that the Onsite Program has a good existing model for screening, and the majority of the facilities will require a simple inspection and not an extremely in-depth screening process that would be labor intensive for DEQ staff.

Commissioner O'Keeffe stated that she is from eastern Oregon and appreciates and supports the environmental risk-based assessment for permits rather than assessments based on facility size.

Mr. Landman noted that DEQ should reframe the image of compost from solid waste to a beneficial and valuable product and process.
Mr. Landman presented one clarification, noting that the actual proposed rules are in attachments A2 through A5 and the staff report recommendation should read "in attachments A2 to A5."

Action – Adopt the DEQ recommendation in the staff report with the clarification noted above
Move: Vice Chair Williamson
Second: Commissioner O'Keeffe
Passed unanimously

Director Pedersen noted that this rulemaking is a major landmark event, and echoed Ms. Wiles' acknowledgement of Mr. Landman and recognized Ms. Wiles for her work and a very important rulemaking.

Commissioner Dodson also noted that she supported the environmental risk-based assessment as a positive element of this rule.

I. Discussion Item: DEQ climate change symposium

Andy Ginsburg and Wendy Wiles, Department of Environmental Quality

Andy Ginsburg and Wendy Wiles presented the discussion item, and asked the commissioners for feedback on a proposed climate change symposium in late fall 2009 or early winter 2010. The commissioners asked questions related to the scope and intent of the symposium, and suggested that DEQ present the material in a series of informational items at regularly planned commission meetings rather than a one-day symposium. The commissioners stated that they would like sessions to establish baseline scientific knowledge on climate change, to help them make informed policy decisions.

Mr. Ginsburg summarized that DEQ will present four or five informational items starting in winter 2010. The sessions will cover baseline scientific information, a discussion of state and federal policies related to climate change, scientific and policy adaptations that may be required by climate change, visions for the future, and some next steps and how they

relate to the commission's role and scope. Mr. Ginsburg added that that California has a very forward-thinking climate change bill and many action items, and it would be a good opportunity to hear their work and the direction for Oregon's policy and regulatory authorities. Commissioner Dodson noted that DEQ presenters should develop messages to share with the public as partners in policy.

Chair Blosser recessed the meeting until the 7 p.m. town hall.

J. Town hall meeting on local environmental issues
The commission hosted a town hall-style meeting from 7 to 9 p.m. with residents, stakeholders, local officials and other interested persons to address issues of local concern.

Chair Blosser recessed the meeting until Friday, Aug. 21, 2009.

Friday, June 19 — Commissioners' tour began at 9 a.m.
K. Tour
Keith Andersen, Western Region acting Administrator, led the commission on a tour of projects and sites of interest in the Newport area. The group visited Nye Beach, an asphalt manufacturing plant and the Hatfield Marine Science Center. The group viewed the GP Toledo plant's wastewater outfall at Nye Beach, the work at the Hatfield Marine Science Center, the International Port of Newport and the planned NOAA facility in Yaquina Bay. The stop near an asphalt plant was the result of comments at Thursday evening's town hall-style session from residents concerned about air toxics from the manufacturing process and the plant's proximity to two schools and a residential area. Several DEQ staff members, including Director Pedersen, also went on the tour.

Chair Blosser reconvened the regular meeting at 11:39 a.m.

L. Public Forum
1. Diana Purdy submitted a letter for the official meeting record from Bill Hall, Lincoln County Board of Commissioners. She read the letter for the official audio record.

2. Tom Kerns submitted a letter for the official meeting record and commented on human rights and the environment, especially air quality and the coastal region. Mr. Kerns focused on the air quality degradation caused by paper mills and asphalt plants, and issues associated with runoff from forestry management practices. Mr. Kerns asked DEQ to establish an air quality monitor on the coast at Newport so that specific air quality and air toxics data exists for Newport.

3. Maxine Centala read from a prepared statement, later entered into the official meeting record. Ms. Centala stated that DEQ must establish an air monitoring station in the area and that modeling is not sufficient. She stated that the GP Toledo plant is the major reason to do this monitoring, and requested that DEQ establish a rule to cover materials used in industrial boilers, test the air in Toledo and reduce or eliminate plastics from allowed burn piles. She stated that DEQ appears to favor industry over people, though

that seems less prevalent a response now than in the past and that the EQC can implement stricter air quality rules and policies than federal regulations.

4. Milo Mecham identified himself as the attorney for the city of Coburg and commented on the proposed permanent rule adoption for the Clean Water State Revolving Fund and the proposed temporary rule. He stated his intent to submit his comments in writing for the permanent rulemaking before the close of the comment period. Mr. Mecham stated that DEQ's permanent rule is much more conservative than the federal intent for rule, and frustrates the actions of Congress to fund projects to stimulate the economy. Mr. Mecham stated that DEQ's proposed permanent rule limits the scope of recovery act funding, and makes some projects ineligible when they would be immediately able to start work, particularly limiting the opportunities of cities like Coburg to gain access to the funds. He also stated that the temporary rule carries the same restrictions as the permanent rule and eliminates Coburg and other small cities from the funding when they are able to begin work immediately.

5. Charlie Plybon, of the Surfrider Foundation, submitted a handout that the commission assistant distributed to the commission and entered into the official meeting record. Mr. Plybon explained that the outfall at the GP Toledo plant is a major focus of the group's work. Mr. Plybon discussed the outfall location, impacts to recreational activities and associated tourism concerns. Mr. Plybon asked DEQ to establish an ongoing monitoring program in Newport and stated that his organization will be involved through the upcoming permit renewal process for GP Toledo.

6. A letter from the city of Gresham regarding the proposed temporary rule for the Clean Water State Revolving Fund. The commission assistant distributed the letter to commission and entered a copy into the official meeting record.

7. A letter from the Association of Clean Water Agencies regarding the proposed temporary rule for the Clean Water State Revolving Fund. The commission assistant distributed the letter to commission and entered a copy into the official meeting record.

Lunch Break
The commission recessed for lunch from approximately 12:15 to 1:45 p.m. and held a government-to-government meeting with representatives from the Confederated Tribes of Siletz.

Additional public comment regarding the city of Coburg petition
Chair Blosser invited Terrance O'Connor, city manager for the city of Coquille to share a brief public comment related to the city of Coburg petition. Mr. O'Conner stated that the DEQ staff members erred in determinations for stimulus funding that excluded Coquille, and possibly other communities, and officially stated his support for the Coburg petition and proposed amendments. He urged the commission to adopt Coburg's proposed amendments to the State Revolving Fund rules.
[* The audio for this item is at the start of Item M.]

M. Informational Item: Collaborative water quality planning
Phil Ward, Water Resources Department

Phil Ward, director of the Water Resources Department, presented background information on a new legislative direction for DEQ and the Water Resources Department to work with other state agencies on a comprehensive and integrated water quality planning strategy for Oregon. Director Pedersen noted that this could be a regular update to the commission as the planning proceeds.

Mr. Ward explained that Oregon lacked a clearly articulated plan for long-term water resources and water supply needs five years ago, and the Water Resources Department started a process to develop that strategy and a plan to integrate quantity issues with quality issues. Those actions led to legislation in 2009 that directed the Water Resource Commission to create and adopt a long-term and integrated strategy for water resources that included water quantity, quality, and fish and wildlife needs through a partnership with DEQ/EQC and Oregon Department of Fish and Wildlife over the next two years. Mr. Ward noted that the Water Resource Commission has been very involved in this process and Christine Svetkovich from DEQ helped to draft the first issue paper on water quality.

Director Pedersen stated that he is attending a Water Resources Commission meeting in September and would like to have a joint commission meeting at some point in the future. Vice Chair Williamson stated that he would like more economic analysis in the issue papers and reports to create a cohesive story for the Legislature on the true value of water resources.

Mr. Ward answered several clarifying and detailed questions about the presumed approach and strategies for the planning process and what outcomes he expects. All commissioners stated their support for this project and interest in the planning and strategy information as it is available.

N. Action Item: Coburg Petition
Neil Mullane and Judy Johndohl, Department of Environmental Quality

The city of Coburg submitted a petition to amend the rules for the Clean Water State Revolving Fund Loan Program to allow approval for their wastewater treatment project. Judy Johndohl summarized the rules, adopted in April 2009, and the content of the petition and proposed amendments. Ms. Johndohl explained DEQ's position in response to the petition and its proposed amendments and requested that the EQC deny the petition's request.

Chair Blosser invited Milo Mecham, city attorney for Coburg, to address the commission. Mr. Mecham presented the city's position and petition request. He stated that the city of Coburg requests that the commission accept the petition and adopt the two amendments for the proposed permanent Clean Water State Revolving Fund rules.

The commission discussed timelines, risk and benefit for amendments now or later, and the possibility of adopting the proposed amendments.

Action – Adopt the DEQ recommendation as presented in the staff report

Move: Vice Chair Williamson
Second: Commissioner Dodson
Discussion: Chair Blosser stated that the city of Coburg is asking for a significant amount of funding through this petition, and it is dangerous for EQC to grant the request. Vice Chair Williamson noted that the DEQ staff members came up with rules that they thought were the intent of the stimulus money, and this issue is obviously a difference of opinion on the intent and associated rules. He stated he did not want to jeopardize DEQ's ability to disperse the Clean Water State Revolving Fund money by granting the petition and requiring additional time to reprioritize projects. Commissioner Uherbelau noted that she supports the motion, but does not necessarily agree with staff report where it says that Coburg is not eligible for act funding.
Passed unanimously

O. Action Item: Tax credits
Maggie Vandehey, Department of Environmental Quality

Maggie Vandehey presented the information on 17 applications for final certification and four certificate transfers under the pollution control tax credit provisions.

Action – Accept the recommendation to approve the items in attachments B and C, as presented in the staff report.
Move: Commissioner O'Keeffe
Second: Commissioner Dodson
Passed unanimously

P. Action Item: State Revolving Fund temporary rulemaking
Neil Mullane and Judy Johndohl, Department of Environmental Quality

Neil Mullane and Judy Johndohl submitted a handout with a copy of their presentation slides, and the materials were entered into the official meeting record. Director Pedersen clarified that this set of proposed temporary rules applied to normal Clean Water State Revolving Fund money, and not the $45 million in stimulus funding program.

Neil Mullane explained that the proposed temporary rule would establish a special fund of loan money that would allocate 50 percent of the funds from the 2009 fiscal year loans repayments to new projects and 50 percent to increasing loans for projects already in-progress under the program.

He noted that this special reserve would allow DEQ to direct about $24 million to new projects at zero percent interest and with a $5 million maximum for any one project. The

other $24 million would go to the standard increases in loans for projects that have had Clean Water State Revolving Fund loans in the past.

The commission discussed the proposed temporary rules and asked clarifying questions on the financial impacts, program funds comparison and next steps. Mr. Mullane noted that the Water Quality Division plans to start a full program review of the Clean Water State Revolving Fund with Judy Johndohl as the lead on that project and engage in permanent, instead of successive temporary, rulemaking.

Director Pedersen thanked Mr. Mullane and Ms. Johndohl, and the rest of the program's staff, for their creative and new approach to getting this loan money to new projects and communities. He redirected the commissioners to the comment letters from the city of Gresham and the Association of Clean Water Agencies submitted as part of public forum and in support of this temporary rulemaking.

Action – Adopt the staff recommendation, as presented in the staff report.
Move: Commissioner Uherbelau
Second: Vice Chair Williamson
Passed unanimously

Vice Chair Williamson asked DEQ staff members to review the zero percent interest provision in the rules, as it may give an impression to communities that the loan has less value than one with a small interest rate. Commissioner Uherbelau expressed a contrary view on this issue, noting that the communities are borrowing the money to meet state requirements for the Clean Water Act so it makes sense to offer loans at zero percent for this certain and limited use.

Commissioner Reports
Commissioners presented information and updates not covered in the regular meeting agenda.

Vice Chair Williamson – The Oregon Watershed Enhancement Board was created through an initiative process and is planned to expire in 2014. The group is discussing best ways to manage that change and some environmental groups are planning an initiative ballot for 2010 that would create a state agency similar to OWEB but with a different scope. DEQ gets about $3 million a year from OWEB to fund a number of programs, including the total maximum daily load program. DEQ needs to be involved in this process as appropriate and coordinate with the other state agencies that OWEB funds.

Commissioner Uherbelau – Suggestion: hold the October EQC meeting in Klamath Falls, or other location closer to the southern part of Oregon. Director Pedersen responded to Commissioner Uherbelau's suggestion, noting that it may be an opportunity to be in southeastern Oregon for the October meeting and he will work with staff to finalize this information soon.

Chair Blosser adjourned the meeting at approximately 3:20 p.m.

State of Oregon
Department of
Environmental
Quality

Umatilla Chemical Demilitarization Program
Status Update
Environmental Quality Commission
October 22, 2009

Agent Processing at the Umatilla Chemical Agent Disposal Facility

As of September 14, 2009, the Umatilla Chemical Agent Disposal Facility has destroyed 218,114 munitions representing 99 percent of all Umatilla munitions and bulk containers and 41 percent of the original Umatilla stockpile by agent weight.

Mustard operations

The mustard campaign began June 4, 2009. There are 2,635 mustard ton containers in the facility's stockpile, which is one percent of all facility munitions and bulk containers and 63 percent, by agent weight, of the original stockpile. As of September 14, 2009, the facility has disposed of 145 ton containers containing 128 tons of mustard agent.

The facility continues ton container characterization sampling and treatment operations under the temporary authorization issued for the mustard trial burn. The facility has completed the sampling of the initial 60 ton containers required by the permit, and continues sampling of the second set of 60 ton containers, targeting those with high mercury content.

The facility has used the initial 720 shakedown hours for the metal parts furnace. Shakedown hours allow the facility to deviate from its permitted operating parameters in order to prepare for the performance test, also called a trial burn or a source test. The performance test will establish new operating parameters that DEQ will write into a permit when the facility documents that the new operating parameters will demonstrate compliance with stack emission limits contained in the regulations. DEQ granted 350 additional shakedown hours for the metal parts furnace to determine heel sizes that will control boil-overs inside the furnace and to conduct sampling in the cool-down area.

The comment period for the mustard agent trial burn permit modification request closed August 24, 2009. DEQ is considering the comments received, and has not yet made a final decision on the permit modification request.

The facility exceeded its permitted emission limit for carbon monoxide on nine occasions because of boil-over conditions in the metal parts furnace. DEQ issued a pre-enforcement notice for these violations, along with violations for exceeding a waste feed limit to the metal parts furnace, failure to characterize fully a shipment of brine and the failure to update their contingency plan in the allowed time. DEQ referred these violations to its Office of Compliance and Enforcement.

DEQ issued the draft Title V air quality permit for public comment July 15, and convened a public hearing August 25, 2009. The DEQ public comment period closed August 26, 2009. DEQ prepared a response to the public comments and sent the draft Title V permit to the Environmental Protection Agency on September 16, 2009 for a 45-day review and comment period.

Sarin operations

The Umatilla facility completed sarin munitions and bulk items processing July 2007. Sarin munitions and bulk items comprised 21.4 percent of the total Umatilla stockpile by agent weight. The facility destroyed 155,539 munitions and bulk containers filled with 2,028,020 pounds of sarin nerve agent, which comprised 70.5 percent of all Umatilla munitions and bulk containers and 21.4 percent of the original Umatilla stockpile by agent weight.

The only remaining sarin-related waste is used filer system-related carbon. The facility has treated all other sarin secondary wastes.

VX operations

The facility completed VX, a nerve agent, munitions processing November 5, 2008. VX munitions and bulk items comprised 9.8 percent of the total Umatilla stockpile by agent weight. The facility destroyed 14,519 VX rockets and warheads, one VX ton container, 156 VX spray tanks, 32,313 155mm VX projectiles, 3,752 eight-inch VX projectiles, and 11,685 VX mines filled with over 720,000 pounds of agent.

Except for carbon, the facility has treated all VX-related wastes previously stored in J-Block igloos.

Other UMCDF Chemical Demilitarization Program News

Permit Modification Request Activity (August 7, 2009, through September 28, 2009):

SUBMITTALS *(09-008 and 09-022 were also accepted/approved during this period)*		
PMR#	**Title**	**Submitted**
UMCDF-09-008-CONT(1N)	Update to contingency plan emergency coordinator list	08/18/09
UMCDF-09-022-MPF(1R)	Metal parts furnace (MPF) additional shakedown hours	08/19/09
UMCDF-09-006-CLOS(2)	Amend closure plan	09/25/09

APPROVALS/ACCEPTANCES *(09-008 and 09-022 were also submitted during this period)*			
PMR#	**Title**	**Received**	**Decision**
UMCDF-09-008-CONT(1N)	Update to contingency plan emergency coordinator list	08/18/09	09/02/09
UMCDF-09-022-MPF(1R)	Metal parts furnace (MPF) additional shakedown hours	08/19/09	09/04/09

IN PROCESS: The following Permit Modification Notices and Permit Modification Requests are under DEQ review *(includes 09-006 which was also submitted during this period)*				
PMR#	**Title**	**Received**	**Public Comment Period Close**	**Target Decision/ Review Date**
Requests				
UMCDF-05-034-WAST(3)	Deletion of the dunnage incinerator and addition of the carbon micronization system	10/25/05	12/24/05[1]	TBD
UMCDF-07-006-DFS(3TA)	Minimum temperature limit change on the deactivation furnace system	01/16/07	04/25/08[3]	TBD
UMCDF-09-003-MISC(3)	Resubmittal of mustard ATBP	02/26/09	08/12/09[2]	10/15/09
UMCDF-09-020-DMIL(1R)	Change in bulk drain station weight instrument operating range	07/01/09	N/A	09/30/09
UMCDF-09-006-CLOS(2)	Amend closure plan	09/25/09	11/24/09[1]	12/24/09
Notices				
UMCDF-08-037-MISC(1N)	Annual procedures update	05/29/08	N/A	TBD
UMCDF-08-028-MISC(1N)	Redline annual update for general/ PAS Systems	11/26/08	N/A	TBD
UMCDF-09-001-MISC(1N)	Redline annual update-furnace system	01/21/09	N/A	TBD
UMCDF-09-010-MISC(1N)	Redline annual update for the brine reduction area, tank, and MISC systems	03/17/09	N/A	TBD
UMCDF-09-018-PAS(1N)	High-moisture automatic waste feed cut-off	04/21/09	N/A	09/30/09
UMCDF-09-016-MISC(1N)	Redline annual update for CHB, HVAC, and MISC Systems	05/22/09	N/A	TBD
UMCDF-09-017-MISC(1N)	Redline annual update for DMIL, munitions demilitarization building, and MISC systems	08/06/09	N/A	TBD

[1] Initial (permittee) public comment period.
[2] Additional public comment period required/opened due to incompleteness of original Permit Modification Request submittal
[3] DEQ (draft permit) public comment period.

UMCD PMR Activity: None for the period August 7, 2009, through September 28, 2009

Significant Events at Other Demilitarization Facilities

EPA announced August 31, 2009 that it accepted the clean closure of the Johnston Atoll Chemical Agent Disposal System. The closure, cleanup and dismantling effort lasted from May 2001 to January 2004.

To date, 64.3 percent of the national chemical agent stockpile tonnage has been destroyed.

Anniston Chemical Agent Disposal Facility, Alabama

The Anniston facility has destroyed 59.1 percent of its total stockpile by agent weight. The Anniston facility began mustard processing on July 2, 2009, processing HT- and HD-mustard

4.2-inch mortars. As of September 16, 2009, the facility destroyed 22,162 mortars. Its mustard campaign may end in early 2012.

Pine Bluff Chemical Agent Disposal Facility, Arkansas
The Pine Bluff facility has destroyed 44.2 percent of its total stockpile by agent weight. The facility started mustard ton container processing December 7, 2008, and has processed 1,251 HT-mustard and 12 HD-mustard ton containers as of September 16, 2009.

Closure activities at the former BZ disposal building continue preparatory to demolition.

Tooele Chemical Agent Disposal Facility, Utah
Toole facility agent disposal is 83.4-percent complete. The Toole facility is treating mustard ton containers. As of September 16, 2009, 4,072 ton containers have been treated.

The facility is installing three sulfur-impregnated carbon filters as part of an expansion to the existing pollution abatement system. The filters will be used to capture mercury that may remain after incineration of mustard mortars and ton containers considered high-mercury by containing greater than one part per million of mercury.

Newport Chemical Agent Disposal Facility, Indiana
The Newport facility has completed agent disposal operations. It is the third site to complete operations, following Johnston Atoll Chemical Agent Disposal System in 2000 and Aberdeen Chemical Agent Disposal Facility in 2006.

The Newport facility will engage in closure activities over an 18- to 24-month period. The above-ground portion of the process auxiliary building has been demolished, and demolition of the foundation slab is ongoing. The facility conducted an unventilated monitoring test the week of August 23, 2009. Demolition of the utility building will begin after a successful unventilated monitoring test.

Pueblo Chemical Agent Destruction Pilot Plant, Colorado
The Pueblo facility will use neutralization followed by biotreatment to destroy the 2,611-ton mustard stockpile of artillery and mortar projectiles. The overall design is complete and some construction is under way, but the facility is still designing and fabricating some site-specific equipment. The facility began testing of some of the special equipment in spring 2009 for the linear projectile and mortar disassembly system. Target date for startup is 2014.

Based on the U.S. Army's commitment to treat all agent-contaminated secondary wastes onsite versus offsite shipment, as was done at Newport, the facility will process all hydrolysates onsite.

Because of continuing schedule delays, the state of Colorado issued a hazardous waste compliance order in June 2008 mandating the destruction of chemical weapons at Pueblo by 2017. This deadline is four years ahead of the Department of Defense's latest schedule for destruction at the site, but matches congressional mandates that were put in force less than a year ago. The order indicates the Pueblo Chemical Depot has long been out of compliance with state hazardous waste regulations that limit the amount of time hazardous waste may be stored. The

Army is disputing the order. The state issued a permit October 17, 2008 that allows the project to build the remainder of the plant.

Blue Grass Chemical Agent Destruction Pilot Plant, Kentucky
The Blue Grass facility will use neutralization followed by supercritical water oxidation to destroy the 524-ton stockpile of nerve and mustard agents. The facility will start chemical agent operations in 2017 and finish by 2023. The design work is 95 percent complete and should be final in 2010.

The Blue Grass facility neutralized three sarin ton containers representing 0.2 percent of the stockpile as part of Operation Swift Solution. When completed, the operational facilities will be shut down and the temporary structures and equipment will be shipped back to Aberdeen Proving Grounds.

Based on the U.S. Army's commitment to treat all agent-contaminated secondary wastes onsite versus offsite shipment, as was done at Newport, all hydrolysates will be processed onsite.

The metal parts treater, one of the specialty equipment items at the Blue Grass facility, is being fabricated at the Parsons facility in Pasco, Washington. The facility will test this and other site-specific equipment over a six-month period.

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

ACWA –Assembled Chemical Weapons Alternatives, agency of the Army overseeing operations at Pueblo, CO (PCAPP) and Bluegrass, Kentucky (BGCAPP)

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

APG–Aberdeen Proving Grounds, Edgewood, Maryland

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 monitors key operating parameters of a high temperature incinerator and automatically shuts off waste feed to the incinerator if prescribed operating limits are exceeded

BDS – Bulk Drain Station – the used in the Munitions Demilitarization Building to weigh, hole punch and drain liquid HD from ton containers

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

BGCAPP – Blue Grass Chemical Agent Destruction Pilot Plant, new designation for BGCA.

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/)

CMP – comprehensive monitoring program – a program designed to conduct sampling of various environmental media (air, water, soil and biota) required by the EQC in 1997 to confirm the projections of the Pre-Trial Burn Health and Ecological Risk Assessment.

CMS – carbon micronization system – a new treatment system that is proposed to be used in conjunction with the deactivation furnace system to process spent carbon generated at UMCDF during facility operations – the CMS would pulverize the spent carbon and then inject the powder into the deactivation furnace system for thermal treatment to destroy residual chemical agent adsorbed onto the carbon

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/)

CWC Treaty – Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction. Ratified by the U.S. Senate on April 24, 1997.

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

DAL – discharge airlock – a chamber at the end of MPF used to monitor treated waste residues prior to release.

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

DUN – dunnage incinerator – high temperature incinerator included in the original UMCDF design and intended to treat secondary process wastes generated from munitions destruction activities – this incinerator was never constructed at UMCDF

ECR – Explosive Containment Room – UMCDF has two ECRs used to process explosively configured munitions. ECRs are designed with reinforced walls, fire suppression systems, pressure sensors, and automatic fire dampers to detect and contain explosions and/or fire that might occur during munitions processing

EONC – Enhanced Onsite Container – Specialized vessel used for the transport of munitions and bulk items from UNCD to UMCDF and for the interim storage of those items in the UMCDF Container Handling Building until they are unpacked for processing

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

HTS – Heel Transfer Station – the part of the HD bulk drain station that contains the water and air sprays that used to solubilize solid heels in ton containers for purposes of sampling and meeting waste feed limitations

HVAC – heating, ventilation, and air conditioning

HW – hazardous waste

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

IOD – integrated operations demonstration – part of the Operational Readiness Review process when UMCDF demonstrates the full functionality of equipment and operators prior to the start of a new agent or munition campaign.

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

MDB – munitions demilitarization building – the building that houses all of the incinerators and chemical agent processing systems. The MDB has a cascaded air filtration system that keeps the building under a constant negative pressure to prevent the escape of agent vapor. All air from inside the MDB travels through a series of carbon filters to ensure it is clean before it is released to the atmosphere.

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 munitions bodies

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

NRC – National Research Council

ORR – operational readiness review – a formal documented review process by internal and external agencies to assess the overall readiness of UMCDF to begin a new agent or munitions processing campaign.

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

PCAPP – Pueblo Chemical Agent Destruction Pilot Plant, new designation for PUCDF.

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

PMN – permit modification notice

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

SAP – sampling and analysis plan

SETH – simulated equipment test hardware – "dummy" munitions used by UMCDF to test processing systems and train operators before the processing of a new munitions type. SETH munitions are often filled with ethylene glycol to simulate the liquid chemical agent so that all components of the system, including the agent draining process, can be tested.

TAR – Temporary Authorization Request

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

WAP – waste analysis plan –a plan required for every RCRA permit which describes the methodology that will be used to characterize wastes generated and/or managed at the facility.

WDC – Washington Demilitarization Company, LLC – the Systems Contractor for the U.S. Army at UMCDF.

VX – a nerve agent

Item C, Informational Item: Sustainability at DEQ
October 22-23, 2009 EQC meeting

This item is postponed until the December 2009 meeting

State of Oregon
Department of Environmental Quality Memorandum

Date: September 29, 2009

To: Environmental Quality Commission

From: Dick Pedersen, Director



Subject: Agenda Item D, Informational Item: DEQ's toxics reduction strategy
October 22-23, 2009 EQC Meeting

Purpose of Item

This item will introduce DEQ's agency-wide toxics reductions strategy and highlight several relevant current programs.

Why this is Important

There are over 80,000 chemicals in commerce and approximately 1,500 new chemicals added every year. DEQ directly regulates the management and discharge of only a small percentage of these chemicals. Many of these toxic chemicals are ubiquitous and diffuse in the environment and are not released as "point" source pollutants, which poses a significant challenge for DEQ in managing their presence in the environment. At the same time, DEQ needs to maintain a high level of compliance with regulations that apply to industrial point sources. In addition, many of these toxic chemicals readily move from one environmental media to another, and single program approaches often do not address the entire problem.

Background

At the EQC's direction, DEQ is developing an agency-wide toxics reduction strategy, with the goal of using a comprehensive approach to reduce toxic chemicals in Oregon's environment.

The steps involved in developing this strategy include:

- identifying a list of high-priority toxic chemicals;
- determining the sources of those toxics and the pathways to the environment;
- evaluating gaps in existing programs; and
- recommending new or modified reduction actions.

Where possible, the strategy will identify reduction options that address a range of toxic chemicals that may move between air, land and water, thereby increasing the efficiency of reduction efforts while ensuring we address the problem comprehensively. DEQ will also place a major emphasis on reducing toxic chemicals at the source, rather than managing these chemicals after they are released.

Projects

The agency-wide toxics reduction strategy integrates staff and projects from the air, land and water programs by using a collaborative team approach for planning toxics reduction work. The team's emphasis on cross-program applications and comprehensive assessments of toxics informs individual projects and programs as well as collaborative work. Three major DEQ collaborative toxics reduction efforts are highlighted below.

Senate Bill 737

The 2007 Oregon legislature passed Senate Bill 737, which required a number of things from DEQ.

The presentation will include information about:

- the types of pollutants on the October 2009 Final Priority Persistent Pollutant List, known as the P3 list;
- DEQ's efforts to identify sources of P3-listed pollutants; and
- opportunities to reduce these pollutants.

Staff will describe the scope and timeline of the upcoming rulemaking on trigger levels and how this process ties in with municipalities' effluent monitoring and subsequent toxics reduction plan development. The presentation will also cover stakeholder involvement, opportunities for public involvement, and the relationship of Senate Bill737 implementation to DEQ's agency-wide toxics reduction strategy.

Water Quality Standards

Water quality standards are benchmarks established to assess whether the quality of Oregon's rivers and lakes is adequate for fish and other aquatic life, recreation, drinking, agriculture, industry and other uses. Water quality standards are also regulatory tools used by DEQ and the EPA to prevent pollution of our waters. DEQ is responsible for establishing water quality criteria to protect human health. These criteria are established to allow Oregonians to consume fish and shellfish and to use state waters for drinking water supply without adverse health effects. Most of DEQ's current standards are based on EPA recommended criteria. One important exception is the current rulemaking to revise the fish consumption rate based on human health criteria and the amount of fish consumed by many Oregonians, which is substantially higher than the national averages used in EPA's rule.

The presentation will provide:

- an overview of the scope of the toxics criteria review project;
- the history of the project;
- the EQC's October 2008 directives on the fish consumption rate;

- the status of the project;
- the remaining milestones, and
- the timeline for completing the rulemaking.

Staff will highlight how the water quality standards program connects to the other toxics reduction programs at DEQ, including the agency-wide toxics reduction strategy and present key issues and direction for major components of upcoming rulemaking related to water quality standards.

Portland Air Toxics Solutions

Portland Air Toxics Solutions, or PATS, is a community-based geographic air toxics reduction project established under the Oregon Air Toxics Rules. PATS is a collaboration with a broad group of partners and an advisory committee to help develop and implement a ten-year air toxics emission reduction plan. This plan could include both mandatory and voluntary air toxics reduction measures needed to reduce risk. Because air toxics, particulates, greenhouse gases and compounds that form ground-level ozone (smog) are produced by many of the same sources, PATS will link with other ongoing and future regional air pollution reduction efforts. DEQ selected the Portland area as the first community for geographic air toxics reduction planning based on a ranking of county air toxics data statewide. The PATS study area includes portions of Multnomah, Clackamas and Washington Counties where people are most exposed to air toxics. PATS is distinct from other air toxics control efforts to date because it evaluates risk holistically to produce an area-wide plan to decrease emissions from sources roughly commensurate with their contribution to problems. After addressing Portland area air toxics, DEQ may initiate similar efforts in other Oregon communities exceeding target risk levels from air toxics. This approach is provided for in rules associated with benchmarks. The presentation will highlight the recent work of the PATS advisory committee, investigate the direction of the project and its connections to agency-wide toxics reduction strategy.

EQC Involvement

A follow-up informational item and discussion is planned for the December 2009 EQC meeting. This information may inform a rulemaking or other commission action in the future, but there are no planned rulemakings for the agency-wide toxics reduction strategy at this time.

Attachments

None

Approved:

Division:

Division:

Division:

Report Prepared By: Sarah Armitage,
Cheryl Grabham, Debra Sturdevant and Kevin Masterson.

DATA SOURCES FOR DEQ AGENCY BASE LIST OF TOXICS

The basis for the draft Agency Toxics Priority List is a set of toxic pollutant priority lists developed by individual DEQ programs or inter-agency initiatives with which DEQ is involved, which are summarized in the table below. Many toxic chemicals appear on multiple program lists. In addition, some programs have grouped individual chemical cogeners (e.g., PCBs, PBDEs, PAHs), degradates and metabolites, while other have not. In general, chemical congeners, degradates and metabolites will be grouped for the Agency Toxics Priority List, unless there is a need to separate them because of the need to develop more finely focused toxics reduction actions.

LIST	TYPE	# OF CONSTITUENTS
Interim Final Persistent Pollutant Priority List for Surface Water ("P3" List)	Legislatively-mandated list	140[1]
Air Toxics Program Priority Pollutants	Reduction priority and monitoring list	20
Clean Up Program Risk Drivers	Site investigation & remediation priority List	20
Willamette Toxics Monitoring Target Analyte List	Monitoring List	64
Drinking Water Contaminants of Concern	Monitoring List	51[2]
Toxics Exceeding Oregon Water Quality Standards	State regulatory criteria	28[3]
Household Hazardous Waste Priority List	Reduction priorities	75
Oregon Water Quality Pesticides of Concern and Pesticides of Interest	Monitoring & reduction priorities	58[4]
Columbia River Toxics Priorities	Monitoring and reduction priorities	155[5]
Groundwater Toxics Monitoring List	Monitoring List	66[5]
EPA National Waste Minimization Priorities (DEQ uses for Toxics Use Reduction Program)	Reduction priorities	37

TOTAL TOXIC CONSTITUENTS ON ALL LISTS (with duplicates eliminated):

- **Congeners, degradates, metabolites <u>grouped</u> = 319**
- **Congeners, degradates, metabolites <u>separated</u> = 401**

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[1] This list includes individual chemical (e.g., PCBs), some of which (e.g., PCBs) will be grouped for the purposes of the Agency Toxics List

[2] The Willamette Toxics Monitoring Analyte List is inclusive of most, but not all, of the Source Drinking Waters List

[3] The toxic pollutants on this list are those on the 2004/2006 303(d) list, as well as pollutants were identified as "pollutants of concern" on the 2004/2006 Water Quality Assessment Report

[4] The Pesticides of Concern and Pesticides of Interest were designated by the Inter-Agency Water Quality Pesticide Management Team (comprised of representatives from the Oregon Departments of Agriculture, Environmental Quality, Forestry and Human Services). These lists were informed by a list developed by EPA's Office of Pesticide Programs, and focus on pesticides that pose risks to ground and surface water

[5] Individual cogeners and degradates were grouped prior to determining the total number of toxic pollutants on this list

DERIVATION OF DEQ PROGRAM PRIORITY TOXICS LISTS

Interim Final Persistent Pollutant Priority List for Surface Water ("P3" / SB 737 List)

DEQ's Interim Final Priority Persistent Pollutant List (P^3 List) identifies 140 toxic pollutants, divided into three tiers, that persist in the environment and/or accumulate in animals. All of the pollutants on the list have potential to cause harm to aquatic life if they get into the water and thereby have the potential to pose a threat to Oregon's waters. To create this list, DEQ convened a Science workgroup of seven experts in the fields of fate and transport, hydrology, as well as in the fields of human health, aquatic life, and wildlife toxicology. This group provided advice as DEQ assessed the toxicity, persistence and bioaccumulation characteristics of more than 2000 chemicals with several US Environmental Protection Agency (EPA) models.

Air Toxics Priority Program Pollutants

Toxic air pollutants designated by the DEQ Air Quality Division as one of the top 20 causes of risk to human health from breathing ambient air. These pollutants include chemicals that are measured and modeled at significant levels in Oregon's air, are on EPA's list of regulated air toxics, and for which the Environmental Quality Commission has established by regulation ambient benchmark concentrations, or health-based clean air goals. Air toxics ambient benchmark concentrations are based on the best available toxicological information and were recommended by Oregon's Air Toxics Science Advisory Committee.

Cleanup Program Risk Drivers

Toxic chemical, or group of chemicals that DEQ's Cleanup and Tanks Programs recognize as a priority 'risk driver' at contaminated sites around the state. The list originates from discussions in early 2009 among DEQ's Cleanup Program toxicologists about those chemicals in specific sites' soil, surface water, sediment, and groundwater that occur most frequently and present the greatest threats to human or environmental receptors. While the selection of these chemicals/groups was somewhat subjective, the fact that all toxicologists agreed with the final list makes the list credible and technically sound.

Willamette Toxics Monitoring Program Target Analytes

The Willamette Toxics Monitoring target analytes were selected based on a review of relevant literature and monitoring reports for the Willamette and Lower Columbia River Basins and conversation with internal and external stakeholders. The analyte list included DEQ Drinking Water Protection Program priorities and many pesticides measured by Pesticide Stewardship Partnership Program. Tissue analytes were selected based on published research, monitoring information and fish consumption advisories for the basins. The draft monitoring plan was made available to stakeholders and posted on the DEQ Webpage for review and comment before monitoring was initiated.

Drinking Water Contaminants of Concern

The scope of the Drinking Water Source Monitoring Project was developed in 2007 and drew upon expertise and resources from both DEQ and the Department of Human Services—Environmental Public Health Division. The purpose of the project is to design technical assistance and pollutant reduction strategies to address the pollutants of highest concern for drinking water in Oregon. In developing the priority list of pollutants, the DEQ/DHS team used recent national USGS emerging contaminant data in drinking water source areas, an analysis of current unmonitored pollutants used in Oregon, other state source monitoring programs, and consultations with environmental toxicologists at OSU and DHS that have public health and drinking water expertise. Data sources for prioritizing within each group of pollutant included USGS national detection data on pharmaceuticals (Dana Kolpin, USGS); cleaners, VOCs, fire retardants from the recent analysis of Oregon's highest risks from household chemicals (DEQ/HHW, 2007); pesticides used in Oregon forestry from ODF (Knotts, January 2008); pesticides used in Oregon agriculture from DEQ Willamette Valley study (DEQ, 2002); and for other areas of the state, Pesticide Stewardship Partnership data based on past DEQ monitoring in agricultural areas. After developing lists within each pollutant group, the final priorities were selected by agency toxicologists based on determinations of potential risks to public health.

Toxics Exceeding Oregon Water Quality Standards

This list includes toxic pollutants exceeding in-stream water quality standards designed to protect human health or aquatic life in Oregon. Waterbodies that exceed criteria for specific toxic pollutants (established in Oregon Administrative Rule 340-041-0033, Table 20) are placed on the Oregon 303(d) list of impaired waters. This program list also includes other "pollutants of concern" identified in the 2004/2006 Water Quality Assessment Report, as well as pollutants that were identified in a recent fish consumption rate report (SAIC, 2008) as having the potential to exceed currently effective criteria for some permitted wastewater discharge sources.

Household Hazardous Waste Program Prioritization

The Household Hazardous Waste Priority Assessment project developed a risk-based method to assess which household hazardous wastes likely pose the greatest danger to public and environmental health. A consultant designed a methodology and spreadsheet tool, compiled relevant data on hazardous products and substances, and performed the assessment. The primary evaluation criteria are *Health Impacts*, *Environment Impacts*, and *Hazard Potential.* The U.S. Environmental Protection Agency's Tool for the Reduction and Assessment of Chemical and Other Environmental Impacts (TRACI) and the National Library of Medicine's Hazardous Substances Data Bank (HSDB) as the primary data sources for the criteria of health impacts, environmental impacts, and hazard potential. TRACI was developed by the EPA to assist in impact assessment for pollution prevention initiatives, among other purposes. The HSDB is a database that focuses on the toxicology of potentially hazardous chemicals. Both data sources have undergone extensive peer review.

Oregon Water Quality Pesticides of Interest and Pesticides of Concern

Nationwide, state agencies compiled a list of 57 active ingredients or groups of active ingredients that are most likely to affect water quality. The Oregon Inter-Agency Water Quality Pesticide Management Team (WQPMT) evaluates a certain number of these "pesticides of interest" (POIs) each year, along with any others that are deemed have the potential to occur in Oregon at concentrations approaching or exceeding a federal, state or tribal health or environmental reference concentration. Based on these evaluations, the WQPMT may designate an active ingredient as a "pesticide of concern" (POC) because it approaches or exceeds an established benchmark concentration and poses a possible risk to human or ecological life. Once an ingredient receives becomes a POC, active management strategies are proposed to reduce levels in surface or groundwater.

Columbia Toxics Reduction Strategy Monitoring Priorities

A multi-stakeholder contaminant and media subgroup was tasked with identifying the toxics of highest priority for the Columbia River Toxics Reduction Workgroup. The subgroup developed a tiered list of contaminants of concern, which is meant to serve as a living list with updates made on yearly basis. The individual toxics were considered highest priority (Tier 1) based on the following factors: (a) Is it an existing problem? (b) Is it an ecological threat, a human health threat, or both? (c) Is there an implementation plan/reduction strategy in place? The subgroup also considered these factors: Trend data available, relevance to people (health), probability that relevant data will continue to be collected, clear link to contaminants/effects of contaminants, relevance to how people use/interact with the Columbia River, ease of collecting necessary information.

Groundwater Toxics Monitoring List

DEQ conducts regular groundwater monitoring in designated Groundwater Management Areas in the state. Typically, these monitoring locations are private, domestic drinking water wells. The analytes including in the groundwater monitoring suite include metals, nitrate/nitrate (as N), ammonia and a wide range of pesticides included in EPA's standard groundwater pesticide suite. The entire toxics monitoring suite may not be included in every monitoring event, but they are all analyzed at least two times per year. In addition, analyses for other toxic chemicals (e.g.,

pharmaceuticals, VOCs) may be included for specific groundwater projects, but aren't included on the standard monitoring list because of the episodic nature of these projects.

EPA Waste Minimization Program's Priority Chemicals

The EPA National Waste Minimization Program's Priority Chemicals are used by the Oregon Toxics Use and Hazardous Waste Program to help focus its toxics reduction efforts. The organic chemicals included in the list of Priority Chemicals (PCs) were selected following an EPA Agency-wide expert review of scientific information available on them. EPA experts reviewed scientific information made available to the public in 1998 and scientific information received from commenters in response to the 1998 Notice of Availability. Based on its review, EPA concluded that 27 organic chemicals are persistent, bioaccumulative, and toxic (PBT). They are currently being generated in industrial waste and are found in soil, sediment, ground water, surface water, air, and plant, animal, and human tissue as a result of past and present releases. Even when released in very small amounts, they accumulate and can cause environmental problems. Many of these organics are difficult to clean up once they get into the environment, resulting in costly clean up efforts. Polychlorinated biphenyls (PCBs) were added in 2004 because of their chemical properties. Three metals are included in the list. The PC list includes cadmium, lead, and mercury. These metals and their compounds are known to occur frequently in RCRA regulated industrial wastes and often trigger RCRA's Toxicity Characteristic criteria, meaning the wastestreams they are found in must be managed under RCRA hazardous waste regulations.

Draft DEQ Priority Toxics Focus List (10/01/09)

CASRN	Chemical Name	Known Uses/Sources	D	DEQ PROGRAM PRIORITIES [1] WATER QUALITY	D	LAND QUALITY	D	AIR QUALITY	Number of Program Priorities
134-62-3	Diethyltoluamide, N, N- (DEET)	mosquito repellent		WTM, DWP, CR-T3		HHW			4
104-40-5	Nonyphenol, 4- (& ethoxylates)	Detergent/Surfactant		CRT-3, WTM, DWP		HHW			4
	Current Use Pesticides								
333-41-5	Diazinon	Insecticide		POC, P3, WTM, DWP, CR-T2, GW		HHW			7
1582-09-8	Trifluralin	Herbicide		POI, P3, DWP, CR-T3, GW		HHW, WMP			7
1912-24-9	Atrazine	Herbicide		POC, WTM, DWP, CR-T3, GW		HHW			6
2921-88-2	Chlorpyrifos	Insecticide		WQS, POC, P3, DWP, CR-T2		HHW			6
58-89-9	Hexachlorocyclohexane (HCH), gamma- (Lindane)	Insecticide		P3, DWP, GW		Cleanup (all HCH isomers), HHW, WMP			6
87-86-5	Pentachlorophenol	Wood Preservative		WQS, CR-T3, GW		Cleanup, WMP, HHW			6
52645-53-1	Permethrin	Insecticide		P3, WTM, DWP, CR-T3, GW		HHW			6
63-25-2	Carbaryl	Insecticide		POI, DWP, CR-T3, GW		HHW			5
121-75-5	Malathion	Insecticide		POI, WTM, DWP, GW		HHW			5
40487-42-1	Pendamethalin	Herbicide		POI, P3, DWP, CR-T3		WMP			5
94-75-7	2,4-D	Herbicide		POI, WTM, GW		HHW			4
1897-45-6	Chlorothalonil	Fungicide		POI, P3, DWP		HHW			4
330-54-1	Diuron	Herbicide		POI, WTM, DWP		HHW			4
1071-83-6	Glyphosate	Herbicide		POI, WTM		HHW			3
72-43-5	Methoxychlor	Insecticide		GW		HHW, WMP			3
114-26-1	Propoxur (Baygon)	Insecticide		DWP, GW		HHW			3
	Flame Retardants								
N/A	Polybrominated Diphenyl Ethers (PBDEs) - as a group	Brominated Flame Retardant		CR-T1, DWP		Cleanup			5 (total)
5436-43-1	*PBDE-047 [2,2',4,4'-Tetrabromodiphenyl ether]*	*Brominated Flame Retardant*		*P3*		*WTM*			2
60348-60-9	*PBDE-099 [2,2',4,4',5-Pentabromodiphenyl ether]*	*Brominated Flame Retardant*		*P3*		*WTM*			2
189084-64-8	*PBDE-100 [2,2',4,4',6-Pentabromodiphenyl ether]*	*Brominated Flame Retardant*		*P3*		*WTM*			2
68631-49-2	*PBDE-153 [2,2',4,4',5,5'-hexabromodiphenyl ether]*	*Brominated Flame Retardant*		*P3*		*WTM*			2
1163-19-5	*PBDE-209 [decabromodiphenyl ether]*	*Brominated Flame Retardant*		*P3*		*WTM*			2
36483-60-0	*PBDE-138 [2,2',3,4,4',5'-Hexabromodiphenyl ether]*	*Brominated Flame Retardant*				*WTM*			1
36483-60-0	*PBDE-154 [2,2',4,4',5,6'-Hexabromodiphenyl ether]*	*Brominated Flame Retardant*				*WTM*			1
68928-80-3	*PBDE-185 [2,2',3,4,4',5',6-Heptabromodiphenyl ethe*	*Brominated Flame Retardant*				*WTM*			1
40088-47-9	*PBDE-66 [2,3',4,4'-Tetrabromodiphenyl ether]*	*Brominated Flame Retardant*				*WTM*			1
32534-81-9	*PBDE-85 [2,2,3,4,4-Pentabromodiphenyl ether]*	*Brominated Flame Retardant*				*WTM*			1
	Industrial Chemicals or Intermediates								
N/A	Polychlorinated Biphenyls (PCBs)	Electrical equipment coolants/insulators		WQS, CR-T1, WTM		Cleanup, HHW, WMP			7 (total)
7012-37-5	*PCB-028 [2,4,4'-trichlorobiphenyl]*	*Electrical equipment coolants/insulators*		*P3, WTM*					2
35693-99-3	*PCB-052 [2,2',5,5'-tetrachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*P3, WTM*					2
32598-13-3	*PCB-077 [3,3',4,4'-tetrachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*P3, WTM*					2
37680-73-2	*PCB-101 [2,2',4,5,5'-pentachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*P3, WTM*					2
32598-14-4	*PCB-105 [2,3,3',4,4'-pentachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*P3, WTM*					2
31508-00-6	*PCB-118 [2,3',4,4',5-pentachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*P3, WTM*					2
57465-28-8	*PCB-126 [3,3',4,4',5-pentachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*P3, WTM*					2
35065-28-2	*PCB-138 [2,2',3,4,4',5'-hexachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*P3, WTM*					2

Draft DEQ Priority Toxics Focus List (10/01/09)

CASRN	Chemical Name	Known Uses/Sources	D	DEQ PROGRAM PRIORITIES [1] WATER QUALITY	D	LAND QUALITY	D	AIR QUALITY	Number of Program Priorities
	Combustion By-Products								
N/A	Polycyclic Aromatic Hydrocarbons (PAHs) - as group	Combustion by-products		WQS, CR-T2		Cleanup, WMP		Air Toxics	9 (total)
120-12-7	*Anthracene*	*Combustion by-products*		*P3, WTM, DWP*		*WMP*			*4*
218-01-9	*Chrysene [benzo(a)phenanthrene]*	*Combustion by-products*		*P3, WTM, DWP*		*WMP*			*4*
56-55-3	*Benz(a)anthracene*	*Combustion by-products*		*P3*		*HHW, WMP*			*3*
50-32-8	*Benzo(a)pyrene*	*Combustion by-products*		*P3, WTM*		*WMP*			*3*
206-44-0	*Fluoranthene [Benzo(j,k)fluorene]*	*Combustion by-products*		*P3, DWP*		*WMP*			*3*
129-00-0	*Pyrene*	*Combustion by-products*		*WTM, DWP*		*WMP*			*3*
205-99-2	*Benzo(b)fluoranthene*	*Combustion by-products*		*P3*		*WMP*			*2*
191-24-2	*Benzo(g,h,i)perylene*	*Combustion by-products*		*P3*		*WMP*			*2*
207-08-9	*Benzo(k)fluoranthene*	*Combustion by-products*		*P3*		*WMP*			*2*
53-70-3	*Dibenz(a,h)anthracene*	*Combustion by-products*		*P3*		*WMP*			*2*
193-39-5	*Indeno(1,2,3-cd)pyrene*	*Combustion by-products*		*P3*		*WMP*			*2*
85-01-8	*Phenanthrene*	*Combustion by-products*		*P3*		*WMP*			*2*
83-32-9	*Acenaphthene*	*Combustion by-products*				*WMP*			*1*
208-96-8	*Acenaphthylene*	*Combustion by-products*				*WMP*			*1*
205-82-3	*Benzo(j)fluoranthene*	*Combustion by-products*				*WMP*			*1*
189-55-9	*Benzo(r,s,t)pentaphene*	*Combustion by-products*				*WMP*			*1*
226-36-8	*Dibenz(a,h)acridine*	*Combustion by-products*				*WMP*			*1*
224-42-0	*Dibenz(a,j)acridine*	*Combustion by-products*				*WMP*			*1*
5385-75-1	*Dibenzo(a,e)fluoranthene*	*Combustion by-products*				*WMP*			*1*
192-65-4	*Dibenzo(a,e)pyrene*	*Combustion by-products*				*WMP*			*1*
189-64-0	*Dibenzo(a,h)pyrene*	*Combustion by-products*				*WMP*			*1*
191-30-0	*Dibenzo(a,l)pyrene*	*Combustion by-products*				*WMP*			*1*
194-59-2	*Dibenzo(c,g)carbazole, 7H-*	*Combustion by-products*				*WMP*			*1*
86-73-7	*Fluorene*	*Combustion by-products*				*WMP*			*1*
56-49-5	*Methylcholanthrene, 3-*	*Combustion by-products*				*WMP*			*1*
3697-24-3	*Methylchrysene, 5-*	*Combustion by-products*				*WMP*			*1*
832-69-9	*Methylphenanthrene, 1-*	*Combustion by-products*		*P3*					*1*
2381-21-7	*Methylpyrene, 1-*	*Combustion by-products*		*P3*					*1*
5522-43-0	*Nitropyrene, 1-*	*Combustion by-products*				*WMP*			*1*
N/A	Dioxins & Furans - as group	Combustion & industrial by-product		CR-T1, WTM		Cleanup, WMP			5 (total)
1746-01-6	*2,3,7,8-TCDD (as total TEQ)*	*Combustion & industryal by-product*		*P3, WQS*					*2*
Multiple	Naphthalenes	Combustion by-product & VOC		CR-T3		HHW, WMP		Air Toxics	4
	Consumer Product Constituents (including pharmaceuticals & personal care products)								
N/A	Phthalates - as a group	Plasticizers				Cleanup, WMP, HHW			6 (total)
84-66-2	*Diethylphthalate*	*Plasticizer*		*WTM, DWP, CR-T3*					*3*
117-81-7	*Bis (2-ethylhexyl) phthalate*	*Plasticizer*		*WQS*					*1*
84-61-7	*Di-cyclohexyl phthalate [DCHP]*	*Plasticizer*		*P3*					*1*
3380-34-5	Triclosan	Disinfectant		P3, CR-T3, WTM, DWP		HHW			5
80-05-7	Bisphenol A	Plasticizer		WTM, CR-T3		HHW, WMP			4

Draft DEQ Priority Toxics Focus List (10/01/09)

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319-85-7	Hexachlorocyclohexane, beta- (beta-BHC)	Legacy Organochlorine Insecticide		P3, GW		Cleanup (all HCH isomers)			3
95-95-4	Trichlorophenol, 2,4,5- (2,4,5-T)	Legacy Organochlorine Herbicide		P3, GW		WMP			3
	Metals								
7439-97-6	Mercury (and methylmercury)	Coal burning, labs, dental amalgam, natural		WQS, CR-T1, P3, WTM, DWP, GW		Cleanup, WMP, HHW		Air Toxics	10
7440-38-2	Arsenic	Insecticide, semiconductors, natural		P3, WQS, WTM, DWP, CR-T2, GW		Cleanup, HHW		Air Toxics	9
7440-43-9	Cadmium	Batteries, pigments, metals indisutries		P3, WQS, WTM, CR-3		HHW, WMP		Air Toxics	7
18450-29-9	Chromium	Metals industries, leather tanning, pigments		WQS, WTM, CR-T3		Cleanup, HHW, HW		Air Toxics	7
7440-50-8	Copper	Biocide, piping, wiring, electronics, brake pads		WQS, POI, WTM, DWP, CR-T2		Cleanup, HHW			7
7439-92-1	Lead	Batteries,electronics, legacy fuels & paints		P3, WTM, CR-T2		Cleanup, WMP HHW		Air Toxics	7
7440-02-0	Nickel	Batteries, metals industries		WQS, WTM, CR-T3		HHW		Air Toxics	5
7439-96-5	Manganese	Metals industries, pigments		WQS, WTM, GW				Air Toxics	4
7440-22-4	Silver	Photography, silverware, jewelry, electronics		WQS, CR-T3		HHW			3
	Volatile Organic Compounds								
127-18-4	Tetrachloroethylene	Drycleaning, degreasing		WQS, WTM, DWP, CR-T3		Cleanup, HHW, WMP		Air Toxics	8
79-01-6	Trichloroethylene	degreasing solvent		WQS, WTM, DWP		Cleanup, WMP, HHW		Air Toxics	7
71-43-2	Benzene	petroluem component, industrial intermediate		WTM, DWP		Cleanup, WMP, HHW		Air Toxics	6
100-41-4	Ethylbenzene	petroluem component, industrial intermediate		WTM, DWP		Cleanup		Air Toxics	4
106-46-7	Dichlorobenzene, 1,4- (Dichlorobenzene-p)	Disinfectant, insecticide, industrial intermeidate		CR-T3		HHW		Air Toxics	3
50-00-0	Formaldehyde	Resins, preservative, combustion by-product				HHW, WMP		Air Toxics	3
108-88-3	Toluene	Paints, solvents, petroleum component		WTM, DWP		HHW			3

(1) DEQ PROGRAM PRIORITIES

WATER QUALITY PROGRAM PRIORITY INDEX

P3 = Chemical on the Interim Final List of Persistent Pollutants developed by DEQ in response to Senate Bill 737 (2007 Legislative Session)

WQS = Toxic pollutant on DEQ's list of impaired waters for surface water body(s) in Oregon [303(d) List], or identified in the 2004/2006 Water Quality Assessment Report as "pollutant of concern"

CR-T1, T2, T3 = Columbia River Basin Toxics Reduction Plan toxics monitoring priority list. T1 = Tier 1 priority pollutant, T2 = Tier 2 priority pollutant, T3 = Tier 3 priority pollutant

POC = Designated as a Pesticide of Concern by the Oregon Inter-Agency Water Quality Pesticide Management Team. POCs become subject to agency management actions.

POI = Designated as a Pesticide of Interest by the Oregon Inter-Agency Water Quality Pesticide Management Team. POIs are evaluated for possible future designation as a Pesticide of Concern.

WTM = Willamette Toxics Monitoring Program Target Analyte List

DWP = Drinking Water Source Monitoring Program Contaminant List

GW = Groundwater Program Toxics Monitoring Priority Chemicals

LAND QUALITY PROGRAM PRIORITY INDEX

Cleanup = Toxic chemical, or group of chemicals, recognized by the DEQ Environmental Cleanup Program as on of the top 20 risk drivers for clean up actions in the state

WMP = One of 37 toxic pollutants included by EPA's National Waste Minimization Priorities Program, or considered a priority pollutant by the DEQ Hazardous Waste Program

HHW = Toxic Substance on ranked in the top by the Household Hazardous Waste Program Prioritization Tool

AIR QUALITY PROGRAM PRIORITY INDEX

Air Toxics = Toxic pollutant designated by the DEQ Air Quality Division as one of the top 20 risk drivers for ambient air quality impairment

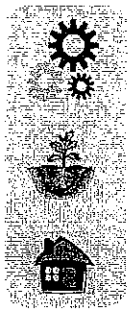
Draft DEQ Priority Toxics Focus List (10/01/09)

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35065-27-1	*PCB-153 [2,2',4,4',5,5'-hexachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*P3, WTM*					*2*
35065-29-3	*PCB-180 [2,2',3,4,4',5,5'-heptachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*P3, WTM*					*2*
37680-65-2	*PCB 18 [2,2',5-trichlorobiphenyl]*	*Electrical equipment coolants/insulators*		*WTM*					*1*
70362-50-4	*PCB-081 (3,4,4',5-tetrachlorobiphenyl)*	*Electrical equipment coolants/insulators*		*P3*					*1*
74472-37-0	*PCB-114 [2,3,4,4',5-pentachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*P3*					*1*
65510-44-3	*PCB-123 [2',3,4,4',5-pentachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*P3*					*1*
38380-07-3	*PCB-128 [2,2',3,3',4,4'-hexachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*WTM*					*1*
38380-08-4	*PCB-156 [2,3,3',4,4',5-hexachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*P3*					*1*
69782-90-7	*PCB-157 [2,3,3',4,4',5'-hexachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*P3*					*1*
52663-72-6	*PCB-167 [2,3',4,4',5,5'-hexachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*P3*					*1*
32774-16-6	*PCB-169 [3,3',4,4',5,5'-hexachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*P3*					*1*
35065-30-6	*PCB-170 [2,2',3,3',4,4',5-heptachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*WTM*					*1*
52663-68-0	*PCB-187 [2,2',3,4',5,5',6-heptachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*WTM*					*1*
39635-31-9	*PCB-189 [2,3,3',4,4',5,5'-heptachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*P3*					*1*
52663-78-2	*PCB-195 [2,2',3,3',4,4',5,6-octachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*WTM*					*1*
40186-72-9	*PCB-206 [2,2',3,3',4,4',5,5',6-nonachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*WTM*					*1*
2051-24-3	*PCB-209 [2,2'3,3',4,4',5,5',6,6'-decachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*WTM*					*1*
41464-39-5	*PCB-44 [2,2',3,5'-tetrachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*WTM*					*1*
32598-10-0	*PCB-66 [2,3',4,4'-tetrachlorobiphenyl]*	*Electrical equipment coolants/insulators*		*WTM*					*1*
34883-43-7	*PCB-8 [2,4'-dichlorobiphenyl]*	*Electrical equipment coolants/insulators*		*WTM*					*1*
7664-41-7	Ammonia	Fertilizer/Intermediate for Dyes		WQS, GW		HHW			3
	Legacy Pesticides								
60-57-1	Dieldrin	Legacy Organochlorine Insecticide		WQS, WTM, DWP, CRT-T3		Cleanup			5
50-29-3	DDT (and metabolites - as a group)	Legacy Organochlorine Insecticide		WQS, CR-T1		Cleanup, HHW			4 (total)
72-54-8	*4,4'-DDD*	*Legacy Organochlorine Insecticide*		*P3, WTM*					*2*
3424-82-6	*2,4'-DDE*	*Legacy Organochlorine Insecticide*		*WTM*					*1*
789-02-6	*2,4'-DDT*	*Legacy Organochlorine Insecticide*		*WTM*					*1*
72-55-9	*4,4'-DDE*	*Legacy Organochlorine Insecticide*		*WTM*					*1*
50-29-3	*4,4'-DDT*	*Legacy Organochlorine Insecticide*		*WTM*					*1*
53-19-0	*DDD, 2,4'-*	*Legacy Organochlorine Insecticide*		*WTM*					*1*
57-74-9	Chlordane (and metabolites - as a group)	Legacy Organochlorine Insecticide		WQS		Cleanup			4 (total)
57-74-9	*alpha-Chlordane*	*Legacy Organochlorine Insecticide*		*WTM*					*1*
5103-71-9	*Chlordane, cis-*	*Legacy Organochlorine Insecticide*		*P3*					*1*
5103-74-2	*Chlordane, trans-*	*Legacy Organochlorine Insecticide*		*P3*					*1*
5103-73-1	*Cis-Nonachlor*	*Legacy Organochlorine Insecticide*		*WTM*					*1*
27304-13-8	*Oxychlordane*	*Legacy Organochlorine Insecticide*		*WTM*					*1*
39765-80-5	*Trans-Nonachlor*	*Legacy Organochlorine Insecticide*		*WTM*					*1*
319-84-6	Hexachlorocyclohexane, alpha- (alpha-BHC)	Legacy Organochlorine Insecticide		P3, WQS, GW		Cleanup (all HCH isomers)			4
309-00-2	Aldrin	Legacy Organochlorine Insecticide		WQS, WTM		Cleanup			3
76-44-8	Heptachlor (& Heptachlor epoxide)	Legacy Organochlorine Insecticide		WQS, P3		WMP			3
118-74-1	Hexachlorobenzene	Legacy Organochlorine Fungicide		P3, GW		WMP			3

State of Oregon
Department of
Environmental
Quality

DEQ Toxics Reduction Opportunities Workshop
Tuesday, November 17, 2009
Portland, Oregon
The Ambridge, 1333 Martin Luther King, Jr. Blvd.
FREE & Open to the Public, Pre-registration Required
www.deq.state.or.us/wq/SB737/toxicsworkshop.htm

Draft Agenda – updated 9/29/09



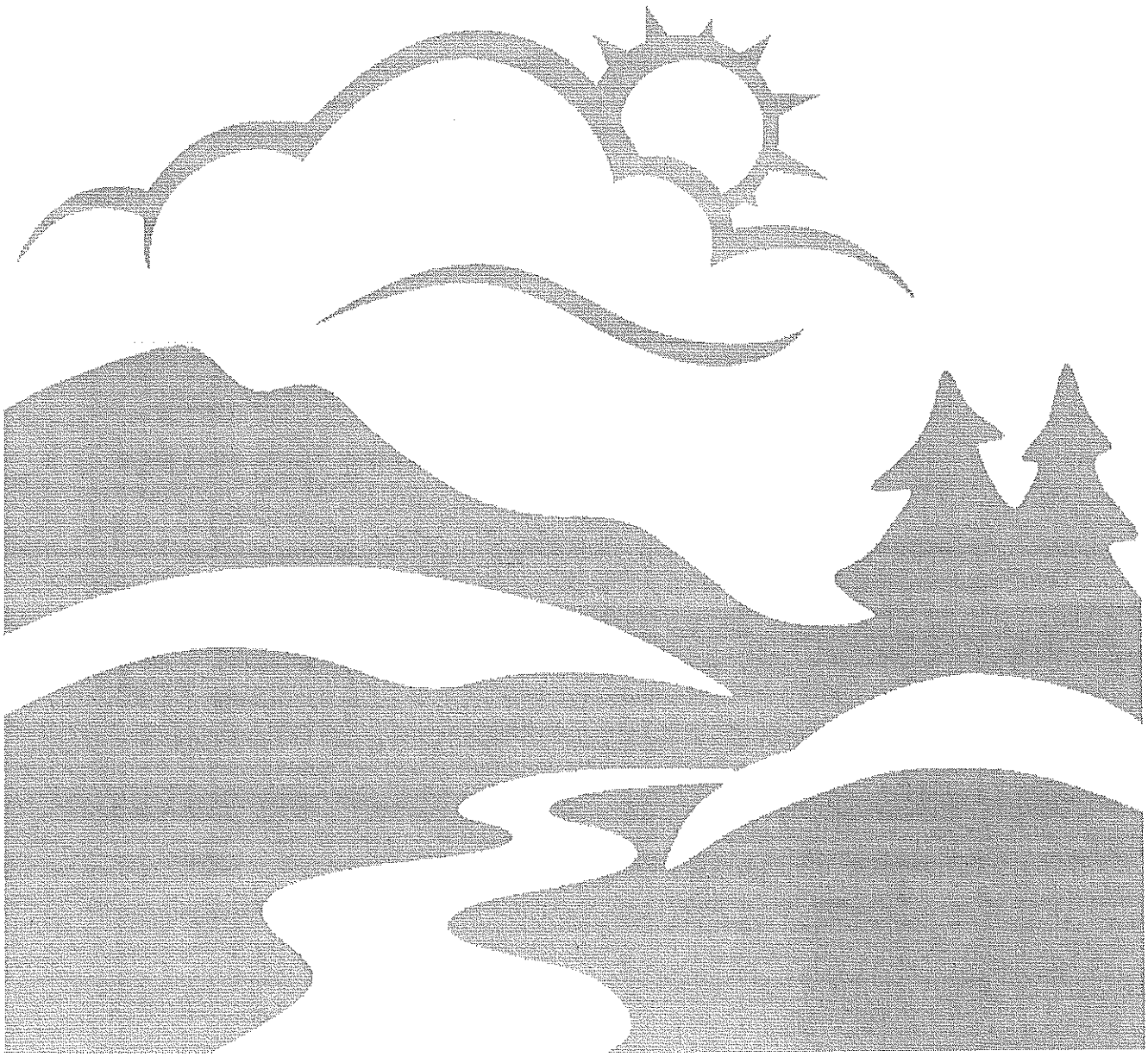
8-8:30 a.m.	**Registration**
8:30 a.m.	**Welcome** – Large Ballroom - Dick Pedersen, Director, Oregon Department of Environmental Quality
8:45 a.m.	**Plenary Session 1** – Panel: "Where we are" (Kevin Masterson, Oregon DEQ, moderator) Successful innovative toxics reduction efforts: • Elizabeth Whalen, Columbia Forest Products – *Green chemistry for formaldehyde alternatives.* • Anne Saxby, District Manager, Hood River SWCD – *Leadership in agricultural toxics reduction.* • Mark Yaeger, City of Albany - *How one municipality is reducing toxic pollutants. (invited)* Progressive toxics reduction solutions for the future and potential areas for improvement. • Renee Hackenmiller-Paradis, OEC - *Choosing less toxic consumer products and current statewide & national public education campaigns.* • Siltronic Corporation – *Environmental management systems to reduce toxics. (invited)* • Paul Jepson, OSU Integrated Pest Management – *Innovative plant protection efforts. (invited)*
10:15 a.m.	**Setting up for Success** - Donna Silverberg, Facilitator
10:30 a.m.	**Break** - *15 minutes*
10:45 a.m.	**Break out Session 1** – *What are the major toxic chemicals of this source sector? What reduction activities are currently taking place for these chemicals? Are these reduction strategies working? Why? Why not? Based on what we know about sources and pathways and the effectiveness of existing reduction strategies of these chemicals, what new reduction opportunities exist? What are the barriers to implementing these activities?*
Noon	**Lunch (on your own)** – See restaurant listing in your packet for ideas. (1 hour)
1 p.m.	Report back to main group – Large Ballroom – *Report on outcomes of Breakout Session 1. Plan afternoon discussion.*
1:30 p.m.	**Breakout session 2** – *Identify timelines for strategies (short-term vs long-term), organize preliminary recommendations and add details to those strategies likely to gain momentum. Identify implementation considerations, such as potential opportunities and limitations. (e.g. length of time before evaluating success of voluntary solutions, and potential regulatory options if voluntary efforts are not successful.)*
2:30 p.m.	**Break** - *15 minutes*
2:45 p.m.	**Report back to main group** – Large Ballroom - *Report on outcomes of Break out Session 2.*
3:15 p.m.	**Closing Remarks** – Panel: "Where do we go from here?" (Jennifer Wigal, Oregon DEQ, moderator) • Ken Williamson, Environmental Quality Commission • Kathleen Feehan, Confederated Tribes of the Umatilla Indian Reservation • Senator Jackie Dingfelder • Mary Lou Soscia, Environmental Protection Agency, Region 10
4:15 p.m.	**Large Group Discussion** – Thoughts on the next steps forward.
4:30 p.m.	**Closing**

Final Report

Senate Bill 737 Development of a Priority Persistent Pollutant List (P^3L) for Oregon

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State of Oregon
Department of
Environmental
Quality



Senate Bill 737: Development of a P^3 List for Oregon



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Acronyms



State of Oregon
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CalEPA	California Environmental Protection Agency
CASRN	Chemical Abstract Service Registry Number
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
ChV	Chronic toxicity value (for fish)
DEQ	Oregon Department of Environmental Quality
DSL	Domestic Substances List {Environment Canada program}
ECOSAR	Ecological Structure Activity Relationships {U.S. EPA model}
EPCRA	Emergency Planning and Community Right-to-Know Act
HPV	High Production Volume {chemicals}
IARC	International Agency for Research on Cancer
IRIS	Integrated Risk Information System
NAWQA	National Ambient Water Quality Assessment {by the USGS}
NWIS	National Water Information System
NOEC	No-observed-effect-concentration
ORS	Oregon Revised Statutes
P³L	Priority Persistent Pollutant List {required by SB 737}
PBT	Persistent, Bioaccumulative, and Toxic {chemical}
POP	Persistent Organic Pollutant
PPSWG	Priority Persistent Pollutant Science Workgroup
QSAR	Quantitative Structure Activity Relationship
RAIDAR	Risk Assessment Identification and Ranking {Canadian model}
RCRA	Resource Conservation and Recovery Act
RfD	Reference dose for humans
SB 737	Oregon Senate Bill 737
SMILES	Simplified Molecular Input Line Entry System
TRI	Toxics Release Inventory {U.S. EPA program}
U.S. EPA	U.S. Environmental Protection Agency
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environmental Program
USGS	U.S. Geological Survey
WDOE	Washington State Department of Ecology

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Executive Summary

The Oregon Department of Environmental Quality (DEQ) Water Quality Program's mission is "to protect and improve Oregon's water quality." Many Oregonians are concerned about the health of Oregon's rivers and people who use them. There is a growing concern about persistent pollutants – those that come from a wide variety of sources but linger in the environment and have a documented effect on human health, wildlife and aquatic habitat. Our communities use and dispose of literally thousands of chemicals resulting from manufactured goods we use and consume, choices we make in our daily routines, and products available at stores throughout the state. Many of these chemicals end up in our aquatic systems, such as rivers, where they persist and travel up through the food chain, in some cases having ongoing impacts to humans and the environment. To date, Oregon has not comprehensively evaluated which of these pollutants should be a priority for strategic action.

The 2007 Oregon Legislature directed DEQ to compile a prioritized list of persistent pollutants (the P³ List) to guide DEQ's pollution prevention efforts. Senate Bill 737 (SB 737) sets specific guidelines for DEQ to follow in compiling this list. The statute requires DEQ to present a list of priority persistent pollutants to the Legislature by June 1, 2009. An Interim Final Priority Persistent Pollutant List (P³L) was submitted to the Legislature at that time. Then from June to through July 2009, DEQ provided the public an opportunity to submit additional information on certain pollutants; information relevant to their behavior in sediment, overall persistence, degradation rates, toxicity to humans, bioaccumulation in fish or measurements in water, sediment, or fish tissue. DEQ evaluated all information received and released a Final P³L in October 2009.

By June 1, 2010, DEQ will submit a report to the Legislature identifying sources of pollutants on the list and opportunities to reduce their discharge to water. Oregon's 52 large municipal wastewater treatment plants (WWTPs) must also develop toxics reduction plans by July 2011 to reduce persistent pollutants occurring in their effluent at levels above "trigger levels" set by DEQ. Oregon's 52 largest WWTPs have funded this work for two years, and continue to be closely involved.

To create this list, DEQ convened a Science Workgroup of seven experts in the fields of fate and transport, hydrology, as well as in the field of human health, aquatic life, and wildlife toxicology. This group provided advice as DEQ assessed the toxicity, persistence and bioaccumulation characteristics of more than 2000 chemicals utilizing several U.S. Environmental Protection Agency (EPA) chemical property estimation models.

Because toxic pollutants cross social and political boundaries, DEQ coordinated extensively with other state and federal agencies, tribal nations, outside experts, stakeholders, interested parties

and the general public. A comprehensive public outreach effort in March 2009 reached more than 200 individuals, with 55 individuals or organizations submitting over 150 written comments. DEQ is committed to using a collaborative approach during every phase of the project, including consultation with interested parties through the project's completion.

DEQ's Final P³ List identified 118 toxic pollutants, divided into two categories, that persist in the environment or accumulate in animals. All of the pollutants on the list have potential to cause harm to human health or aquatic life if they get into the water and thereby have the potential to pose a threat to Oregon's waters. Some are known carcinogens, and others are believed to disrupt endocrine functions. The list includes both well-studied pollutants that people have worked to reduce for many years, and those for which little information exists.

Tier 1: 69 Persistent Pollutants

"Persistent pollutant" means a substance that is toxic and either persists in the environment or accumulates in the tissues of humans, fish, wildlife or plants (*SB 737, Section 2(4)*).

Pollutant	Uses / examples
PAHs	Combustion byproducts. Many of these have been identified as carcinogenic.
Halogenated flame retardants	Flame retardants such as PBDEs. Many of these have been banned in Europe since 2003.
Pesticides and herbicides	Used for agricultural, grounds-keeping and urban pest and weed control. Some of these are suspected of disrupting endocrine functions.
Pharmaceuticals and personal care product ingredients	Including synthetic hormones, an anti-psychotic, food additives and disinfectants. Some of these are suspected of disrupting endocrine functions.
Perfluorinated surfactants	Anti-stain coatings.
Metals	Arsenic, tributyltin, cadmium, lead, mercury, selenium. Some of these have been identified as carcinogenic.
Industrial chemicals	Including stabilizers for polymers and plasticizers.

Tier 2: 49 Legacy Persistent Pollutants

"Legacy" means a pollutant, the use of which has been banned or restricted for several years, that remains at detectable levels in sediment and tissue samples (*SB 737, Section 2(1)*).

Pollutant	Uses / examples
Pesticides and herbicides	Includes Chlordane, DDT, Dieldrin, Endrin, Heptachlor, and Mirex. Some of these have been identified as carcinogenic, and some are suspected of disrupting endocrine functions.
Polychlorinated Biphenyls (PCBs)	Used for cooling and insulating fluid for closed electrical systems. Some of these have been identified as carcinogenic.
Polychlorinated Naphthalenes (PCNs)	Used for insulating coatings for electrical wires, wood preservatives, as rubber and plastic additives; in very limited production since 1976.
Dioxins and furans	Occur as by-products in the manufacture of organochlorides, in the incineration of chlorine-containing substances such as PVC (Polyvinyl Chloride), and from natural sources such as volcanoes and forest fires. Some of these have been identified as carcinogenic.

DEQ is building its body of knowledge on many of these pollutants and is also evaluating existing data to confirm the presence of P³ pollutants in sediment, water, or fish tissue and/or data or information indicating whether the presence of the pollutant is likely in Oregon waters.

DEQ acknowledges that many persistent pollutants are not currently regulated under the traditional environmental regulations and are not covered under state or federal environmental standards or limits. DEQ will consult with knowledgeable parties to document existing opportunities for pollution prevention and to also identify new approaches that may reduce the discharge of P³ pollutants into Oregon's waters. DEQ will also incorporate this effort into the agency's efforts to develop a cross-media strategy addressing toxics reduction.

1 INTRODUCTION

1.1 Senate Bill 737

In 2007, the State of Oregon enacted legislation aimed at identifying and reducing discharges of persistent pollutants that pose a threat to State waters. The law, Senate Bill 737 (SB 737), amends Oregon statutes (ORS Chapter 468B) to require the Oregon Department of Environmental Quality (DEQ) to:

(1) by June 2009, consult with all interested parties to develop a list of priority persistent bioaccumulative toxics (the "priority persistent pollutants list" or "P³L") that have a documented effect on human health, wildlife, and aquatic life (SB 737 Sections 3(2)(a), 3(5)(a)) and,
(2) by June 2010, report to the Legislature on the list of priority persistent pollutants; point, nonpoint, and legacy sources of these pollutants based on "existing data", and source reduction and control methods that can reduce discharges of these pollutants (SB 737 Sections 3(1), 3(2)(b), 3(2)(c)).

This report provides a detailed description of the process used by DEQ to develop the P³L, and thereby fulfill the first requirement of SB 737 (SB 737 Section 3(2)(a)).

1.2 Considerations for P³ List Development

1.2.1 General

Worldwide, over 80,000 chemicals exist either in current use or as legacy contaminants. DEQ could conceivably have considered all of these as it embarked on development of the P³L. Given the resources available to DEQ and the timeframe dictated by the legislation, DEQ developed a process to methodically identify those chemicals relevant to Oregon as persistent pollutants per SB 737 and to then prioritize these in terms of their relative ability to adversely impact the waters of the state, with a special emphasis on impacts to aquatic species.

The process that emerged reflected five major considerations:

(1) A general need for a clear and transparent process;
(2) Requirements imposed by the language of SB 737;
(3) Advice and guidance from the Priority Persistent Pollutant Science Workgroup (PPSWG);
(4) Clear definition and understanding of the various terms and criteria used to identify and prioritize persistent pollutants; and
(5) A "learn from others" review of existing national and international persistent bioaccumulative toxin (PBT) and persistent organic pollutant (POP) identification schemes.

Early on, and in response to (5) above, DEQ recognized that it would be of paramount importance to be able to communicate how the universe of 80,000+ chemicals that could be considered for listing were reduced to those on the final P³L. As a result, DEQ sought to develop a process that:

(a) Clearly disclosed values and sources for all physicochemical data used for comparison with persistent pollutant criteria;
(b) Used objective and pre-defined criteria, to the extent practicable, to justify the addition of a chemical to, or removal from, the final list; and
(c) Provided clear explanations for the addition or removal of a chemical for reasons other than adherence to these criteria.

1.2.2 Legislation-Specific

1.2.2.1 Scope: Chemicals

SB 737 defines a "persistent pollutant" as "… a substance that is toxic and either persists in the environment or accumulates in the tissues of humans, fish, wildlife, or plants" (SB 737 Section 2(4)). While the toxicity of a chemical is a common feature of all definitions of PBT chemicals, SB 737 specifies a pollutant that either persists in the environment or accumulates in organism tissues. Most other PBT or POP identification schemes use the more restrictive definition of persistent and bioaccumulative and toxic. Only the Canadian Domestic Substances List (DSL) and the U.S. EPA Toxic Release Inventory (TRI) use broader definitions similar to that specified by SB 737. The primary consequence of using this broader definition is that a greater number of chemicals are likely to be subject to classification as "persistent pollutants" per SB 737.

1.2.2.2 Scope: Exposure Pathways

Various toxic chemicals, including persistent pollutants, may be found in a variety of environmental media (i.e., air, water, soil, etc.) and may reach a variety of human and environmental receptors via different exposure pathways (air, surface water, soil, sediment). While all of these pathways are important, SB 737 requires a focus on persistent pollutants discharged in the State (SB 737 Section 3(1)) that pose a threat to the waters of the State (SB 737 Section 3(2)(a)). This language was interpreted by DEQ as requiring a focus on chemicals that reach human and non-human (ecological) receptors only through the aquatic system (surface water, sediment, or biota (e.g., fish ingestion)). All of the listed pollutants have the potential to cause harm to aquatic life or human health if they are in surface water or sediment in sufficient amounts and thereby have the potential to pose a threat to Oregon's waters. Conversely, this precludes chemicals that may reach a receptor through pathways not involving an aquatic system, such as via direct contact (e.g., lower-molecular weight phthalate esters in cosmetic products that primarily accumulate in human tissue as a result of direct application to skin) or indirectly via ingestion of terrestrial food plants (e.g., consumption of root vegetables).

1.2.2.3 Other Required Considerations

SB 737 gives, as a minimum, four additional chemical-specific factors that must be considered when developing the list (SB 737 Section 3(2)(a)(A-D)):

(A) Toxicology and bioaccumulation characteristics;
(B) Feasibility of reduction options;
(C) Dose and response data; and
(D) Magnitude and significance of specific on-going and legacy discharges.

Measured or estimated physical, chemical, and toxicological data, responsive to (A) and (C), were the dominant factors in establishing the P³L. DEQ addressed feasibility of reduction options (B) on the basis of a pollutant's potential responsiveness to local toxic reduction efforts. As a result of this evaluation, DEQ separated persistent pollutants into "tiers" (c.f., Section 4.4). Empirical data of sufficient breadth and quality are not presently available on a statewide basis to confidently and equitably evaluate the magnitude and significance of various discharges (D). This factor was addressed by assuming an emission scenario, with a fixed emission rate, for all chemicals. DEQ also gathered, and will continue to gather, information that may be used to effectively judge the presence of a chemical or chemicals in Oregon.

1.2.3 Persistent Pollutant Science Workgroup (PPSWG)

As noted previously, SB 737 requires DEQ to consult with other interested parties while preparing the list and reports. To address this requirement in part, DEQ assembled the Persistent Pollutant Science Workgroup (the PPSWG) comprised of seven technically qualified individuals to provide advice and guidance to DEQ during the P³L development process. DEQ selected members of the workgroup from a list of qualified candidates in the business, academic, and government sectors that had been assembled through consultation with all interested stakeholders. These individuals were selected primarily on the basis of their considerable scientific or technical expertise in one or more of the following disciplines: toxicology, risk assessment, epidemiology/biostatistics, public health, water quality modeling, transport and fate modeling, exposure modeling, and ecotoxicology. DEQ charged the PPSWG with: (a) providing the Department with advice and comment on the identification and prioritization of persistent pollutants that are scientifically and technically sound, independent, balanced, useful, and timely, (b) focusing its input on scientific and technical issues, and (c) performing solely as a scientific and technical advisory body, rather than as a committee designed to reflect stakeholder views. Members served from August 2008 through May 2009, during which there were eight publicly-accessible meetings divided between locations in Portland and Salem. The group discussed the direction and details of list development at each meeting; agendas and notes for each meeting are available on the SB 737/PPSWG website.[1]

[1] www.deq.state.or.us/wq/SB737/pollutants.htm

1.2.4 Review of Definitions

DEQ asked the PPSWG to review and agree on definitions for various terms typically used to identify and categorize persistent, bioaccumulative and toxic chemicals. DEQ and the PPSWG developed definitions for terms based on those in the literature or in other regulatory documents. There was reasonable consistency among existing definitions of most terms, with the exception of those for accumulation. After some discussion, the PPSWG satisfactorily resolved these based on their knowledge of the subject. This review was done primarily to create a common understanding of how these terms would be defined for this process, any nuances in those definitions, and how any differences in definitions could create substantive differences in the resulting P³L.

1.2.5 Review of Other List Development Processes

In order to learn from the experience of others, both DEQ and Parametrix (a consultant retained by the Oregon Association of Clean Water Agencies and the League of Oregon Cities) reviewed how various other state, national, and international environmental and regulatory agencies approached the identification of persistent bioaccumulative toxic pollutants (PBTs) or persistent organic pollutants (POPs) (Parametrix, 2008). Most such schemes share similar goals of identifying chemicals of greatest concern to human and environmental health to support pollution prevention or reduction programs. Over 100 chemicals were included in one or more of the various prioritization and management schemes reviewed. Relatively few of these chemicals were included in all schemes even though many of the schemes used similar identification and prioritization criteria and thresholds. Among the lists reviewed, the most frequently identified were the 12 chemicals and chemical groups (e.g., polychlorinated biphenyls, dioxins, furans) developed for the Stockholm Convention (Stockholm, 2001).

In order to provide schemes that are practical to develop and apply, as well as easy to understand, most of those reviewed used fairly simple, generic thresholds for persistence, bioaccumulation, and toxicity. These simplifications typically introduce varying degrees of scientific uncertainty into any list development process. Despite these simplifications, DEQ and Parametrix both found that the details of how an agency moved from the universe of possible chemicals to just those on their specific list were rarely completely transparent. Documentation associated with the lists also generally did not disclose the actual values and sources of physicochemical data being compared to PBT threshold criteria. In a few instances, the initial list of chemicals appears to have emerged prior to any specific criteria, with such criteria being specified later only to guide additions to the initial list.

1.2.6 Recent Science-Based PBT Identification Guidance

Current national and international regulations define PBTs and POPs in terms of fairly strict criteria that are based on the state of the science in the late 1970s and early 1980s. However, the development of regulatory criteria has not kept up with recent developments in environmental

chemistry and toxicology. As a result, guidance on PBT and POPs criteria applicable in a regulatory context is sometimes available, but is often limited or even out of date. To foster the advancement of a sound scientific foundation for identifying and evaluating PBTs and POPs, the Society of Environmental Toxicology and Chemistry (SETAC) sponsored an international workshop in January 2008 to address scientific issues related to persistence, bioaccumulation, and environmental toxicity (Klečka and Muir, 2008; van Wijk et al., 2009).[2] This report notes the specific instances where DEQ's P³L development process reflects the findings of this workshop.

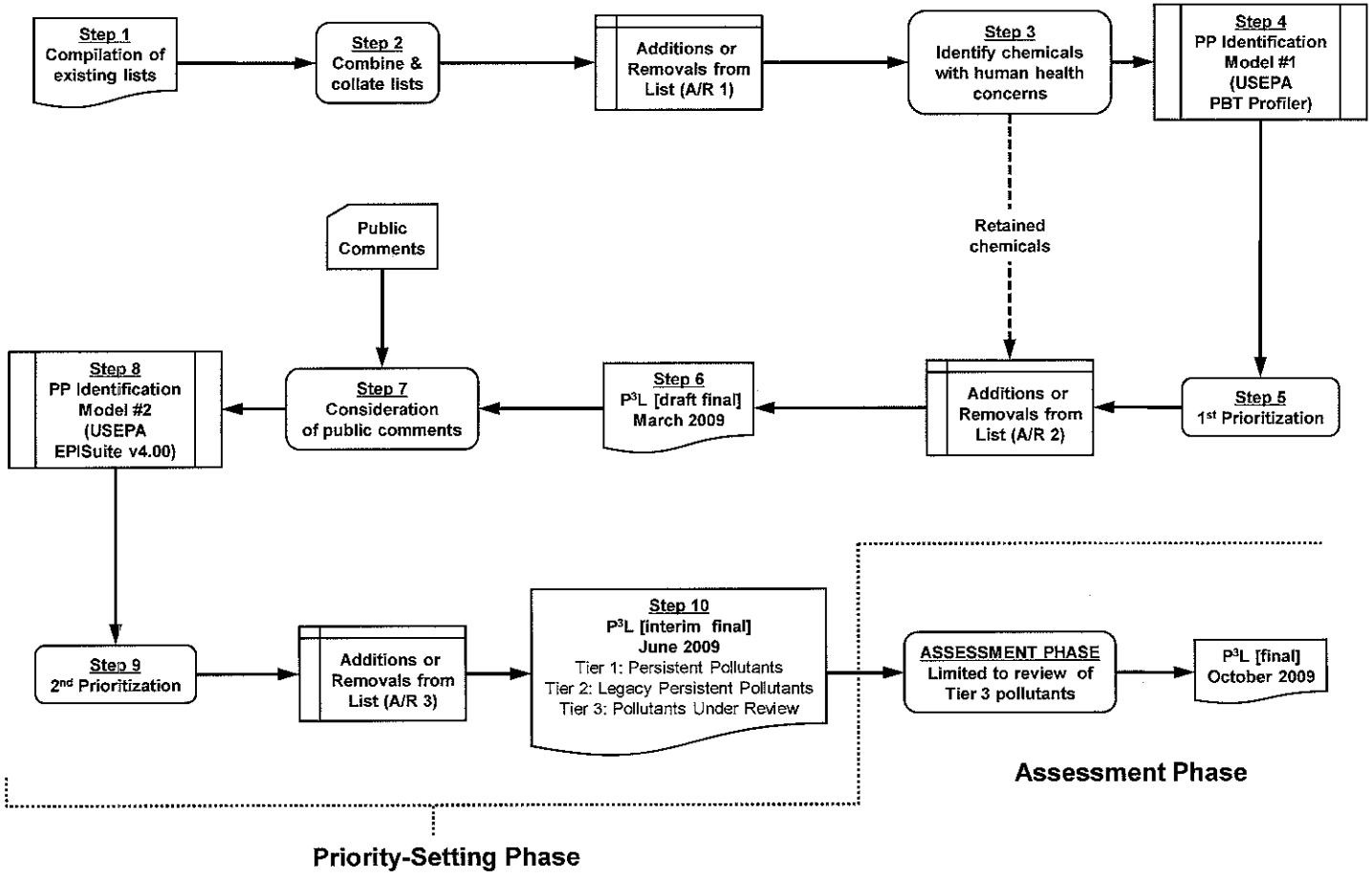
1.3 DEQ's P³L Development Process

Reviews of PBT and POP substances generally involve an initial priority-setting phase, followed by a more in-depth assessment phase of the properties of prioritized substances and their potential for adverse effects (Klečka and Muir, 2008). In the priority-setting phase, rapid, inexpensive, and conservative approaches are used, so as to minimize the probability of false negative results (i.e., not identifying a chemical as a PBT/POP when it is one). Substances identified as priorities or as potential PBTs or POPs by this process can then be evaluated in more detail in a second assessment phase using empirical and other robust data, substance-specific modeling, and weight-of-evidence approaches. However, the ultimate basis for decisions as to whether a substance is a PBT or POP, and whether risk management decisions are required, depends on the goal and mandate of the underlying legislation.

Figure 1 shows the process DEQ used to move from the universe of possible chemicals to those selected for inclusion on the Final P³L. DEQ developed this process based on its own internal discussions, discussions with the PPSWG, and recent PBT/POP guidance (Klečka and Muir, 2008), to be responsive to the above requirements, factors, and considerations. The technical details of each step are described and discussed in the following sections of this report.

[2] www.setac.org/sites/default/files/ExecutiveSummary.pdf

Figure 1. Process for Identification and Prioritization of Persistent Pollutants in Oregon



2 CHEMICALS CONSIDERED FOR LISTING

2.1 Compilation from Existing Lists [Figure 1, Step 1]

To develop the Final P³L, DEQ first compiled chemicals[3] from existing lists of PBTs and POPs. These lists were developed by a variety of other state, federal, and international agencies and incorporated lists of chemicals that have been found to be present, or may be present, in Oregon's waters, based on sampling done by DEQ and other agencies, both locally and regionally. When compiling this initial list of potential persistent pollutants, DEQ considered only whether the chemical had been previously identified as a PBT/POP or could be in Oregon's waters. DEQ's objective was to identify which chemicals qualified as a persistent pollutant (per SB 737) and, as such, would be placed on the P³L. Chemicals were gathered from the following lists:

A. Canada's Domestic Substances List (DSL; Environment Canada, 2006). The DSL process generates lists based on human health criteria specific to Canada, as well as on ecological criteria for persistent and toxic or bioaccumulative and toxic chemicals - more than 2,000 additional chemicals. DEQ selected the 393 chemicals that exhibited all three PBT characteristics simultaneously with respect to ecological receptors; receptors which may be more impacted than human receptors because of more frequent and sustained exposures, as well as potentially greater sensitivity.
B. Washington State List of PBTs (WAC, 2004a). This is a list of 77 chemicals. Metals were addressed separately later in the process (see Section 4.1.1), so those of concern to the State of Washington (WAC, 2004b) were not included at this time.
C. U.S. EPA PBT chemicals, final rule (USEPA, 1999a). A list of 64 chemicals (this list was substantially reduced by later U.S. EPA rulemakings).
D. United Nations Environmental Program, Persistent Organic Pollutants (UNEP, 2008). A list of 12 chemicals, consistent with the Stockholm Convention.
E. U.S. EPA International Programs. A list of 12 chemicals, consistent with the Stockholm Convention treaty, signed by the U.S. in 2001 (USEPA, 2008d).
F. U.S. EPA TRI chemicals subject to reporting under the Emergency Planning and Community Right-to-Know Act (EPCRA), Section 313 (USEPA, 2008a). A list of 18 chemicals, excluding inorganic and organic metals (which were addressed later in the process (see Section 4.1.1)).
G. United Nations Economic Commission for Europe (UNECE) 1998 protocol on POPs, both listed and candidate POPs (Denier van der Gon et al., 2006; Lerche et al., 2002). A list of 25 chemicals.

[3] Note that "chemical", as used here, may encompass multiple individual congeners, such as "dioxins" or "polychlorinated biphenyls".

H. Confederated Tribes of the Umatilla Indian Reservation (CTUIR, 2008). An undated, non-policy level list of 62 chemicals including metals (C. Svetkovich, DEQ Water Quality, *personal communication*).

I. U.S. EPA PBT Chemical Program, Priority PBTs. A list of 16 chemicals, including metals (USEPA, 2008c).

J. U.S. EPA Resource Recovery and Conservation Act (RCRA) PBT chemicals (USEPA, 1998). A draft list of 52 chemicals (63 FR 60332; November 9, 1998).

K. U.S. EPA National Waste Minimization Program, Priority Chemicals. A list of 33 chemicals, including metals (USEPA, 2008b).

L. Pharmaceuticals, hormones, and other organic wastewater contaminants analyzed for in the Willamette River Basin by the U.S. Geological Survey (USGS) between 1999 and 2000 (Barnes et al., 2002). A list of 88 chemicals.

M. Chemicals in wastewater biosolids found to be accumulating in earthworms (Kinney et al., 2006, 2008). A list of 22 chemicals from a longer list of chemicals sampled for and detected in biosolids from wastewater treatment.

N. A list of 51 chemicals released in an amount greater than 0.1 pound to locations in Oregon other than landfills; extracted from the June 2008 Oregon TRI report.[4]

O. Possible endocrine disrupting chemicals identified by the Institute for Environment and Health (IEH, 2005) as those with: (i) one or more positive findings from in vitro or in vivo assays of endocrine disruption or (ii) findings from general or reproductive toxicity tests indicative of potential endocrine activity or (iii) previous identification as a potential endocrine disruptor by an authoritative international or national body. A list of 79 chemicals.[5]

P. Pharmaceuticals, hormones, other organic wastewater contaminants, and pesticides detected at least once by USGS water quality monitoring programs between 1990 and 2007, as reported by the National Water Information System (NWIS).[6] A list of 243 chemicals (see also Barnes et al., 2008; Gilliom et al., 2006; Kolpin et al., 2002).

Q. DEQ Toxic Monitoring Program target analytes for 2008-09 (DEQ, 2008). A list of 85 chemicals.

R. A national list of 1,689 high-production volume (HPV) chemicals, ranked in order of their likelihood of being detected in the water column, was obtained from Jim Pankow, Portland State University (Joe Rinella, USGS, *personal communication*). This list was compared to the P+B+T DSL produced by Environment Canada (see "A" above), as these were considered to be comparable compilations of largely industrial chemicals. The objective was to identify those PBT chemicals not already so identified by Environment Canada. After removal of duplicates, a total of 379 chemicals remained.

[4] www.epa.gov/triexplorer
[5] www.cranfield.ac.uk/health/researchareas/environmenthealth/ieh/page21115.jsp
[6] http://nwis.waterdata.usgs.gov/or/nwis/qwdata

S. U.S. EPA Region 10 list of chemicals of concern in sediment (USEPA, 2007a: Table 9). A list of 19 chemicals.
T. DEQ list of chemicals of concern in sediment (DEQ, 2007: Table A-1). A list of 40 chemicals.
U. Chemicals detected in human tissues compiled from national biomonitoring studies, summarized by Washington Department of Ecology in preparation for their proposed Children's Safe Products Act legislation (Alex Stone, WDOE, *personal communication*). A list of 186 chemicals.
V. Chemicals detected in the Clackamas River between 2000 and 2005 (Carpenter et al., 2008). A list of 61 chemicals.
W. Chemicals detected in urine and blood samples taken from ten Oregon residents (Hackenmiller-Paradis, 2007). A list of 29 chemicals.
X. Chemicals identified (as of 2008) by the Rotterdam Convention on prior informed consent procedures for certain hazardous chemicals and pesticides in international trade. A list of 28 chemicals.[7]
Y. Chemicals detected in urine, blood, and hair samples taken from ten Washington residents (Schreder, 2006). A list of 27 chemicals.
Z. OSPAR Commission list of chemicals for priority action; update for 2007 (Wiandt and Poremski, 2002). A list of 29 chemicals, including metals. OSPAR (Oslo-Paris Conventions) is the mechanism by which fifteen governments of the western coasts and catchments of Europe, together with the European Community, cooperate to protect the marine environment of the North-East Atlantic.[8]

2.2 Combining & Collating Lists [Figure 1, Step 2]

Combined, these lists comprised a total of 2,130 chemicals, with numerous duplicate entries, several without a Chemical Abstract Service Registry Number (CASRN), and several with an incorrect CASRN or a mis-match between a CASRN and the name of a chemical. A CASRN was necessary to clearly specify which chemical was being categorized; it is also the most convenient means of submitting a chemical to the persistent pollutant identification models (Steps 4 and 8). A CASRN itself has no inherent chemical significance but provides an unambiguous way to identify a chemical substance or molecular structure when there are many possible systematic, generic, proprietary, or trivial names.[9]

2.2.1 Addition or Removal of Chemicals [Figure 1, A/R 1]

There were three specific points in the P³L development process where chemicals were added to, or removed from, consideration. At this point duplicate entries and chemicals for which a unique CASRN could not be found were removed. Resolution of mismatches between a chemical's

[7] www.pic.int/home.php?type=s&id=30&sid=30
[8] www.ospar.org
[9] www.cas.org/expertise/cascontent/registry/regsys.html

name and its CASRN also resulted in the removal of chemicals. The PPSWG also noted that a number of chemicals (86) were specifically associated with oil and gas development from Canadian tar sands, and would therefore be unlikely to be present in Oregon. DEQ removed a total of 939 chemicals for these reasons.

As noted in Section 1.2 above, DEQ followed this transparent process for decision-making so that it would be very clear why a given chemical was considered for persistent pollutant status in the first place and why it did (or did not) appear on the final P³L. To this end, DEQ kept a log of the disposition (i.e., added, removed, or retained) of each chemical, and the reason for that disposition, during the entire list-generating process.

At this point in the process, DEQ and the PPSWG identified a total of 1,191 chemicals as potential persistent pollutants.

3 PRIORITY-SETTING PHASE (for Draft P³L)

3.1 Human Health Concerns [Figure 1, Step 3]

DEQ screened each potential persistent pollutant identified at Step 3 against criteria indicative of its potential to cause adverse human health effects (carcinogenic, non-carcinogenic, developmental effects). This was necessary because national and international schemes typically evaluate a chemical's toxicity solely on the basis of chronic toxicity to fish. The PPSWG was concerned that a chemical toxic to humans (either as a non-carcinogen or a carcinogen), but possibly not so to fish, might be inadvertently excluded. Each of the 1,191 chemicals from the preceding step was screened against the following criteria:

(1) An oral reference dose (RfD) of ≤ 0.003 mg/kg/day (for non-carcinogens), or
(2) Identification (for non-carcinogens) as a developmental toxin by the California Environmental Protection Agency (CalEPA) per California's Proposition 65[10], or
(3) A U.S. EPA Integrated Risk Information System (IRIS) carcinogenic weight-of-evidence classification of A, B1, or B2 (USEPA, 1986) [or *Carcinogenic to Humans, Likely to Be Carcinogenic to Humans*, or *Suggestive Evidence of Carcinogenic Potential* per the 2005 guidelines (USEPA, 2005)], or
(4) A U.S. EPA IRIS cancer slope factor, or
(5) An International Agency for Research on Cancer (IARC) carcinogenic weight-of-evidence classification of 1, 2A, or 2B.[11]

With respect to (1) above, the Washington Department of Ecology, in establishing their PBT rule (WAC, 2004a) used an RfD of 0.003 mg/kg/day to identify "highly" toxic chemicals. They obtained this criterion by rank ordering U.S. EPA IRIS RfD values available in 2004 and then selecting a value (i.e., 0.003 mg/kg/day) that corresponded to the approximately the 75th percentile of this distribution of IRIS values (WDOE, 2006a). DEQ used this same 0.003 mg/kg/day value for consistency.

DEQ retained a chemical if, regardless of its toxicity to fish, it met any one of the above five criteria and was also determined (in Step 4; Section 3.2) that the chemical was persistent or bioaccumulative. Thus, if DEQ concluded a chemical was persistent or bioaccumulative, as well as toxic to humans (items 1 to 5 above) or fish, DEQ reintroduced the chemical to the Draft Final P³L at Step 6.

[10] www.oehha.org/prop65/prop65_list/files/P65single121908.pdf
[11] http://monographs.iarc.fr/ENG/Classification/crthalllist.php

3.2 Persistent Pollutant Identification Model #1 [Figure 1, Step 4]

The overwhelming majority of known chemical substances do not have experimental persistence, bioaccumulation, and toxicity data available. Only a small fraction of chemicals currently in commerce, including the 2,000 new chemicals introduced each year, have sufficient data available to perform a thorough empirical evaluation of their PBT characteristics. Consequently, there is, and will continue to be, a reliance on predictive tools to complete regulatory requirements in a timely and cost-effective manner. U.S. EPA's PBT Profiler[12] was designed to help interested parties screen chemicals on the basis of their estimated persistence, bioaccumulation, and aquatic toxicity characteristics when comprehensive empirical data are unavailable (Nordberg and Rudén, 2007; Pennington, 2001; Rodan et al., 1999; USEPA, 1999ab). DEQ selected this tool to make an initial consistent evaluation of the PBT characteristics of each chemical identified in Step 2.

3.2.1 Emission Scenario

Assumptions about the emission scenario influence estimates of persistence. The PBT Profiler estimates persistence based on a standard emission scenario of equal rates (300 kg/hr) to soil, water, and air. DEQ used this default scenario.

3.2.2 Predominant Persistence

The PBT Profiler first determines the amount (expressed as a percentage of the total amount in the environment) of the chemical expected to be found in the water, soil, and sediment compartments using a Level III multimedia mass balance fugacity model (Mackay, 2001). It then determines which of these three compartments is "predominant" (i.e., which has the highest percentage or mass fraction). DEQ compared the half-life in this "predominant" compartment to the following persistence criteria:

(0) None to Low: Half-life in predominant medium (air, soil, water, sediment) < 60 days.
(1) Moderate: Half-life in predominant medium ≥ 60 and < 180 days.
(2) High: Half-life in predominant medium ≥ 180 days.

DEQ considered a chemical to be "persistent" if it had either a "moderate" ("1") or "high" ("2") level of persistence. When selecting numerical threshold criteria to categorize a chemical as persistent, DEQ looked to those established by other organizations and through internationally negotiated agreements (Stockholm, 2001; Wahlström, 2003). These negotiations all recognized, and took into account, the fact that the degree of persistence is a continuum and selecting a specific criterion is not an absolute scientific determination. Rather it is a combination of science and policy. International organizations chose a half-life of 60 days for water and 180 days for soil and sediment as threshold criteria for chemicals that are the extremely persistent

[12] www.pbtprofiler.net

and destined to be banned or severely restricted (USEPA, 1999ab; Wahlström, 2003). U.S. EPA determined that using these higher international criteria alone would result in a very narrow list of chemicals that would focus on only those that are extremely persistent.

Consistent with EPCRA Section 313 (TRI reporting), U.S. EPA concluded that, in addition to these longer half-life criteria, shorter criteria were needed to protect communities from PBT toxicants coming from sources closer to home, since, all other things being equal, a pollutant reaches nearby populations in less time than distant ones. U.S. EPA selected a lower half-life criterion of ≥ 60 days but < 180 days for water, sediment, and soil to yield a broader representative sample of chemicals that persist in the environment. Chemicals meeting these shorter criteria were characterized by the PBT Profiler as having a "moderate" level of persistence (USEPA, 1999ab).

3.2.3 Bioaccumulation

The PBT Profiler determines a chemical's potential to bioaccumulate directly from an estimated bioconcentration factor (BCF). The BCF estimate is based on a chemical's octanol/water partition coefficient and does not explicitly address the possible metabolism of the chemical in exposed organisms, which could lead to actual bioaccumulation being lower than predicted. DEQ compared the estimated BCF to the following bioaccumulation criteria:

(0) None to Low: Bioconcentration factor (BCF) < 1000 L/kg.
(1) Moderate: BCF ≥ 1000 and < 5000 L/kg.
(2) High: BCF ≥ 5000 L/kg.

DEQ considered a chemical to be "bioaccumulative" if it had either a "moderate" ("1") or "high" ("2") bioconcentration factor. As with persistence, international organizations have chosen the "high" ("2") BCF numerical threshold of 5,000 L/kg to indicate chemicals that could be banned or severely restricted. However, using the same rationale that applied to persistence, U.S. EPA selected a "moderate" ("1") BCF of ≥ 1,000 L/kg and < 5000 L/kg to determine whether a chemical is bioaccumulative for purposes of EPCRA Section 313.

3.2.4 Toxicity

The PBT Profiler considered only fish chronic toxicity and estimated it using the U.S. EPA ECOSAR (Ecological Structure Activity Relationships) program (ECOSAR v0.99g).[13] ECOSAR estimates the toxicity of chemicals to aquatic organisms such as fish, invertebrates, and algae by using Quantitative Structure Activity Relationships (QSARs). These relationships predict the aquatic toxicity of chemicals based on their structural similarity to chemicals for which aquatic toxicity data are available. QSARs measured for one compound can be used to predict the

[13] www.epa.gov/oppt/newchems/tools/21ecosar.htm

toxicity of similar compounds belonging to the same chemical class (Reuschenbach et al., 2008). DEQ compared the estimated fish toxicity to the following toxicity criteria:

(0) None to Low: Fish chronic value (ChV) > 10 mg/L.
(1) Moderate: ChV ≥ 0.1 and ≤ 10 mg/L.
(2) High: ChV < 0.1 mg/L.

When the PBT Profiler was unable to estimate toxicity, DEQ assigned a toxicity score of "high" (2) as a conservative default.

3.3 First Prioritization [Figure 1, Step 5]

3.3.1 Addition of Chemicals [Figure 1, A/R 2]

After consultation with the PPSWG, DEQ added four inorganic metals (arsenic, cadmium, lead, selenium), and retained two organic metals (mercury (as methylmercury) and tributyltin oxide (TBTO)). Such consultation was necessary because it is very difficult to evaluate inorganic metals with generic accumulation threshold criteria (e.g., BAF or BCF) (DeForest et al., 2007). The group supported adding these metals based primarily on: (a) their toxicity to humans and aquatic life, (b) the existence of bioavailable forms, (c) the ability of these bioavailable forms to bioaccumulate in aquatic organisms, and (d) their not being an essential nutrient for humans or aquatic species. For inorganic metals, the presence and longevity of the bioavailable form of the metal, and not of elemental, insoluble, or otherwise biologically unavailable forms, defines the "persistence" of the metal (USEPA, 2007c: p. 1-11). DEQ and the PPSWG therefore noted that evaluation of the inorganic metals should generally be done based on the dissolved fraction, rather than on the total recoverable amount, so as to better represent the biologically available fraction.

In addition to adding these metals, DEQ also added one organic chemical (trans-chlordane, CASRN 5103-74-2) to complete the chlordane series contained in DEQ's initially compiled list, because chlordane can appear, and has appeared, as different isomers or as various metabolites.

DEQ also added one halogenated flame retardant (PBDE-153) because of its documented high bioaccumulation potential. In addition, the PBT Profiler clearly identified it as a persistent pollutant. PBDEs are suspected of being toxic to both humans and wildlife (Hopper and McDonald, 2000; Turyk et al., 2008); USEPA toxicological reviews are available for PBDE-047, -099, -153, and -209.[14]

3.3.2 Removal of Chemicals [Figure 1, A/R 2]

3.3.2.1 Not in PBT Profiler Database, Mixture, or Organometallic

[14] http://cfpub.epa.gov/ncea/iris/index.cfm?fuseaction=iris.showToxDocs

DEQ excluded a total of 189 chemicals because they were not in the Profiler's database of 100,000 chemicals (136), were chemical mixtures (12), or were organometallic compounds (41).

3.3.2.2 Total PBT Score < 3

In order to quantitatively compare and rank chemicals based on PBT Profiler estimates of their PBT characteristics, the three qualitative scores (i.e., "none to low", "moderate", "high"), were equated to numeric values (0, 1, 2, respectively). The separate 0, 1, or 2 scores for predominant persistence, bioaccumulation, and fish toxicity were then summed to give a "total PBT score" (with a minimum value of 0 and a maximum of 6) for each chemical.

To score a total of "3" or higher, a chemical needed to score "high" (2) in at least one category and "moderate" (1) in another or "moderate" (1) in all three categories. DEQ chose to establish a total PBT score of "3" as a cut-off point to focus the P³L on those chemicals likely to be of greater persistence or accumulative ability and toxicity. The PPSWG discussed and concurred with this policy choice.

3.3.2.3 Industrial Chemicals (Chemical Intermediates)

Chemical intermediates (or industrial chemicals for which it was very difficult to determine sources or uses) on the Canada DSL P+B+T and the U.S. EPA HPV lists, but not on any other PBT or POP list, were removed. DEQ and the PPSWG reviewed and discussed these chemicals and agreed that it was reasonable to assume that the majority of these are industrial or process intermediates unlikely to be used or discharged in any significant amounts, if at all, in Oregon.

3.3.2.4 Fish Chronic Toxicity Revisions

The PBT Profiler did not report fish chronic toxicity estimates for all of the chemicals. In the absence of this information, DEQ and the PPSWG initially assigned a default toxicity estimate value of "high" ("2") to chemicals without toxicity estimates. For completeness and consistency, DEQ re-evaluated the fish toxicity for all chemicals remaining at this point in the process using the following hierarchy of data sources:

(a) U.S. EPA ECOSAR (v0.99h), 90-day chronic fish toxicity (ChV).
(b) U.S. EPA ECOSAR (v0.99h), 30-day ChV.
(c) U.S. EPA ECOSAR (v0.99h), lowest ChV.
(d) U.S. EPA ECOSAR (v0.99h), fish 14-day median lethal concentration (LC_{50})/10.
(e) Trimethoprim (Choi et al., 2008), 96-hr LC_{50} for fish/10.
(f) Selected hormones and pharmaceuticals (Kolpin et al., 2002), lowest LC_{50}/10.
(g) U.S. EPA, Office of Pesticide Programs, Aquatic Life Benchmark table, chronic value.[15]
(h) Various published pesticide toxicity studies, lowest mean LC_{50}/10.
(i) U.S. EPA Mid-Atlantic Risk Assessment, Freshwater Screening Benchmarks, 2006.[16].

[15] www.epa.gov/oppefed1/ecorisk_ders/aquatic_life_benchmark.htm

(j) Selected phthalate esters (Staples et al., 1997), fish no-observed-effect-concentration (NOEC).
(k) U.S. EPA National Recommended Water Quality Criteria, chronic freshwater criteria (USEPA, 2006).
(l) Toxicity of 2,3,7,8-TCDD to fish early life stage (Walker and Peterson, 1994).

For (d), (e), (f), and (h) above, the median lethal concentration was divided by a factor of 10 to approximate a chronic or "no effects" concentration. DEQ used the toxicity information obtained from these sources to revise the toxicity scoring of each chemical, using the same toxicity criteria as was used previously.

3.3.2.5 Polychlorinated Biphenyls (PCBs)

In consultation with the PPSWG, DEQ reduced the number of listed polychlorinated biphenyls to those that: (a) are commonly the subject of transport and fate modeling on local, regional, and global scales (e.g., Hung et al., 2005; Wania, 1999) or (b) exhibit dioxin-like toxicity (Van den Berg et al., 2005). This placed the focus on congeners of interest to both modelers (whose work is essential to understanding the sources and transport of these and similar contaminants (Primbs et al., 2007)) and the public health community (for whom dioxin-like toxicity is of concern (ATSDR, 2000)). Although not adequate for source apportionment, the listed congeners would act as sentinels, in that it is unlikely significant PCB contamination could exist without one or more of them being present.

3.3.2.6 Polycyclic Aromatic hydrocarbons (PAHs)

PAHs are a family of 4,000+ compounds whose structure is distinguished by the fusion of two or more aromatic rings. Alkyl substituted PAHs (APAHs) are those with various numbers of alkyl substituents (e.g., methyl, ethyl, propyl groups). They constitute more than 90% of the total PAHs in crude oil and are the main constituents toxic to fish (Turcotte, 2008). In consultation with the PPSWG, DEQ reduced the number of listed PAHs to the 16 parent PAHs determined using U.S. EPA Method 8310[17], as well as any APAHs detected in Oregon waters or sediment. The list does not include all of the U.S. EPA 16-PAHs because not all met DEQ's persistent pollutant criteria. Doing this placed the focus on those PAHs for which analytical methods are readily available, those considered to be human carcinogens, and those already known to be present in Oregon waters.

3.3.2.7 Dioxins & Furans

Dioxins and furans (collectively "dioxins") are not single chemicals, but rather families of related compounds that differ in the number and position of their chlorine atoms. Dioxins occur in the environment in complex mixtures of the 210 dioxin (75) and furan (135) congeners. The

[16] www.epa.gov/reg3hwmd/risk/eco/btag/sbv/fw/screenbench.htm
[17] www.epa.gov/SW-846/pdfs/8310.pdf

most toxic congener is 2,3,7,8-TCDD (tetrachlorodibenzo-*p*-dioxin or PCB-126), but toxicity varies among congeners. Most of the 210 congeners are thought to pose no risk to human health. Only the 17 congeners considered to have potential health effects have been assigned, under the international toxic equivalency (TEQ) system, toxic equivalent factors (TEF) relative to the toxicity of 2,3,7,8-TCDD (Van den Berg et al., 2005). Laboratories report dioxin concentrations in environmental samples as total toxic equivalents (total TEQ). Rather than present individual dioxins and furans, DEQ conflated the list to show only 2,3,7,8-TCDD as total TEQ. This concatenation is consistent with how other PBT and POP lists (e.g., the Stockholm Convention) include dioxins and furans.

3.3.2.8 Sampled For, But Not Detected

Reporting limits for chemicals that had been comprehensively sampled for in Oregon waters with credible (QA/QC) analytical methods, but not detected, were compared to the toxicity criteria defined by fish chronic toxicity. DEQ removed chemicals from the list that were not detected if their reporting limit was below the effects threshold.

3.3.2.9 Other

C.I. Direct Black 38 (CASRN 1937-37-7) and Oxytetracycline (CASRN 79-57-2) were removed due a lack of complete physicochemical information. One of the poorly documented metabolic breakdown products (3,5,6-trichloro-2-pyridinol; CASRN 6515-38-4) of chlorpyrifos (CASRN 2921-88-2) was removed, given that chlorpyrifos itself was already on the draft list. Eight of the less well investigated and more poorly documented halogenated flame retardants, and two of their thermal breakdown products, were also removed. This focused the list on those retardants and their constituents (PBDE-047, -099, -100, -153, -209) found in fish in Washington (WDOE, 2006b) or in birds in Oregon (Charles Henny, *personal communication*, 2009), widely used (PBDE-209, HBCD, TBBPA) (Morris et al., 2004), or manufactured in or imported into the U.S. at a rate of up to 10 million pounds per year (TBPH) (Andersson et al., 2006).

3.3.3 Retention of Chemicals [Figure 1, A/R 2]

Twenty-four chemicals that had been slated for removal from the list based on fish toxicity were subsequently retained (i.e., re-instated) for human health concerns. DEQ retained nine chemicals for other reasons, including new information on their presence in Oregon and reconciliation of discrepancies between a chemical's name and its CASRN.

3.4 Draft Final P³L [Figure 1, Step 6]

Following the additions, removals, and retentions described above, DEQ produced a Draft Final P³L with 175 pollutants. At this point, DEQ organized the draft list of pollutants into groups of chemicals to facilitate communication about the pollutants on the list with a broad audience.

4 PRIORITY-SETTING PHASE (for Interim P³L)

4.1 Consideration of Public Comments [Figure 1, Step 7]

DEQ released the Draft Final P³L for public review and comment between March 2 and 27, 2009. DEQ sought substantive verifiable scientific or technical information on any specific pollutant on the Draft Final P³L. Stakeholders and interested members of the pubic were invited to submit comments in writing to DEQ anytime during the public comment period. In addition, DEQ conducted public information sessions at four locations throughout the state (Pendleton, Coos Bay, Medford, and Portland) to give stakeholders and interested members of the pubic an opportunity to learn and ask questions about the list development process and the Draft Final P³L.

DEQ received written comments totaling more than 200 pages from 55 separate entities or sources. Of these, approximately 106 comments addressed scientific or technical aspects of the list and approximately 40 comments addressed policy or legal issues. The comments directed at specific pollutants requested that approximately 60 pollutants be added to the list, approximately 50 pollutants be removed, and for three pollutants competing comments requested both retention and removal. DEQ evaluated all of the comments received. Changes and modifications made to the process and subsequent list are noted throughout this report where a comment influenced or altered the process.

4.2 Persistent Pollutant Identification Model #2 [Figure 1, Step 8]

A number of comments criticized DEQ for identifying persistent pollutants with model estimates rather than with empirical data. DEQ agrees that, as a general matter, data are preferred to model estimates and that, if a model identifies an issue of potential concern, additional data should be gathered or additional analyses conducted to come to an informed decision about the chemical under review. DEQ decided, however, to continue identifying persistent pollutants with a model because use of a model is consistent with the objectives of both the priority-setting phase (i.e., for a "rapid, inexpensive, and conservative prioritization" (Klečka and Muir, 2008)) and SB 737 (i.e., its comprehensive requirement to consider pollutants in a broad context). In addition, multimedia mass balance models are the only practical means for estimating overall environmental persistence (Klečka and Muir, 2008). Modeling also allows for identification of specific data gaps, making data calls more efficient; an important consideration given DEQ's limitations on time and resources.

Several comments noted that U.S. EPA's PBT Profiler had not been updated since 2003 and therefore no longer reflects the state-of-the science in PBT modeling. In response, DEQ upgraded its model to the most recent version of U.S. EPA's EPISuite modeling system (v4.00, January 2009), which includes an updated version (v1.00, February 2009) of ECOSAR. DEQ

also altered some of its key modeling assumptions, both in response to the public comments and to the recommendations of the recent SETAC Pellston workshop (Klečka and Muir, 2008).

4.2.1 Emission Scenario

The PBT Profiler default assumption of equal emissions, at a rate of 300 kg/hr, to air, water, and soil was replaced with an assumption of 100% of emissions to water only, at a rate of 1000 kg/hr. Because SB 737 focuses on pollutants that are likely to be present in Oregon's waters, this assumption is more reflective of its legislative intent. For some pollutants this is clearly a "worst-case" scenario (in that they were never intended to be placed directly in water), but it does address the key question of concern within SB 737: *"If a pollutant were to enter a water-sediment system, what could happen?"*

4.2.2 Overall Persistence

The PBT Profiler based its estimate of persistence on a pollutant's half-life in the single most relevant (i.e., predominant or highest mass fraction) environmental medium. The most current available guidance related to identifying PBTs uses overall persistence (P_{OV}), in an evaluative, multimedia regional or global environment, as the measure for comparison to persistence criteria (Klečka and Muir, 2008). Different metrics have been proposed and used to measure P_{OV}, the most common being the steady-state residence time (Scheringer et al., 2009). In addition, all P_{OV} metrics measure elimination of a chemical by transformation (biodegradation) alone and do not regard advective losses (movement of a chemical out of the model domain) as actual disappearance from the environment (Scheringer et al., 2009). DEQ used EPISuite to estimate overall persistence as residence time within the model environment, assuming all net loss from the model environment occurred through biodegradation (no advection). A model estimate of ultimate biodegradation (complete breakdown of the parent compounds and its degradates) was used, rather than of primary degradation (transformation to an initial metabolite). DEQ used ultimate degradation because of concerns for the persistence and toxicity of degradates and because this approach is in keeping with the conservative goals of the priority-setting phase of a PBT evaluation. DEQ compared the estimated P_{OV} to the following persistence criteria:

(0) None to Low: Overall persistence (P_{OV}) $\leq$ 60 days.
(1) Moderate: P_{OV} > 60 and $\leq$ 180 days.
(2) High: P_{OV} > 180 days.

The threshold logic for these criteria was adjusted (from < 60 days to $\leq$ 60 days; from $\leq$ 180 days to > 180 days) to create a more distinct break between categories.

4.2.3 Bioaccumulation

In response to comments, DEQ estimated BCFs with the Arnot and Gobas method (BCF BAF v3.00), which allows for biotransformation (i.e., the possible metabolism of the pollutant in

exposed organisms), rather than the octanol-water partition coefficient alone. DEQ compared the estimated upper trophic level BCF to the following bioaccumulation criteria:

(0) None to Low: Bioconcentration factor (BCF) ≤ 1000 L/kg.
(1) Moderate: BCF > 1000 L/kg and ≤ 5000 L/kg.
(2) High: BCF > 5000 L/kg.

The threshold logic for these criteria was adjusted slightly (from < 1000 L/kg to ≤ 1000 L/kg; from ≤ 5000 L/kg to > 5000 L/kg) to create a more distinct break between categories.

4.2.4 Toxicity

Several comments asserted that DEQ used "biased" toxicity studies or mis-interpreted the results of certain toxicity studies when selecting toxicity values for comparison to toxicity criteria (c.f., Section 3.3.2.4). Others raised the issue of the ECOSAR toxicity model being updated (from v0.99 to v1.00) as this work was in progress. This updated version offers several additional features (e.g., BCF estimation assuming metabolism) and is capable of evaluating a greater number of chemical classes than the previous version. To address these issues, DEQ re-evaluated the fish toxicity for all pollutants on the Draft Final P³L, and for all pollutants suggested for addition to the list, using the following revised hierarchy of sources for toxicity estimates:

(a) U.S. EPA ECOSAR (v1.00), 60-day chronic fish toxicity (ChV).
(b) U.S. EPA ECOSAR (v1.00), 30/60-day ChV.
(c) U.S. EPA ECOSAR (v1.00), 32/33-day ChV.
(d) U.S. EPA ECOSAR (v1.00), 30-day ChV.
(e) U.S. EPA ECOSAR (v1.00), ChV.
(f) U.S. EPA National Recommended Water Quality Criteria, chronic freshwater criteria (USEPA, 2006).
(g) U.S. EPA, Office of Pesticide Programs, Aquatic Life Benchmark table, chronic value.[18]
(h) U.S. EPA NPDES permit limits for phytosterols (NPDES Permit #ID-000116-3).

DEQ then compared these toxicity estimates to the following revised (after Klečka and Muir, 2008) toxicity criteria:

(a) None to Low: Fish chronic value (ChV) > 1 mg/L.
(b) Moderate: ChV ≥ 0.01 and ≤ 1 mg/L.
(c) High (2): Fish chronic value < 0.01 mg/L.

[18] www.epa.gov/oppefed1/ecorisk_ders/aquatic_life_benchmark.htm

Although these toxicity criteria were changed, the threshold logic for these criteria remained the same.

4.2.5 Solubility Limit

A few comments noted that, for certain pollutants, solubility in water (in mg/L) at saturation may be below known or estimated ChV (in mg/L) and thus there may be no effects (from chronic toxicity) at saturation (Rufli et al., 1998). No effects at saturation refers to a saturated aqueous solution (one where the maximum water solubility of a chemical has been reached) that does not have a concentration high enough to allow potential toxic effects to be expressed. However, for chemicals that are potentially persistent and bioaccumulative, this limitation is questionable as these chemicals may accumulate to higher, and potentially toxic, levels over time (Fliedner, 1997). After discussion with the PPSWG, DEQ decided not to use water solubility considerations alone to exclude a pollutant from the list.

However, DEQ did decide - again after discussion with the PPSWG - to use the logarithm of the octanol-water partition coefficient ($\log K_{OW}$) as a surrogate for a chemical's solubility limit (the concentration at which a chemical's toxicity is limited by its solubility). With respect to chronic toxicity, ECOSAR predicts no effects at saturation if the $\log K_{OW}$ of a chemical is greater than 8. Recent work suggests that a $\log K_{OW}$ equal to 8 represents the no effects solubility threshold at a 95% confidence level (Tolls et al., 2009). DEQ therefore used a $\log K_{OW} > 8$ as the solubility limit surrogate. Pollutants were removed from the list if their $\log K_{OW}$ exceeded 8, however those with $\log K_{OW} > 8$ were retained if scientific information showed them capable of causing aquatic toxicity, regardless of endpoint.

4.2.6 Developmental Toxicity

DEQ retained a pollutant on the Draft Final P³L if, in addition to being persistent or bioaccumulative, it was also a human health concern. One criterion for such a concern (for non-carcinogens) was listing by the California Environmental Protection Agency (CalEPA) under Proposition 65 as a developmental toxin. Two pollutants, which also met either persistence or bioaccumulation criteria, remained on the list due to this human health concern alone. Because Proposition 65 may list a pollutant for either administrative or scientific reasons, the PPSWG requested that DEQ confirm the scientific status of all pollutants on the list identified as developmental toxins under Proposition 65. DEQ confirmed that developmental toxicity was a health concern for four of the five non-legacy persistent pollutants identified as developmental toxins, including the two listed for this concern alone. DEQ could not confirm the status of the fifth (pimozide (CASRN 2062-78-4)) as a developmental toxin with available information and consequently no longer identified it as a human health concern in the Interim Final P³L.

4.3 Second Prioritization [Figure 1, Step 9]

Because of the model updates and assumption revisions described above, DEQ re-evaluated those chemicals that were: (a) given a total PBT score = 2 by the PBT Profiler and subsequently removed at A/R 2 (chemicals with score of "2" were chosen because they would be more likely to advance to ≥ 3 than would a chemical with a score of "0" or "1") and (b) not in the PBT Profiler data base. Chemical mixtures and organometallic compounds were not re-evaluated.

4.3.1 Addition of Pollutants [Figure 1, A/R 3]

The absence of pyrethroid pesticides from the Draft Final P³L came to the attention of DEQ based on discussions within the Agency and with stakeholders. In general, these pesticides are replacing the use of organophosphates for pest control in urban and commercial environments and are the dominant insecticides among retail sales to consumers. Twenty of the most commonly used and frequently detected pyrethroids were evaluated with respect to DEQ's PBT criteria; fourteen met these criteria. DEQ selected seven of these 14 for inclusion in the Interim Final P³L based on their high frequency of detection in urban runoff and urban stream sediment (Hintzen et al., 2009; Holmes et al., 2008; Weston et. al., 2009). Comments were received requesting that 65 chemicals (mostly pesticides) be added to the list. After evaluating these with the updated model and revised assumptions, DEQ added six of these pollutants to the Interim Final P³L.

4.3.2 Removal of Pollutants [Figure 1, A/R 3]

DEQ removed 27 pollutants from the list because their total PBT score, as estimated with the newer EPISuite model and revised assumptions, was less than three. Three pollutants were removed as redundant with, or duplicates of, other listings. DEQ also removed 24 pollutants with human health concerns from the list because their total PBT score, as estimated with the newer EPISuite model and revised assumptions, was less than three. DEQ removed one pollutant from the Interim Final P³L based solely on new information regarding its solubility limit ($\log K_{OW} > 8$). For other pollutants with $\log K_{OW} > 8$ and otherwise low solubility, there was evidence of aquatic toxicity (as well as either persistence or bioaccumulation) so they remained on the list.

4.3.3 Retention of Pollutants [Figure 1, A/R 3]

Of the 132 pollutants re-evaluated with the newer EPISuite model and revised assumptions, DEQ retained seven on the Interim Final P³L.

4.3.4 Presence in Oregon Waters

Consistent with SB 737 Section 3(1), DEQ must also consider whether a persistent pollutant is or was "...discharged in ... Oregon..." DEQ has sought, and will continue to seek, available information on (a) whether a persistent pollutant has been analyzed for and detected in Oregon waters or sediment using scientifically defensible methods (i.e., with project plans and QA/QC)

or (b) might reasonably be assumed to be present based on published reports of its widespread dissemination in the environment. Thus far, DEQ has gathered information on the presence or suspected presence of persistent pollutants in Oregon waters from the following sources:

(a) Pharmaceuticals, personal care products, anthropogenic waste in Columbia River sediment (Nilsen et al., 2007);
(b) PBDEs in piscivorous (fish-eating) wildlife (Osprey eggs) in the Willamette Basin (Charles Henny, *personal communication*, 2009);
(c) PCBs in soil (USEPA, 2007b);
(d) Pharmaceutical and personal care products (Barnes et al., 2002);
(e) Oregon TRI (for 2008);
(f) Pesticides detected in Oregon surface water (USGS National Water Information System, 2000-2007);
(g) Pesticides in the Clackamas River (Carpenter et al., 2008);
(h) PCBs in fish and osprey eggs (Henny et al., 2009);
(i) Pesticides detected in Oregon surface water, 1968-2004 (Jeffrey Jenkins and Wade Trevathan, Oregon State University, *personal communication*);
(j) Polyfluoroalkyl compounds (Calafat et al., 2007; Lau et al., 2007);
(k) Phytosterols in sediment (Billig and Gould, 2007);
(l) Pyrethroid pesticides (Hintzen et al., 2009; Weston et al., 2009);
(m) Toxic Compounds and Microbes Detected in the Mid-Columbia River (Columbia Riverkeeper, Mid-Columbia "River Nose" Studies, 2009 (draft)); and
(n) Hormones in the McKenzie River (Eugene Water and Electric Board, *comment on Draft Final list*)

In addition, DEQ reviewed the following publications, and, while they are not specific to Oregon waters, suggest the likelihood for a pollutant to be present in Oregon waters:

(a) Brominated flame retardants (Öberg et al., 2002);
(b) Polycyclic musks (Zeng et al., 2005);
(c) Consumer product constituents (Steinemann, 2009); and
(d) Polychlorinated naphthalenes (Falandysz, 1998).

DEQ will continue to seek available information on the documented presence, or suspected presence, of listed persistent pollutants in Oregon surface waters, fish tissue, or sediment. DEQ will use an online survey and other techniques to collect this information.

4.4 Interim Final P³L [Figure 1, Step 10]

Following the additions, removals, and retentions described above, DEQ produced an Interim Final P³L of 140 pollutants. Based on internal DEQ discussions, as well as those with the

PPSWG and stakeholders, this list was sorted into three tiers as described below. DEQ described this iteration of the P³L as "interim" to allow for a limited assessment phase (aimed at the Tier 3 pollutants) prior to finalization of the list.

4.4.1 Tier 1 - Persistent Pollutants

This tier contained 51 persistent pollutants for which DEQ received no comments or whose PBT status was not affected by use of the newer EPISuite model and revised assumptions. These are also persistent pollutants with primarily local (in-state) anthropogenic sources, for which local toxic reduction plans are more likely to be effective in reducing the discharge.

4.4.2 Tier 2 - Legacy Persistent Pollutants

This tier held 46 globally-sourced and legacy (and often ubiquitous) persistent pollutants, which DEQ recognizes are important pollutants that continue to have an impact on our environment. However, consistent with the feasibility of reduction requirements of SB 737 Section 3(2)(a)(D), DEQ has determined that broad scale toxic reduction efforts will not significantly reduce either of these classes of pollutants. Globally-sourced pollutants typically reach Oregon from overseas sources through aeolian transport and subsequent deposition from air, sources which are outside of the state's jurisdiction. Legacy pollutants include those for which local, as well as national and international, reduction efforts have been in place for some time. Their recalcitrance (and ubiquity) in the environment means that, even with control measures already in place, it will be many years before non-detect or other acceptable levels are achieved.

4.4.3 Tier 3 - Pollutants Under Review

This tier included 43 pollutants, divided into three subsets:

(a) Those (23) which were requested to be dropped but which DEQ determined, based on existing information and modeling, did not qualify for removal from the Interim Final P³L;
(b) Those (13) which were requested to be added and which DEQ determined, based on existing information and modeling, did qualify for addition to the Interim Final P³L; and
(c) Those (7) not on the March 2009 Draft Final P³L but retained by DEQ on the Interim Final P³L after re-evaluation with the newer EPISuite model and revised assumptions.

With respect to (a), certain commenters critical of DEQ's reliance on model estimates also submitted or requested an opportunity to submit additional empirical information on specific pollutants. With respect to (b) and (c), these pollutants were not available for public review during the public comment period, and DEQ sought additional information on these as well. Submission of additional, focused information beyond the priority-setting phase is consistent with an assessment phase (Klečka and Muir, 2008; van Wijk et al, 2009).

5 ASSESSMENT PHASE (for Final P³L)

5.1 Review of Tier 3 Pollutants

SB 737 Section 3(5)(b) allows for revision of the P³L. Per recent guidance, an assessment phase could be used for the more accurate and precise assessment of the PBT characteristics of a limited number of pollutants using empirical data, substance-specific modeling, and weight-of-evidence approaches (Klečka and Muir, 2008; van Wijk et al., 2009). DEQ therefore opened a data call from June 1 through July 31, 2009 for receipt of new or revised, substantive, and verifiable scientific or technical information on Tier 3 pollutants only.

5.1.1 Disposition of Tier 3 Pollutants

DEQ received written comments totaling more than 200 pages (along with numerous supporting documents (journal articles, internal research reports, test results, and others) in electronic format) from 18 separate entities. Of these, the vast majority addressed only scientific or technical issues related to Tier 3 pollutants. The comments requested that approximately 26 pollutants be retained, 34 pollutants be removed, and 3 be re-categorized as Tier 2. DEQ evaluated all additional information received relative to the status of the Tier 3 pollutants. After evaluating this information, DEQ determined that 17 pollutants merited removal from the list due to evidence of lower than model-estimated values for overall persistence, bioaccumulation or toxicity; evidence from or corroboration by other governmental agencies (primarily Environment Canada and the European Chemical Bureau) that a pollutant did not meet PBT criteria; or correction of their solubility limits. DEQ re-categorized three pollutants as Tier 2 and moved the remaining 25 pollutants to Tier 1. An additional 5 pollutants were removed because of revisions to their solubility limits. Details as to the disposition of all Tier 3 pollutants can be found on the SB 737 website.[19]

5.2 Final P³L

As a result of these changes, DEQ produced a Final P³L with 118 pollutants, divided into two tiers (Table 1).

[19] http://www.deq.state.or.us/wq/SB737/index.htm

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Table 1. PRIORITY PERSISTENT POLLUTANT LIST (FINAL)

CASRN	Chemical Name	Total PBT Score
TIER 1 - PERSISTENT POLLUTANTS		
Pesticides & Herbicides		
82657-04-3	Bifenthrin	4
2921-88-2	Chlorpyrifos (Lorsban, Dursban)	5
52918-63-5	Deltamethrin [decamethrin]	4
333-41-5	Diazinon	3
115-32-2	Dicofol	6
1031-07-8	Endosulfan sulfate	3
66230-04-4	Esfenvalerate	5
13356-08-6	Fenbutatin-oxide	4
120068-37-3	Fipronil	4
91465-08-6	Lambda-cyhalothrin	4
330-55-2	Linuron	2 [(a)]
88671-89-0	Myclobutanil	2 [(b)]
42874-03-3	Oxyfluorfen	4
40487-42-1	Pendimethalin	3
67747-09-5	Prochloraz	4
1582-09-8	Trifluralin	4
Consumer-Related Products		
57-88-5	Cholesterol	4
360-68-9	Coprostanol	4
541-02-6	Cyclopentasiloxane, decamethyl- [D5]	4
556-67-2	Cyclotetrasiloxane, octamethyl- [D4]	3
56-53-1	Diethylstilbestrol	3
1222-05-5	Galaxolide [HHCB]	5
70-30-4	Hexachlorophene	4
15323-35-0	Musk indane	3
81-14-1	Musk ketone	3
145-39-1	Musk tibetene	3
81-15-2	Musk xylene	4
2062-78-4	Pimozide	4
80214-83-1	Roxithromycin	3
83-45-4	Sitostanol, beta- [Stigmastanol]	4
83-46-5	Sitosterol, beta-	4
92-94-4	Terphenyl, p-	4
3380-34-5	Triclosan [2,4,4'-trichloro-2'-hydroxydiphenyl ether]	5
Halogenated Flame Retardants		
25637-99-4	Hexabromocyclodecane [HBCD]	5
5436-43-1	PBDE-047 [2,2',4,4'-Tetrabromodiphenyl ether]	5

Table 1. PRIORITY PERSISTENT POLLUTANT LIST (FINAL)

CASRN	Chemical Name	Total PBT Score
60348-60-9	PBDE-099 [2,2',4,4',5-Pentabromodiphenyl ether]	6
189084-64-8	PBDE-100 [2,2',4,4',6-Pentabromodiphenyl ether]	---[c]
68631-49-2	PBDE-153 [2,2',4,4',5,5'-hexabromodiphenyl ether]	---[c]
1163-19-5	PBDE-209 [decabromodiphenyl ether]	4
79-94-7	Tetrabromobisphenol A [TBBPA]	4
Industrial Chemicals		
98-07-7	Benzotrichloride [trichloromethylbenzene]	3
29082-74-4	Octachlorostyrene	5
1825-21-4	Pentachloroanisole [2,3,4,5,6-Pentachloroanisole]	3
732-26-3	Tris-(1,1-dimethylethyl)phenol, 2,4,6- [Alkofen B]	6
Polycyclic Aromatic Hydrocarbons (PAH)		
120-12-7	Anthracene	3
56-55-3	Benz(a)anthracene	3
50-32-8	Benzo(a)pyrene	4
205-99-2	Benzo(b)fluoranthene	4
191-24-2	Benzo(g,h,i)perylene	4
207-08-9	Benzo(k)fluoranthene	4
218-01-9	Chrysene [benzo(a)phenanthrene]	4
53-70-3	Dibenz(a,h)anthracene	4
206-44-0	Fluoranthene [Benzo(j,k)fluorene]	3
193-39-5	Indeno(1,2,3-cd)pyrene	4
832-69-9	Methylphenanthrene, 1-	3
2381-21-7	Methylpyrene, 1-	3
85-01-8	Phenanthrene	3
129-00-0	Pyrene	3
Inorganic & Organic Metals		
7440-38-2	Arsenic Compounds [dissolved]	---[d]
7440-43-9	Cadmium Compounds [dissolved]	---[d]
7439-92-1	Lead Compounds [dissolved]	---[d]
22967-92-6	Methylmercury	4
7782-49-2	Selenium Compounds [total]	---[d]
Perfluorinated Surfactants		
434-90-2	Decafluorobiphenyl	5
375-85-9	Perfluoroheptanoic acid [PFHpA]	3
375-95-1	Perfluorononanoic acid [PFNA]	5
754-91-6	Perfluorooctane sulfonamide [PFOSA]	5
1763-23-1	Perfluorooctane sulfonic acid [PFOS]	5
335-67-1	Perfluorooctanoic acid [PFOA]	4

Table 1. PRIORITY PERSISTENT POLLUTANT LIST (FINAL)

CASRN	Chemical Name	Total PBT Score
TIER 2 - LEGACY PERSISTENT POLLUTANTS		
Pesticides & Herbicides		
5103-71-9	Chlordane, cis-	6
5103-74-2	Chlordane, trans-	6
143-50-0	Chlordecone [Kepone]	4
72-54-8	DDD, 4,4'-	5
72-55-9	DDE, 4,4'-	6
50-29-3	DDT, 4,4'-	6
60-57-1	Dieldrin	6
88-85-7	Dinoseb	3
72-20-8	Endrin	6
76-44-8	Heptachlor	6
1024-57-3	Heptachlor epoxide	5
118-74-1	Hexachlorobenzene [HCB]	5
319-84-6	Hexachlorocyclohexane, alpha-	4
319-85-7	Hexachlorocyclohexane, beta-	4
58-89-9	Hexachlorocyclohexane, gamma- [Lindane]	5
465-73-6	Isodrin	5
2385-85-5	Mirex	6
5103-73-1	Nonachlor, cis-	6
39765-80-5	Nonachlor, trans-	6
27304-13-8	Oxychlordane, single isomer	6
608-93-5	Pentachlorobenzene	5
82-68-8	Pentachloronitrobenzene	3
95-95-4	Trichlorophenol, 2,4,5-	3
88-06-2	Trichlorophenol, 2,4,6-	3
Polychlorinated Naphthalenes (PCN)		
32241-08-0	Heptachloronaphthalene	6
1335-87-1	Hexachloronaphthalene	6
1321-64-8	Pentachloronaphthalene	6
1335-88-2	Tetrachloronaphthalene	4
1321-65-9	Trichloronaphthalene	3
Dioxins / Furans		
1746-01-6	Dioxins / furans (as 2,3,7,8-TCDD TEQ)	6
Polychlorinated Biphenyls (PCB)		
7012-37-5	PCB-028 [2,4,4'-trichlorobiphenyl]	4
35693-99-3	PCB-052 [2,2',5,5'-tetrachlorobiphenyl]	6
32598-13-3	PCB-077 [3,3',4,4'-tetrachlorobiphenyl]	5
70362-50-4	PCB-081 (3,4,4',5-tetrachlorobiphenyl)	6

Table 1. PRIORITY PERSISTENT POLLUTANT LIST (FINAL)

CASRN	Chemical Name	Total PBT Score
37680-73-2	PCB-101 [2,2',4,5,5'-pentachlorobiphenyl]	6
32598-14-4	PCB-105 [2,3,3',4,4'-pentachlorobiphenyl]	6
74472-37-0	PCB-114 [2,3,4,4',5-pentachlorobiphenyl]	6
31508-00-6	PCB-118 [2,3',4,4',5-pentachlorobiphenyl]	6
65510-44-3	PCB-123 [2',3,4,4',5-pentachlorobiphenyl]	6
57465-28-8	PCB-126 [3,3',4,4',5-pentachlorobiphenyl]	6
35065-28-2	PCB-138 [2,2',3,4,4',5'-hexachlorobiphenyl]	6
35065-27-1	PCB-153 [2,2',4,4',5,5'-hexachlorobiphenyl]	5
38380-08-4	PCB-156 [2,3,3',4,4',5-hexachlorobiphenyl]	5
69782-90-7	PCB-157 [2,3,3',4,4',5'-hexachlorobiphenyl]	5
52663-72-6	PCB-167 [2,3',4,4',5,5'-hexachlorobiphenyl]	5
32774-16-6	PCB-169 [3,3',4,4',5,5'-hexachlorobiphenyl]	6
35065-29-3	PCB-180 [2,2',3,4,4',5,5'-heptachlorobiphenyl]	5
39635-31-9	PCB-189 [2,3,3',4,4',5,5'-heptachlorobiphenyl]	5
Inorganic & Organic Metals		
56-35-9	Bis (tributyltin) oxide [TBTO, hexabutyldistannoxane]	---[(d)]

NOTES

(a) Persistent and of concern for human toxicity (RfD < 0.003 mg/kg/d; developmental toxin).

(b) Persistent and of concern for human toxicity (RfD < 0.003 mg/kg/d).

(c) Physicochemical property data limited; added based on a deliberative process separate from PBT modeling.

(d) Metals included based on a deliberative process separate from PBT modeling.

3

Oregon Environmental Quality Commission

Public Forum
Request to Present Information

Agenda Item ____ **or**
Topic of Presentation HH Toxics WQS Development Process

Kathryn VanNatta, NW Pulp & Paper Assn.
Name (Please print clearly)

2191 SE Oak Crest DR Hillsboro, OR
Address

NWPPA | 503-844-9540
Affiliation | Email (optional) | Phone (optional)

4

Oregon Environmental Quality Commission

Public Forum
Request to Present Information

Agenda Item P **or**
Topic of Presentation Toxics Criteria Revisions + Tox. Strategy

Rick George, Kathleen Feehan
Name (Please print clearly)

PO Box 638, Pendleton
Address

CTUIR
Affiliation | Email (optional) | Phone (optional)

(7)

Oregon Environmental Quality Commission

Public Forum
Request to Present Information

Agenda Item ____ **or**
Topic of Presentation Toxics Reduction

Don Gentry
Name (Please print clearly)

P.O. Box 436, Chiloquin, OR 97624
Address

The Klamath Tribes | don-gentry@klamathtribes.com | (541) 783-2219
Affiliation | Email (optional) | Phone (optional)

(1)

Oregon Environmental Quality Commission

Public Forum
Request to Present Information

Agenda Item ____ **or**
Topic of Presentation TOXICS

CHARLIE LOGUE - ACWA
Name (Please print clearly)
PETER RUFFIER - LEAGUE OF OR. CITIES

Address

Affiliation | Email (optional) | Phone (optional)

Oregon's Toxic Reduction Strategy

Local Government Presentation to Environmental Quality Commission

October, 2009

Charlie Logue, Clean Water Services for Oregon Association of Clean Water Agencies (ACWA)

Peter Ruffier, City of Eugene for League of Oregon Cities

Oregon local governments have fully participated in the development of an overall toxic reduction strategy for Oregon. We came to the table, having supported the review and revisions to the fish consumption rate, and committed to application of the revised rate in a manner that achieves effective and meaningful protection of human health through control and reduction of toxic substances in Oregon's waters. We are still committed to this goal, and have been working with other stakeholders on the Toxics Rulemaking Advisory Committee to support DEQ in achieving practical implementation of revised water quality standards and constructive improvement of the control of toxic substances from all media and sources.

In our view, the comprehensive Oregon toxic reduction strategy has three key components:

1. DEQ Agency Wide Toxics Reduction Strategy, Including Nonpoint Sources
2. SB 737 Focused Pollution Prevention Planning
3. Water Quality Standards/ Fish Consumption Rate

DEQ Agency Wide Toxics Reduction Strategy

- Appreciate hard work of DEQ staff in working on the strategy
- Very important that both point **and nonpoint** sources are included
    - A strategy that focuses solely on the point sources will not be effective at improving human health protection by reducing the concentrations of toxics in fish tissues because, for many of the toxics of concern, point sources are not the major contributors.
- Agree with Department about reducing pollutants at their source—regardless of the source
    - Pollution prevention is more effective and less costly than effluent treatment or environmental clean up once a toxic substance is released into t he environment.
- Integrating and comparing toxics priority lists and toxic management programs at DEQ is a good start
- Municipalities will likely use the DEQ 'high priority' toxic chemical list as a way to prioritize our work under pollution prevention programs developed under SB 737
    - We all know that we can't tackle everything at once
- We believe that it is important that all DEQ Divisions - - Water Quality, Air Quality, and Land Quality - - be integrated into the plan
    - In the Air Quality program - Oregon needs to specifically address water quality and aquatic endpoints in regulation of air toxics and to integrate air quality control programs into meeting water quality standards and/or TMDL waste load allocations for pollutants such as mercury and lead-containing compounds

        - A quick review of EPA's Toxic Release Inventory (TRI) data provides information on areas to examine
    - In the Land Quality program, toxics in landfill leachate should be examined along with past practice issues
    - In the Water Quality program, the SB 737 P3 screening and pollution prevention planning requirements should be extended to appropriate industrial sources of toxics
- DEQ is outlining annual reporting – EQC may want to track on a more frequent basis
- We urge the EQC to continue to provide leadership in this area, along with DEQ
    - Outreach to other state Commissions
    - Leadership for voluntary programs

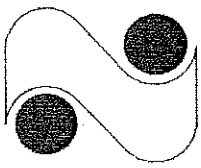
SB 737 – Focused pollution prevention planning

- Remain committed to the pollution prevention process incorporated in SB 737
- Want to ensure that the 'trigger' levels are set using achievable analytical methods and reasonable assumptions for the characteristics and presence of toxics in wastewater effluent
- Want to work with DEQ to ensure the most cost effective types of screening and monitoring are completed
- Want to work with DEQ on crafting effective pollution prevention tools for the affected municipalities that are easy-to-implement and focused on the highest priority pollutants

Water Quality Standards/Fish Consumption Rate

- ACWA and the League of Oregon Cities (LOC) supported the increased fish consumption standard based on a commitment and directive from the Commission to pursue pollution prevention, development of an integrated toxic reduction approach that incorporates both point and nonpoint sources **AND** development of permitting tools that will allow municipalities to effectively manage wastewater treatment for toxics reduction.
- Work to date on variances and intake credits is very valuable
- More tools are needed to ensure that the increase in the fish consumption rate can be translated into water quality-based requirements technically and economically achievable for NPDES permit holders, as well as, expanding the need for reductions to other non-point sources which in many cases are the major sources of these contaminants.
- We would appreciate a reaffirmation of the directive set out by the Commission at the October meeting last year.

The Oregon Association of Clean Water Agencies and the League of Oregon Cities appreciate the opportunity to address the Commission on this very important issue.



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October 22, 2009

For the record, I am Kathryn VanNatta, Governmental Affairs Manager of the Northwest Pulp and Paper Association (NWPPA) and member of DEQ water quality advisory committees for the last 15 years. In October 2008, the Environmental Quality Commission (EQC) directed that the Department of Environmental Quality (DEQ) develop water quality standards that reflect a higher fish consumption rate of 175 grams per day. This would make Oregon's standards by far, the highest statewide rates of any state in the nation. The EQC recognized the significance of this directive and took an unusual step. Instead of the usual two-step process of first adopting a water quality standard and then second at a later time figuring out how to make it work, the EQC directed that this rulemaking should be developed differently. Specifically, in October of 2008, the EQC directed that feasible implementation tools for NPDES permits would be developed at the same time and that good science would be considered. At the time of the EQC deliberations, the promoters of revising water quality standards to reflect a higher fish consumption rate cite a plethora of ideas for feasible implementation tools (this list is attached).

NWPPA had participated in every DEQ workshop and every Fiscal Implementation and Advisory Committee (FIIAC) meeting prior to the EQC 2008 meetings. We agreed to continue to participate because of the EQC's commitment to have their agency explore the list of implementation tools and the use of science.

One year later, NWPPA is before the Commission to report that very little progress has been made on viable, feasible and cost-effective National Pollution Elimination System Permit implementation tools for Oregon industrial point sources for implementation of Oregon's

proposed standards. Furthermore, NWPPA does not believe the original directive of the EQC is being implemented.

As of October 19th, the rulemaking group meeting, all of the implementation tools identified a year ago have been whittled away except for one, the idea that variances could be made available. Some of the ideas were too novel for EPA to approve under the CWA but other ideas that were also discarded have been in use in other states for many years and have been approved by EPA. Variances are now the only tool for which DEQ staff has developed actual draft rule language. In NWPPA's opinion this does not satisfy the October 2008 EQC directive. Several items we ask the EQC to consider on variances:

- Oregon already has had variance rule language on the books for years.
- Oregon has never approved a variance in history of the Oregon program. It would seem unlikely any variances would be granted in the future given the proposal to make the criteria for variances even more stringent.
- The variances currently under consideration would not be comparable to variances quantified in the US EPA Cost of Compliance Report by SAIC used in your August and October 2008 EQC discussions.
- Given that variances will be unlikely in the future, the October 2008 FIIAC report costs provided to you – that assumed variances would be available – are no longer valid. The compliance costs would need recalculation before rule adoption if the present course were followed.
- NWPPA provided a cost analysis prepared by an engineering firm last fall, which showed our industry would face cost-prohibitive capital investments – in the range of tens of millions of dollars – if feasible NPDES implementation measures were not adopted.

NWPPA is still looking towards EQC and DEQ leadership to keep their promise in development of viable, feasible, cost-effective NPDES implementation tools that provide regulatory certainty to Oregon point source dischargers. We ask the EQC to take a close look the whole package on the one-year anniversary of the rulemaking advisory committee. We have taken a solid look – found the proposed language on the implementation tools totally lacking – and our time running out to a December 2009 deadline.

We ask the EQC to reaffirm your directives of last October. If NWPPA does not see the availability of viable, feasible cost effective implementation tools, we will be forced to stridently oppose the toxics water quality standard rulemaking in 2010.

Fish Consumption Rate Process--Alternative Matrix

Option Name	Approach	Regulatory or Voluntary?	Chemical Driver	Affected Party	Regulatory Certainty	Impl. Steps/Schedule	Monitoring Plan	Compliance Enforcement Mechanism	Costs				Benefits	Expected Results	Feasibility			
									Capital	O&M	Pollution	To Regulated Comm.			Tech	Legal	Political	Economic
Compliance Schedules	**General Approach:** Use of schedules of compliance where immediate compliance with water quality-based effluent limitation can not be achieved	Regulatory; authorization usually contained in State WQS and implemented through permitting process	All	Permittees	Certain	Must show that immediate compliance not possible; interim milestones must be identified leading to reasonable further progress; permit must contain final enforceable limits	Could be included						Water quality based-effluent limits will ultimately be attained; legal mechanism contained in permit.	Appropriate in circumstances where compliance with water quality-based effluent limits is ultimately expected, with some certainty		Unknown: Currently being litigated on related issue		
	Phosphorous in Oklahoma: Set more stringent phosphorous criterion, received resistance from Arkansas, decided to phase-in criterion through compliance schedule language with objective of meeting criterion within 10 years (2012).	Regulatory; authorization and some schedules contained in State WQS; implemented through permitting process	Phosphorous	Dischargers in Oklahoma and Arkansas	Certain	Schedules established for large cities to meet interim limits; Medium sized entities (0.5 MGD-1 MGD req'd to reduce P to the maximum extent possible through voluntary controls aimed at reaching interim limit or P loading limited based on flow and effluent concentration.		Compliance schedule					Continued progress toward meeting WQS while actions in addition to point source reductions are being pursued.			Yes		
Variances	**General Approach:** Where analyses demonstration dischargers cannot meet WQS based on 1 of the 6 bases contained in the regulations (most likely reasons include "widespread social and economic impact" or naturally occurring pollutant concentrations," dischargers may get a variance	Regulatory; contained in State WQS; burden of proof on user	All	Permittees	Limited certainty	Applicant must show that cannot meet water quality-based effluent limits; may include terms and conditions during term of variance; 1 every 3-5 years variance must be renewed to assure conditions under which variance granted still exist	Could be included	EQC decision requiring EPA approval			Limit unknown	Applicant bears burden of proof for variance	Progress toward reductions may occur			Yes	Requires EQC and EPA approval	
	Mercury in the Great Lakes States: Statewide variance procedures in Michigan, Ohio, Wisconsin with typical POTW types and limits.	Regulatory	Mercury	POTWs	Certain - depends on type of POTW	Must meet minimum effluent quality; submit information indicating no readily available end-of-pipe treatment technology; development and implementation of pollutant minimization program	Yes						Continued reductions in mercury; cost-effective source reduction activities			Yes (current legal challenge in one state)		
Uses and Variances	**PCBs in Delaware Estuary:** Approach still being formulated--under consideration are 10 year incremental waterbody WQS implementation plans for PCBs (like a variance). Criterion is not attainable and not expected to be for decades. Fish consumption use was replaced with Restoration Use. Permittees would have narrative effluent limit requirements based on Restoration Use.	Regulatory	Historical PCBs in sediment	Permittees; other sources of PCBs	Objective is for regulatory certainty, unknown at this time	10 year incremental plans to reduce PCBs	Monitor to report every 10 years on PCB reduction	If plans are found to be ineffective, EPA will not renew the plan					Minimize historical levels of PCB contamination					
Offsets	**General Approach:** New or expanding sources seek more cost-effective reductions in the same pollutant elsewhere in the waterbody/watershed to allow additional increased mass loadings of a pollutant	Regulatory		Permittees; other sources of the same pollutant										Overall reductions in water body				
Intake Credits	**Great Lakes Approach:** Where intake water exceeds the water quality criteria, water quality-based effluent limitations are set equal to the mass and concentration of the intake water.	Regulatory	Pollutants where high levels are found in intake water	Permittees	Certain	Sufficient information to characterize intake water	Must monitor to assure compliance with limits						Not required to treat pollutants that are not part of facilities processes.		Yes	Federally, Yes; may need additional work in Oregon		Yes
Phased Implementation	**Mercury Reduction in Minnesota:** New fish tissue based Hg criterion will only be used initially for human health, but could be used to set effluent limits in the future	Regulatory	Mercury reduction		Uncertain	Wait for EPA to finalize Hg implementation guidance							Adequately protective Hg criterion					

Option Name	Approach	Regulatory or Voluntary?	Chemical Driver	Affected Party	Regulatory Certainty	Impl. Steps/Schedule	Monitoring Plan	Compliance Enforcement Mechanism	Costs				Benefits	Expected Results	Feasibility			
									Capital	O&M	Pollution	To Regulated Comm.			Tech	Legal	Political	Economic
SSC Based on Natural Conditions	**General Approach:** Adopt SSC for water body that can not attain criteria due to natural conditions (i.e. geologic sources of arsenic)	regulatory	most likely arsenic			Rulemaking to set SSC for specific water body based on natural background levels										Yes		
UAA	**General Approach:** Revise designated use for water body that can not attain criteria due to natural conditions	regulatory	most likely arsenic			Rulemaking										Yes		
Toxics Reduction Approach	Alternative toxics reduction approach based on reasonable potential analysis along with integrated statewide toxics reduction implementation.	Both, regulatory to meet the needs of the Clean Water Act.	To be determined. Should be focused on priority pollutants.	All Oregonians: Citizens; Industries; Agriculture; Forestry; Consumers; Government; Legacy Site Owners	Certainty for point sources would have to be verified through EPA approved process. For other sources some would be certain, some uncertain.	NPDES permit requirements. SB 1010 plan requirements. Forest practices act requirements. Other toxic requirement tools.	NPDES monitoring requirements. DEQ toxics monitoring. Other regulatory monitoring.	NPDES, SB 1010, Forest Practices, Toxic Substances Control Act, Title V, other enforcement mechanisms.	Potentially low for elements of a toxics reduction plan. Legacy source controls potentially high.	Program costs are probably most significant for toxic reduction programs.	Unknown what this category addresses	Implementation could cost local businesses, consumers, farmers and industries.	Eliminate toxics from entering the waste stream. Achieving toxics reductions outside the Clean Water Act regulatory scheme	Improved water quality, human health benefits	Legacy sources maybe most other activities likely low technologies requirements. So yes.	Requires EPA sign approval and endorsement. Statutory changes may be required for non-point sources.	Requires major local political support. Statutory changes require state political support.	In most cases this option is economically viable.
Traditional Treatment Approach	Microfiltration followed by Reverse Osmosis--w/blending	Regulatory: technology and or numeric based	All metals and toxics that are not removed through conventional treatment	Point sources and POTWs	Depending on the numeric limits, this could be difficult given that levels may be below detection	POTWs would have to revamp facilities plans, process, CIPs, financing and rates--would require compliance schedules to achieve	Would be part of NPDES permit and DMRs	NPDES permits; CWA provisions	$2.5m to $3.5 m per mgd=$2.3 billion to $3.27 billion for Corvallis, MWMC, CWS, & Portland	Significantly increased electrical and chemical and sludge disposal costs	Increased pollution & green house effect from energy consumed; additional chemical	All costs would be born by rate payers	Known technology increases treatment levels	1)Large amount of money spent with little incremental improvement--not a cost-effective way to treat the problem. 2)Wide spread non-compliance from inability to fund multibillion $ program, while sources left unchecked.	variable with some unknowns	meets CWA objectives	low	low
Traditional Treatment Approach	Microfiltration followed by Reverse Osmosis--full treatment	Regulatory: technology and or numeric based	All metals and toxics that are not removed through conventional treatment	Point sources and POTWs	Depending on the numeric limits, this could be difficult given that levels may be below detection	POTWs would have to revamp facilities plans, process, CIPs, financing and rates--would require compliance schedules to achieve	Would be part of NPDES permit and DMRs	NPDES permits; CWA provisions	$6 m to $15 m per mgd=$5.610 billion to $14.025 billion (for same POTWS)	Significantly increased electrical and chemical and sludge disposal costs	Increased pollution & green house effect from energy consumed; additional chemical	All costs would be born by rate payers		1)Large amount of money spent with little incremental improvement--not a cost-effective way to treat the problem. 2)Wide spread non-compliance from inability to fund multibillion $ program, while sources left unchecked.	variable with some unknowns	meets CWA objectives	low	low
Pass-through Allowance (Variation of "Intake Credits")	**General Approach:** Mass (lb/day) allowance/credit granted based on concentration x flow for human health pollutant of concern, natural or background, brought in via intake water.	Regulatory	HH WQ Criteria below feasible quantitation or removal by FCR increase	Point sources and POTWs	Fits with additional implementation tools	Permittee required to submit valid sampling, flow and mass calculation data for water intake and effluent	Required for NPDES application renewal or by compliance schedule	NPDES permits, Industrial User permits				Sampling, Flow and Engineering Costs by permittees--est. $10k-$25k depending on complexity	Equitable, permittee not unfairly penalized for naturally occurring or background COC's.	Potential for practical, meaningful tool	high	Verify if used in some states. Not currently used in Oregon		high
WQ Benchmark Criteria	**General Approach:** Revised FCR used to establish HH Toxics Benchmarks. Benchmarks used to establish WQ permit goals. Implementation requirements follow a "top down" evaluation that looks at enhanced sampling, feasible technology, toxics use reduction and pollution prevention evaluation and implementation.	Regulatory	HH WQ Criteria below feasible quantitation or removal by FCR increase	Point sources, POTWs, Non-point Sources	Discuss	Implementation requirements follow a "top down" evaluation schedule that looks at enhanced sampling, technology evaluation, toxics use reduction and pollution prevention and raw material substitution evaluation.	Monitoring requirements established in permit (compliance schedule or specific conditions) and through ODEQ guidance	Compare Stormwater Benchmarks, NPDES or IU Permits	Exact capital would depend on the feasibility analysis			Engineering costs could be significant. Estimate $50-100k for municipal and industrial permittees	Fits nicely with planned comprehensive SB 737 work and step-wise implementation of the 17.5 g/day standard and application of the RPA, both of which have not been fully implemented by ODEQ and the regulated community	Could potentially avoid political and legal quagmires of multiple new impairments, listings and fish advisories	Would specifically be designed to provide for technical feasibility	Could potentially help avoid significant legal costs for all parties		Has meaningful progress that has a medium level of cost

Option Name	Approach	Regulatory or Voluntary?	Chemical Driver	Affected Party	Regulatory Certainty	Impl. Steps/Schedule	Monitoring Plan	Compliance Enforcement Mechanism	Costs				Benefits	Expected Results	Feasibility			
									Capital	O&M	Pollution	To Regulated Comm.			Tech	Legal	Political	Economic
De Minimis	**General Approach:** Establish pollutant-specific PQL, MDL or ML (or alternative) as a *de minimis* values for each of the HH WQ Criteria COC's.	Regulatory Narrative Approach	HH WQ Criteria below feasible quantitation or removal by FCR increase	Point Sources and POTWs	Discuss	ODEQ include in WQ standards narrative	Monitoring established in permits	NPDES, Stormwater and IU permits				Capital and O&M likely required for some to achieve de minimis levels	Solves some practical and technology gap problems	Meaningful, practical tool for all parties involved	High, requires monitoring	May currently be used by default, without specific narrative	High	High
Bifurcated Criteria	**General Approach:** Using WQ toxics prioritization based on fish consumer studies, establish a two-part WQ Criteria. Focus available resources on the highest priority pollutants that drive human health concerns, avoiding one-size-fits-all unintended consequences	Regulatory	Revise WQ criteria for top priority list toxics (examples: pesticides, methyl mercury and PCBs)	Point sources and POTWs	TBD	3 parties establish two-tiered priorities consistent with other regulatory programs including SB 737 and state and regional toxics reduction priorities and timelines	Monitoring established in permits	NPDES, Stormwater and IU permits	TBD	TBD		Capital and O&M likely required for some to meet WQ standards	Focuses municipal, industrial and public resources on problem COC's	Equivalent toxicity reduction results achieved at more technically and economically feasible levels. Dovetails with SB 737, LCREP and other state and region-wide toxics reduction priorities.	More feasible than an across-the-board WQ Criteria revision	ODEQ develop rationale and narrative for rulemaking	May be more saleable to public	Medium

HDR Report to the NWPPA: *"Increasing the Fish Consumption Rate: Report of Fiscal Impact to Select Northwest Pulp & Paper Mills"*

HDR Engineering, Inc.
412 E. Parkcenter Blvd., Suite 100
Boise, ID 83706

EXECUTIVE SUMMARY

The Oregon Department of Environmental Quality (ODEQ), United States Environmental Protection Agency (EPA) and Confederated Tribes of the Umatilla Indian Reservation (CTUIR) are planning to make human health water quality criteria (HHWQC) more stringent. This change is due to indications by CTUIR that some of its members consume fish at a greater fish consumption rate (FCR) than the FCR that HHWQC are currently based on. If the FCR used for establishing HHWQC is increased, HHWQC will correspondingly become more stringent.

The initiative to determine the need and justification for the more stringent WQC is referred to as the Oregon Fish and Shellfish Consumption Rate Project and was started by ODEQ, EPA and CTUIR. As part of the project, the ODEQ commissioned Science Applications International Corporation (SAIC) to prepare a report evaluating necessary actions and costs to meet more stringent WQC. SAIC completed this report in January 2008 and it is named *Cost of Compliance with Water Quality Criteria for Toxic Pollutants for Oregon Waters*. It is the opinion of several point source dischargers that the SAIC report did not fully capture costs associated with achieving statewide compliance with revised HHWQC and the costs presented were significantly underestimated. In addition, the report did not sufficiently address the ability of currently available technology to meet the new HHWQC particularly when the HHWQC is below analytical method detection limits.

The purpose of this study and report is to verify the HHWQC that must be met, determine if proposed technologies will meet the limits, and develop an opinion of probable cost for implementing and operating these technologies. Since several of the proposed technologies have not been tested or advanced beyond bench-scale testing, there is much uncertainty in the full-scale applicability of some of the technologies. Therefore, bench testing, pilot-plant testing and/or full-scale demonstrations would be needed to verify with greater accuracy the actual achievable effluent quality for these technologies.

This report develops an opinion of fiscal impacts to the Oregon pulp and paper industry due to more stringent HHWQC from increased FCR. The following report methodology was used to determine these impacts:

1. Collection and review of treated wastewater effluent data from four different pulp and paper mills.
2. Determination of current HHWQC and potentially more stringent HHWQC due to increased FCR; these criteria were then compared with mill final effluent data.

3. A list of candidate treatment technologies was developed for removing these constituents by reviewing studies pertinent to the Fish Consumption Project. Additional literature was reviewed as well to determine other potential treatment technologies.
4. Treatment technologies were screened for reliability and feasibility in meeting applicable HHWQC.
5. Capital and operational cost opinions were developed for the screened treatment alternatives.

Four representative mills were evaluated for this report and are summarized below. :

Mill A – Bleached Kraft Process
Mill B – Unbleached Kraft Process
Mill C – Thermomechanical Pulping/Deink Process
Mill D – Bleached Kraft Process

Data from the four mills was compiled, averaged and compared to HHWQC at increased FCRs. HHWQC at increased FCRs were calculated with the aid of a computer model spreadsheet developed by the ODEQ. The spreadsheet utilizes epidemiological data including reference doses, bioconcentration factors, carcinogen slope factors and other parameters to determine WQC for a given FCR, water intake and body weight.

The model was run at three different FCRs including 17.5 g/day, 63.2 g/day, 113 g/day and 175 g/day. Current WQC is based on a FCR of 17.5 g/day. Changes to WQC by ODEQ could be based on a FCR as high as 175 g/day. The spreadsheet model shows that current mill effluent quality may exceed some of the HHWQC at the elevated FCRs.

It is critical noting that the lowest method detection limit (MDL) for all EPA-approved analytical methods is greater than the new HHWQC for some constituents. While this report identifies potential technologies for removing these constituents, it is impossible to know for certain whether technologies actually can or cannot meet HHWQC since there is no way to accurately measure at such low concentrations at this time. Despite the inability to measure accurately to the HHWQC, it is expected that point source dischargers would still need to plan to meet HHWQC since more sensitive analytical methods could become available. Furthermore, regulating authorities would expect point source dischargers to meet WQC whether or not analytical methods could accurately detect below the WQC.

HHWQC limits at increased FCRs are extremely stringent compared to other environmental standards. HHWQC at increased FCRs should be scrutinized to compare the value of improving water quality with to the actual protection to human health. For example, revised HHWQC at increased FCRs are multiple orders of magnitude more protective than national drinking water standards. Another comparison of note is background water quality. A review of current water quality shows that many of the revised HHWQC may already be exceeded in Oregon surface waters. Therefore, the

opportunity for applying pass-through credits to point source dischargers should be considered where background constituent levels are high.

A literature review of treatment technologies was completed to determine which, if any, technologies can reliably meet the revised HHWQC at higher FCRs. The literature review showed that most published results for constituent removal are related to higher untreated constituent concentrations and technologies for achieving less stringent effluent criteria. These less stringent effluent criteria (including drinking water standards) are orders of magnitude greater than HHWQC for this study. As a result, little research has been conducted investigating constituent removal technologies to extremely low levels. Therefore, published literature does not support or deny that more stringent HHWQC can be met using currently available technologies. Technologies suggested for meeting low level constituents (mostly for metals) included iron coprecipitation, granular activated carbon, ion exchange, nanofiltration and reverse osmosis. Further evaluation of the technologies showed that iron coprecipitation, nanofiltration and reverse osmosis would have the best possibility of meeting HHWQC at increased FCRs and were then evaluated for cost.

Capital and O&M cost opinions for the four mills were evaluated for the three candidate technologies. The costs are summarized below.

Summary of Capital, O&M and Annualized Costs

		Mill A	Mill B	Mill C	Mill D
Capital Costs	Iron Coprecipitation	$31,000,000	$25,000,000	$19,000,000	$34,000,000
	Nanofiltration	$91,000,000	$67,000,000	$41,000,000	$101,000,000
	Reverse Osmosis	$107,000,000	$79,000,000	$48,000,000	$119,000,000
Annual O&M Cost	Iron Coprecipitation	$28,000,000	$20,000,000	$11,000,000	$31,000,000
	Nanofiltration	$9,500,000	$6,700,000	$3,900,000	$10,500,000
	Reverse Osmosis	$10,500,000	$7,400,000	$4,300,000	$11,700,000
Annualized Costs (10 yrs, 7%)	Iron Coprecipitation	$32,000,000	$24,000,000	$14,000,000	$36,000,000
	Nanofiltration	$22,000,000	$16,000,000	$10,000,000	$25,000,000
	Reverse Osmosis	$26,000,000	$19,000,000	$11,000,000	$29,000,000

Cost provided above represent only four of the eight large mills located in Oregon. The cost related to simply installing technology to meet revised HHWQC at increased FCRs is significant and would cost the Oregon pulp and paper industry in excess of $500 million. In addition, annual costs to operate these technologies would cost Oregon pulp and paper mills in the range of $30 to $90 million annually. While costs are significant, there is no certainty at this time that revised HHWQC could be met using existing technology. Steps forward should first ensure that technologies are available for meeting more stringent HHWQC before significant capital expenditures are made.

Environmental Quality Commission
Public Forum
October 23, 2008
Oregon's Fish Consumption Rate
(for use in setting toxic water quality criteria)

Comments of
Northwest Pulp and paper Association

Good Morning Chair Blosser and Commissioners. My name is Llewellyn Matthews and I am the director of the Northwest Pulp and Paper Association. Thank-you for the opportunity to address you today. I will be brief and will not duplicate information you have received from us in August.

Today, the EQC will decide whether or not to direct the DEQ to prepare rulemaking to revise the Oregon toxic water quality standards to reflect the higher fish consumption rate of Native Americans and if so, what direction and considerations to be given to the staff. NWPPA has supported a higher fish consumption rate provided that we can do so in a manner that reflects good science and will direct regulatory efforts to pollutants of greatest concern. In this light, the directions given to the DEQ staff are of the utmost importance. NWPPA appreciates that the directions will likely be based on ***two*** DEQ recommendations:

> **DEQ recommends that the EQC direct DEQ to begin a rulemaking process to:**
> **1. Revise Oregon's toxics criteria for human health based on a fish consumption rate of 175 g/d; and**
> **2. Propose rule language that will allow DEQ to implement the standards in NPDES permits and other Clean Water Act programs in an environmentally meaningful and cost effective manner.**

NWPPA appreciates, as a good first step, the statements by DEQ that it is essential to address implementation as part of the process of revising standards. NWPPA respectfully offers that implementation measures alone will not address the core issues of this proposal. For the reason, NWPPA believes it is equally important for the EQC to provide a ***third*** recommendation as follows:

> **3. Conduct a review of the underlying science, such as bioconcentration factors, for key criteria, such as naturally occurring earth metals, to incorporate other updated science or to make other Oregon specific adjustments.**

Comment 1: If we change the fish consumption factor to reflect higher fish consumption of Native Americans, we must also change other science to reflect Oregon specific considerations.

NWPPA has raised issues with respect to naturally occurring earth metals from the beginning of this process. As a specific example, a fish consumption rate of 175 grams per day would result in a revised criteria for arsenic that is approximately 1000 times below typical natural background levels in Oregon waters.

If we pursue a course of action that results in water quality standards below natural background levels for one or more constituents, we are creating tremendous problems for Oregon

Such a policy outcome sends the message that fish in this state were never safe to eat in the past, are not safe to eat now and can never be made safe to eat in the future. This is because there is no planning, no treatment and no implementation device that will ever provide water in our streams that is lower than natural background.

Any attempt to treat discharges to levels below background will be of no environmental benefit to the receiving waters. In virtually every case, the treated discharge would be relatively small compared to the volume of the receiving water. Sending the message that fish never were and never can be safe to eat has huge implications for seafood and tourism as well as Native Americans and the general public. If this is true, it poses a bigger problem than anything under discussion so far.

Much of the challenge of ensuring that we are implementing the proposed water quality standards in an environmentally meaningful way can be met if we look beyond just updating the fish consumption factor and also make sure we are incorporating other newer science for other parts of the formula.

For example, the current arsenic criterion is based on an out of date bioconcentration factor. The federal criterion is based on a bioconcentration of 44, most of which was driven by a weighted average of the attributes of the eastern oyster (BCF = 350) and blue gill fish (BCF = 4). Neither of these species figure greatly, if at all, in local consumption by Oregonians. EPA has more recently determined that bioconcentration factors could range from 0 to 4. EPA Region VI has taken this approach and recommended a bioconcentration factor of 1 for states in that region.

There are other science issues with the arsenic standard as well that time does not allow me to go into but are described in the attached technical memorandum. Arsenic may exist in many different forms and non-toxic (organic) forms.

The important take-home message is that Oregon permittees would not have an issue with arsenic at the higher fish consumption rate if DEQ incorporates the newer science. Using the out-of-date science will result in a problem for all, without an environmental benefit.

The arsenic example illustrates why it is important, if we are going to adjust the fish consumption factor to reflect Oregon specific consumption, we should also look at other parts of the formula for deriving water quality criteria, such as bioconcentration, to determine if other newer science should be considered and Oregon specific adjustments should be made.

We have been told that this process does not include looking at other parts of the formula as this would be too burdensome. I urge you to consider that it is too burdensome not to look at the formula in its entirety. To fail to do so will result in a tremendous process burden for the state and permittees alike.

Comment 2: Why it will not work to only focus on implementation measures

The DEQ is working on implementation ideas or technical permitting solutions so with the goal to reduce permit requirements that don't make sense. This is an important part of the effort and we look forward to being part of the process of developing these measures. There are some issues with this:

- First, by not addressing whether we have the right science we are not only creating a flawed standard, but we are creating the need for some type of implementation device to provide relief for ***every*** NPDES permittee that uses and discharges water.

- Secondly, all of the discussion to date has been in the direction of limiting the availability of such mechanisms. There was much bold discussion in August about the need to be creative, to bring the best ideas forward and to consider every tool in the toolkit. Concern over whether EPA will approve creative measures has had a stifling effect on this discussion.

- Thirdly this approach will entail upwards of an additional $100,000 to $200,000 per permittee to the cost of application according to the SAIC Report. It must be remembered that when water quality standards are set below natural background, these additional costs are imposed on ***every*** permittee that uses and discharges water. Furthermore, the permittees will incur these expenses without assurance that the applications will succeed.

- Fourthly, this will add tremendously to the DEQ workload in processing permits. We also believe there are costs to the DEQ that have not yet been discussed such as whether or not DEQ will list all waters as impaired for arsenic and other naturally occurring earth metals and then conduct TMDLs. Alternately, is DEQ proposing to determine natural background for each individual waterbody?

- Fifth, by designing a system with water quality standards below natural background, we are creating vastly expanded opportunities for third party lawsuits because of the strict liability aspects of the Clean Water Act.

- Sixth, if DEQ decides not to perform TMDLs where the water quality standards are below natural background, permittees will still shoulder an unnecessary burden in the permitting process and face the possibility of capital investments that could be prohibitive.

- Lastly, state resources used to address arsenic conundrum are resources that are not available to address man-made toxic pollutants that pose the most risk to consumers of fish.

The bottom-line for NWPPA is this. We believe that good science should be the basis of water quality standards and that actual risk should determine where our efforts are placed. If we are to increase the fish consumption factor, we cannot do so in a vacuum. We need to also look at all of the science and make the needed updates so that we are not driving nonsensical results.

Thank-you for your time today.

Questions?

State of Oregon
Department of Environmental Quality Memorandum

Date: October 9, 2009

To: Environmental Quality Commission

From: Dick Pedersen, Director

Subject: Agenda Item E, Informational and Discussion Item: Toxics Monitoring Program Year-One Update: Willamette River Basin
October 22-23, 2009 EQC Meeting

Why this is Important

The toxics monitoring program is part of DEQ's strategic efforts to identify and reduce toxics in our waters, air and land. The program, proposed by Governor Ted Kulongoski and funded by the Oregon Legislature in 2007, grew out of public concern about toxic pollutants in Oregon's waters and their effect on human health and the environment.

Background

While progress has been made in reducing the release of the many toxic pollutants to the environment, many chemicals are not regulated in Oregon and others remain in the environment from past practices. Knowing which pollutants may be found in local rivers and streams and identifying their sources provides Oregonians with the information necessary to take measures to reduce levels of toxic pollutants in their environment and to reduce risks to human health and the environment.

The toxics monitoring program will assess toxic pollutants in some rivers and streams and will eventually do so statewide. DEQ is focusing initially on identifying the distribution and magnitude of these pollutants in the Willamette River Basin. DEQ worked closely with watershed councils, natural resource agencies, and other stakeholders to compile information about toxic pollutants in the basin and, based on that work, develop a monitoring strategy. It has been nearly 20 years since DEQ conducted a broad survey of toxic pollutants in the basin, and little information is available for most other basins in Oregon. DEQ plans to move the program to other river basins throughout the state on a five-year rotating basis.

Discussion

Staff from DEQ's Laboratory and Environmental Assessment Division will present first year results from its toxics monitoring program and discuss the findings in the context of ongoing toxic pollutant reduction strategies at DEQ. Staff will also discuss next steps in the monitoring program.

Key questions include:

- How should DEQ communicate and present this information to stakeholders and the public? Should this information stand alone or as part of an integrated water quality monitoring effort?
- Although DEQ does not have complete data on the environmental and human health effects of personal care products and other chemicals of emerging concern, how should DEQ engage Oregonians in efforts to decrease the use of these toxic chemical and the release of these toxic pollutants to our environment?
- How should DEQ or commission members broaden our toxic pollutant reduction strategies with other state agencies?
- How do we maintain our scientific objectivity while using data to identify policy and program development needs?

EQC Involvement

The commission will review the report, discuss the questions above, and recommend next steps for the program's communications and outreach plan.

Attachments

A. Draft report of year one for the Oregon Toxics Monitoring Program

Approved:

Division: Greg Pettit

Report Prepared By: Dennis Ades
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Report

Oregon Toxics Monitoring Program
Willamette River Basin
Year One (2008) Summary Report
DRAFT

State of Oregon
Department of
Environmental
Quality



Last Updated: 09/29/09
By: Jim Coyle

DRAFT

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DEQ would like to express appreciation to Mr. Bill Egan and Mr. Bob Judkins of the Oregon Bass and Panfish Club for volunteering their time, angling expertise, local knowledge, direct assistance, and use of Mr. Judkins' personal boat to collect fish specimens in the Lower Willamette River Basin. The program benefited directly from their many valuable contributions. The agency also wishes to acknowledge the many reviewers who reviewed and provided valuable input to the original study plan. DEQ also wishes to acknowledge the assistance provided by staff of the Oregon Department of Fish and Game (ODFW) in determining the age of collected fish based on the interpretation of growth annuli of scales removed from the field-collected specimens.

Executive Summary

In 2008 the Oregon Department of Environmental Quality initiated a long-term program to monitor surface waters for toxic pollutants. Monitoring objectives were to collect data on pollutants known to present a substantial threat to human health or aquatic life and to gather information about the occurrence of chemicals of emerging concern in the Willamette River Basin. Water samples and fish were collected from mainstem and tributary locations throughout the basin and analyzed for a wide range of organic pollutants and metals. Presented are results of the first year of this new monitoring program.

Herbicides were the class of pesticides most commonly found in water samples. Diuron and atrazine were found in samples collected at locations throughout the basin. No pesticides were detected in concentrations that exceeded federal or Oregon water quality criteria although few criteria exist for current-use pesticides. Pharmaceuticals including the antibiotic sulfamethoxazole, the mood-stabilizing/anti-depressant venlafaxine, and the anticonvulsant /mood stabilizing drug carbamazepine were detected. Cholesterol and coprostanol, indicators of fecal contamination, were detected at low levels at all 20 sites monitored for organic pollutants. At numerous locations copper and lead concentrations were above Oregon criteria adopted to protect aquatic life from toxic effects of these metals.

Persistent, bioaccumulative toxic pollutants were found in fish collected at all 12 collection sites. Polychlorinated biphenyls (PCBs) levels in fish fillets composites from all sites were near or above USEPA screening levels for subsistence fishers. Combined dioxin and furan concentrations in fish were above USEPA screening levels for subsistence fishers as well as recreational fishers. Polybrominated diphenyl ethers (PBDEs) were detected in fish fillets composites collected at all stations; however, no federal or state screening levels are available for comparison. Levels of the organochlorine pesticides such as DDT were below USEPA recommended screening levels for subsistence and recreational fishers. Average concentrations of mercury found in fish tissue at concentrations exceeded established screening levels for subsistence fishers and often exceeded 0.35 mg/kg, the threshold value used by the Oregon Department of Human Services to issue fish consumption advisories.

USEPA screening levels for recreational and subsistence fishers are based on consumption rates of 17.5 grams and 147 grams of fish per day, lower than the 175 gram per day fish consumption rate recently adopted by the Oregon Environmental Quality Commission. Fish tissue pollutant levels that exceed USEPA screening levels also exceed DEQ targets for freshwater fish.

Introduction / Background

Program Rationale

The mission of Oregon's Department of Environmental Quality is to restore, maintain and enhance the quality of Oregon's air, water and land. To achieve its mission, DEQ collects, analyzes and interprets a variety of aquatic media including water, sediment and biological organisms and compares its findings to established protective criteria. DEQ will use information generated by the Toxics Monitoring Program to evaluate and revise pollution control management decisions to reduce levels of potentially harmful contaminants in the environment, and thereby improve water quality and protect human health.

Regulatory Context

The federal Water Pollution Control Act was originally enacted in 1948, subsequently revised and re-designated as the Clean Water Act during the 1970s. The purpose of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. In order to achieve its objectives, the Clean Water Act required states to designate uses for specific portions of their respective waterways. These uses include drinking, fishing, contact and non-contact recreation, industrial and agricultural supply fish / aquatic life, wildlife, hydropower, hunting, commercial navigation / transportation and aesthetic quality. The states in turn are required to adopt numeric and narrative chemical standards for physical and biological characteristics of their waters to ensure that waters were suitable for their designated uses. The Clean Water Act addresses degradation resulting from both point (discreet discharge points) and non-point (run-off) contaminant sources.

Initially, federal regulations were established for physical and chemical water characteristics such as dissolved oxygen, pH, and temperature (among others) to protect designated uses. However, by the late 1980s, the U.S. Environmental Protection Agency began to establish numeric water quality criteria for a list of toxic pollutants. These numeric criteria described time-based ambient concentrations of pollutants that were protective of human and ecological health. The Clean Water Act required the states to adopt criteria at least as stringent as those recommended by the USEPA. Since then USEPA has set water quality criteria for approximately 160 toxic priority pollutants.

Public concerns regarding toxic pollutants and Oregon's Legislative response

Despite dramatic improvements in the quality of the nation's waters since the 1970s, the number of pollutants for which federal numeric criteria exist represent only a small fraction of the thousands of potentially toxic chemicals

produced, transported, used, and released nationally. In addition to toxic pollutants released in Oregon, some contaminants found in the state's water and aquatic life originate from sources located beyond state and even national boundaries. The number, distribution and variety of local, regional and global sources of toxic pollutants combined with frequently conflicting or insufficient information concerning the risk these released contaminants represent have fueled public concern regarding the presence and impacts of these substances on environmental quality and human health. Since the 1990s, Gallup® polling of the American public has revealed consistently high concerns particularly about toxic pollutants in water. A recent Gallup Poll identified polluted drinking water, toxic pollution of soil and water by toxic waste and pollution of rivers lakes and reservoirs as the top three concerns. DEQ recognized the need for systematic monitoring of toxic pollutants in its 2005 Strategy for Monitoring Oregon's Waters. Acknowledging its repeated identification by the public and DEQ as a high-priority issue, the Oregon Legislature provided funding to DEQ to establish a state-wide, long-term, watershed-based Toxics Monitoring Program in 2007.

Program Implementation and Scope

DEQ began the Toxics Monitoring Program in 2008 with a multi-year focus on measuring toxic pollutants in fish and water in the Willamette River basin. Ultimately, DEQ plans to expand the scope of the Program to all 13 major river basins that lie entirely or partially within the state's boundaries on a repeating five year rotational schedule. The schedule for upcoming sampling outside of the Willamette River basin is currently under development and review. Resources permitting, the Toxics Monitoring Program will be extended to all 13 Oregon river basins, their major tributaries and select watersheds.

In coming years, the focus of Toxics Monitoring Program will remain on measuring and evaluating the concentrations of pollutants in water, fish and other aquatic organisms and media that pose the greatest risks to human and ecological health. Where possible, DEQ will interpret its findings in light of established water quality criteria and/or contaminant effects-thresholds. The program will provide feedback as the agency strives to achieve its mission of restoring, maintaining and enhancing Oregon's water, air and land resources by documenting the presence of toxic pollutants in surface waters and fish in Oregon's river basins. DEQ will use consistent methods to measure surface water and aquatic biota for concentrations of toxic pollutants to optimize the comparability of its findings through time. DEQ will post all final data and reports, fact sheets and outreach products produced through the Program on the Internet to enhance their availability and relevance to policy decision-makers and the public.

Toxic Pollutants of Interest

In this report, the term toxic pollutants refer to substances that are *primarily* the result of human activities. These pollutants have either been intentionally produced or are formed as by-products from industrial, municipal, or agricultural processes. In addition, some naturally-occurring materials including mercury, cadmium, lead, zinc, and copper are also included in the target list. The Toxics Monitoring Program analyzed unfiltered surface water for over 240 pollutants capable of impairing the normal functioning of biological systems, even at low levels of exposure. Adverse effects resulting from exposure to toxic pollutants include reduced survival, impaired development, genetic damage, tumor promotion or diminished reproductive success in human and animal populations.

While numerous regulatory, academic, and public-interest groups have compiled various lists identifying a range of toxic chemicals; no single, widely-accepted catalog of toxic substances of concern is available. Anticipating this challenge, the Oregon Legislature enacted Senate Bill (SB) 737 in 2007 which tasked DEQ with developing a list of priority persistent bioaccumulative and toxic chemicals that may degrade Oregon's surface waters. This persistent priority pollutant list, or P3 list, was not due until well after the development of the Toxics Monitoring Program 2008 monitoring plan and could not be taken into account for the initial round of sampling, but will be considered in subsequent monitoring efforts.

The pollutants targeted by the program in the summer of 2008 included industrial and agricultural chemicals known to be affecting Oregon's aquatic ecosystems, compounds of concern identified by DEQ's Drinking Water Source Protection Program, current use pesticides measured by DEQ's Pesticide Stewardship Partnership and contaminants of emerging concern, including select pharmaceuticals and personal care products. Below is a list and overview of classes of toxic pollutants targeted for analysis in 2008 by the Toxics Monitoring Program:

- Industrial chemicals and combustion byproducts
    - Polycyclic aromatic hydrocarbons (PAHs),
    - Polychlorinated biphenyls (PCBs),
    - Plasticizers (phthalates)
    - Polybrominated diphenyl ethers (PBDEs),
- Dioxins and furans (in fish tissue only)
- Select metals,
- Current-use and legacy pesticides,
- Emerging contaminants of concern (including pharmaceuticals, personal care products)

Industrial chemicals and combustion byproducts. This pollutant group includes chemicals known as volatile organic chemicals and semi-volatile organic chemicals. The chemical class of volatile organic chemicals includes a myriad of compounds whose primary shared characteristics are their relatively low boiling point and high vapor pressures that results in their tendency to vaporize at relatively low temperatures, and limited solubility in water. Examples of volatile organic chemicals include some pesticides, aromatic chemicals such as benzene, toluene, acetone, a variety of solvents and paint thinners, varnishes, gasoline and gasoline additives (i.e. methyl tert-butyl ether - MTBE), lighter fluids, dry-cleaning agents, formaldehyde and refrigerants to name a few. Given their tendency to vaporize, some volatile organic chemicals can pose health risks to humans via inhalation as well as absorption through skin. Any class of chemicals as broad a volatile organic chemicals is bound to exhibit a range of biological effects from little or no impacts to serious harm. Some volatile organic chemicals have been shown to cause cancer in animals and some are considered to be human carcinogens.

Semi-volatile organic chemicals are characterized by lower vapor pressures than those classified volatile organic chemicals. As a result, they are less likely to evaporate. They also tend to have limited solubility in water. As a result of these characteristics, semi-volatile organic chemicals typically bind to sediments or other carbon rich substrates which may include the lipids (fats and fatty acids) of living organisms. Semi-volatile organic chemicals include polycyclic aromatic hydrocarbons (PAHs), plasticizers (phthalates) and a wide variety of halogenated aromatic compounds. Some semi-volatile organic chemicals are suspected human carcinogens and may disrupt endocrine systems and hormone regulation of organ functions. They are liable to metabolic breakdown and excretion once absorbed to a greater degree than some more persistent compounds like PCBs and PBDEs.

PAHs are present in oil, tars, and coal and are released during the combustion of fossil fuels as well as tobacco. Plasticizers are a class of semi-volatile organic chemicals additives that are blended into a variety of polymer-based materials (i.e., plastics and resins) to ensure flexibility of the final product and during manufacturing processes. Plasticizers can enter the environment at the site of their manufacture, use, and degradation of discarded consumer products.

Current use and legacy pesticides. The term pesticide is a non-specific label that encompasses a spectrum of (primarily) synthetic chemical products manufactured and used to control a variety of nuisance organisms. Pesticides are further classified according to the target pest to be managed; such as insects, rodents, terrestrial/aquatic plants, fungi, birds, etc. Within these classifications of pesticides, the individual compounds can be further classed according to their chemical structure (i.e., phenoxy herbicides, organophosphate insecticides, etc) or mode of action (i.e., cholinesterase inhibitors, etc.).

Organochlorine pesticides were introduced in the 1940s and persist in the environment long after they are applied. Dichlorodiphenyltrichloroethane (DDT) is an example of a persistent legacy insecticide which disrupts communication of nervous tissue by slowing the breakdown of the neurotransmitter acetylcholine. Although it was first formulated in the nineteenth century, large-scale production and use as a powerful insecticide did not occur until the mid-1940s. Due to concerns about its human safety and environmental effects (particularly eggshell-thinning in birds) its manufacture and use in the United States was banned along with several other organochlorine pesticides in the 1970s. The Oregon Department of Human Services issued a fish consumption advisory for the lower Columbia River in 1996 because of elevated levels of DDT and other contaminants in fish. The Toxics Monitoring Program analyzed water samples and fish tissue for DDT and several other organochlorine pesticides.

The Oregon Department of Agriculture (ODA) is responsible for the regulation, registration and use of pesticides in the state under the Federal Insecticide, Fungicide and Rodenticide Act. Among its numerous pesticide-related responsibilities, the ODA works cooperatively with other state agencies such as DEQ, Department of Human Services and Oregon Department of Forestry through its Water Quality Pesticide Management Team to address pesticide impacts on the state's waters.

The Water Quality Pesticide Management Team reviewed multiple information sources and followed a structured ranking process to identify pesticides of concern and pesticides of interest for Oregon. These are pesticides that are exceeding or have the potential to exceed a federal, state, or tribal human health or environmental reference point. These pesticides will be assessed and managed according to the framework described in Oregon's Water Quality Pesticide Management Plan that the team developed and submitted to USEPA. Most of the pesticides of interest and concern identified by the pesticide management team were included on the Toxics Monitoring Program's 2008 list of target pollutants.

Polychlorinated biphenyls. PCBs are stable man-made compounds whose primary structure consists of two phenyl rings linked by a carbon to carbon bond. As their name implies, chlorine atoms are added to various available positions on the biphenyl structures. They were first manufactured in the 1930s and found widespread acceptance in a variety of industrial and commercial applications. Their stability at high temperatures and resistance to electrical conductance made them particularly useful in electrical power production and transmission applications and they were frequently used as heat-dissipation and insulating fluids in electrical transformers. PCBs also were incorporated into a wide variety of other products including lubricants, paints, carbonless copy paper and a variety of surface materials and caulking. In all, there are 209 possible PCB configurations, or

congeners depending on the degree of chlorination of the biphenyl structure. Commercial PCB formulations were not pure preparations; rather, they contained complex mixtures of these congeners.

PCBs tend to accumulate in sediments and the lipids or fat of living organisms. Once incorporated into the biological tissue of organisms low on the food-chain, these pollutants are passed on and accumulate or bio-magnify in the tissues of organisms higher in the food-chain like predatory fish, birds and humans. Ultimately, in response to growing concern about their human health and environmental risks, the manufacture of PCBs was banned in the late 1970s along with most of their uses. Despite these prohibitions, measurable residues of PCBs remain widespread globally and in some areas continue to pose risks to human and environmental health.

PCBs have been linked to increased cancer risk and other human health effects including impacts on nerve, endocrine and reproductive functions. Oregon Department of Human Services has issued fish consumption advisories for elevated levels of PCB in fish collected in the lower Columbia River, lower Columbia Slough and Willamette River at Portland Harbor. Total PCB and select PCB congeners were measured in water and fish as part of the Toxics Monitoring Program in 2008.

Polybrominated diphenyl ethers. PBDEs are man-made chemicals whose primary structure is composed of two benzene rings linked together by a carbon to oxygen bond. Due to this primary configuration, they resemble the overall structure of PCBs. Like PCBs, PBDEs have limited solubility in water and are produced as mixtures of a variety of congeners. Unlike PCBs, PBDEs have been typically blended into a wide variety of consumer products as a flame-retardant and are found in furniture, draperies, bedding and electronics. They may constitute up to 30 percent (by weight) of some television and computer components.

PBDEs tend to bio-magnify and their concentrations in environmental samples have been increasing globally, including dramatic increases reported in osprey eggs collected near the Columbia River (Henny et al, 2009). PBDE exposure in mice has resulted in decreased circulating thyroid levels and impacts on behavior and gross motor control. In animal studies, PBDE exposure before and after birth caused problems with brain development. These studies observed problems with learning, memory and behavior. They also show that exposure to PBDE's during development can decrease thyroid hormone levels, affect reproduction, and reduce immune system performance (Oregon DHS 2008). In recent years, production and use of PBDEs in the United States has declined because of regulatory action based on environmental and human health concerns. Total PBDE and select congeners were measured in water and fish in 2008 as part of the Toxics Monitoring Program.

Dioxin and Furans. Polychlorinated dibenzodioxins (dioxins) and polychlorinated dibenzofurans (furans) share a biphenyl structure similar to those found in PCBs and PBDEs. Like PCBs, dioxins and furans also incorporate chlorine atoms bound to available positions on the biphenyl ring structure. As with PCBs and PBDEs, dioxins and furans come in many individual configurations, depending on the degree of chlorination. Of the two chemical classes, dioxins are considerably more toxic than furans. The most toxic form or congener of either class is the 2,3,7,8 tetrachloro dibenzodioxin (2,3,7,8 TCDD) configuration.

Dioxin and furans were never produced intentionally; rather they formed through side-reactions which occur during the manufacture of certain herbicides, preservatives and disinfectants, and as the result of incomplete incineration of chlorinated organic compounds. In 1991 the USEPA approved a Total Maximum Daily Load (TMDL) assigning waste load allocations to chlorine bleach pulp and paper mills discharging wastewater to the Columbia, Snake, and Willamette Rivers. Concentrations of individual congeners of dioxin including 2,3,7,8 TCDD, and furans were measured in fish collected in 2008.

Chemicals of emerging concern. The phrase chemicals of emerging concern refers to a diverse category of environmental pollutants which includes human and veterinary pharmaceuticals along with an expansive list of ingredients that make up personal care products. Pharmaceuticals include prescription and over-the-counter drugs manufactured and used to treat illness or enhance human and animal health. Examples of human pharmaceuticals include antibiotics, birth control medications, mood-stabilizing agents, anti-depressants, seizure-control agents, diagnostic media, hospital and wastes from pharmaceutical manufacturing. To further complicate the picture, some pharmaceuticals may have dual uses; for example, in therapeutic doses anticoagulants can prevent blood clots, but incorporated into bait at higher concentrations, they can also serves as effective rodenticides. Examples of agricultural pharmaceuticals include antibiotics administered to reduce the occurrence or spread of disease and steroids administered to stimulate accelerated growth.

Personal care products include ingredients and final formulations used by the public as fragrances (i.e. musks), cosmetics, sunscreens, insect repellants and surfactants found in many household and commercial detergents and cleaning products. Collectively, these contaminants may enter the environment via manufacture-related releases, collection and transit through municipal sewage treatment facilities and private septic systems, and disposal of bio-solids.

Pharmaceuticals are specifically formulated to alter the function of biological systems. Even when properly administered unabsorbed residues of many human and veterinary pharmaceuticals are excreted. These excreted pharmaceuticals (combined with improperly discarded medications) have been demonstrated to persist and retain

potency despite passing though municipal waste water treatment facilities and private septic systems. Human pharmaceuticals such as anti-depressants, reproductive hormones and antibiotics have been detected in surface and groundwater resources. In addition to human pharmaceuticals entering the environment from private and public treatment facilities, veterinary therapeutics can also enter surface and groundwater resources via non-point source runoff from livestock-related operations. Similarly, compounds used in the formulation of personal care products including surfactants and fragrances have also been detected in the discharges and bio-solids from municipal waste water treatment facilities as well as in from private septic systems. The ecological and human health implications of pharmaceuticals and personal care products at low levels in the environment are currently being evaluated. Some are suspected to influence reproductive health, navigation, swimming and predator/prey behavior in fish.

Metals. Metals and metalloids make up the majority of known elements. The atomic configuration of metals allows them to readily share electrons, which facilitates their ability to conduct electricity. Other distinguishing characteristics include malleability and the ability to conduct heat. Many metals react with oxygen to form oxides and exhibit corrosion, still others like gold do not corrode.

High concentrations of metals such as copper, lead, and zinc can cause mortality to aquatic life but, more often, sublethal effects can be the result of very low concentrations of metals. These sublethal effects may include decreased growth or reproduction or increased susceptibility to other diseases or environmental stressors such as low dissolved oxygen or high temperatures. Very low levels of copper have been linked to disruption of the olfactory (smell) system in salmon, thus impairing their ability to feed, navigate, reproduce, etc (LCREP, 2007).

Oregon has adopted water quality criteria for antimony, arsenic, barium, beryllium, cadmium, chromium, copper, cyanide, iron, lead, manganese, mercury, nickel, selenium, silver, thallium, and zinc. Calcium and magnesium, the primary constituents of water hardness tends to form salts with some metals, making them less toxic. As a result of this effect, water quality criteria for some metals are hardness-dependant. For example, Oregon's water quality criteria for copper and lead assume a water hardness of 100 mg/l (Table 20 OAR 340.41). However, hardness measured at the 40 sites where water was collected for metals determination was commonly less than 100 mg/l. Hardness-dependant water quality criteria values for metals were re-calculated using site and sample-specific hardness.

Bioaccumulation of mercury in fish and other organisms is a problem throughout the US. Mercury is used in a variety of manufacturing processes and is found in instruments and devices such as barometers, thermometers and pressure gages and switches. Mercury enters the environment from numerous local, regional and global point

sources and non-point sources. The largest anthropogenic source of mercury is the burning of fossil fuels, especially coal. Once in the environment it undergoes complex chemical transformations that result in the formation of methyl mercury which accumulates and magnifies in the food chain. The accumulation of mercury in the food-chain can reach levels that pose risks to ecological and human health.

Mercury is a recognized issue in the Willamette River basin where concentrations of mercury in fish tissue exceed human health criteria. The Oregon Department of Human Services issued fish consumption advisories for the Willamette River and several of its reservoirs due to mercury concentrations in resident fish including bass and northern pikeminnow. In response, DEQ developed a Total Maximum Daily Load (TMDL) in 2006 to limit mercury inputs in the Willamette River basin and protect the beneficial use of fish consumption. In the Willamette River basin, the majority of mercury is thought to originate due to the erosion of native soils and mining-related inputs, and from atmospheric deposition to water and land. More globally, mercury can is released into the environment from fossil fuel combustion and point sources associated with manufacturing and power generation.

Environmental Media of Interest

The spectrum of toxic pollutants targeted for analysis in the Willamette River basin can be sorted according to their physical and chemical properties. Some classes of toxic pollutants are hydrophilic (water-loving), dissolve to some degree in water and typically don't accumulate in living organisms. The most direct approach for determining the concentration and distribution of these substances is to collect and analyze surface water samples. Other classes of toxic pollutants are considered to be hydrophobic (water-fearing), have limited solubility in water and tend to accumulate in the lipids (fat) of aquatic biota over time. Fish fillets were analyzed for these pollutants for comparison with USEPA fish consumption screening levels. Recreational and subsistence anglers typically eat fillets which contains less fat than other parts of the fish. Analysis of fish fillets provides data to Oregon Department of Human Services, which uses this information to assess human health risks posed by pollutants that bioaccumulate in fish. However, analyzing fish fillets tends to underestimate the true body-burden of pollutants in the whole fish and; therefore, also underestimates risks posed by bioaccumulated contaminants to eagles, osprey, and other predators and scavengers that feed on fish.

Stability of pollutant list over time

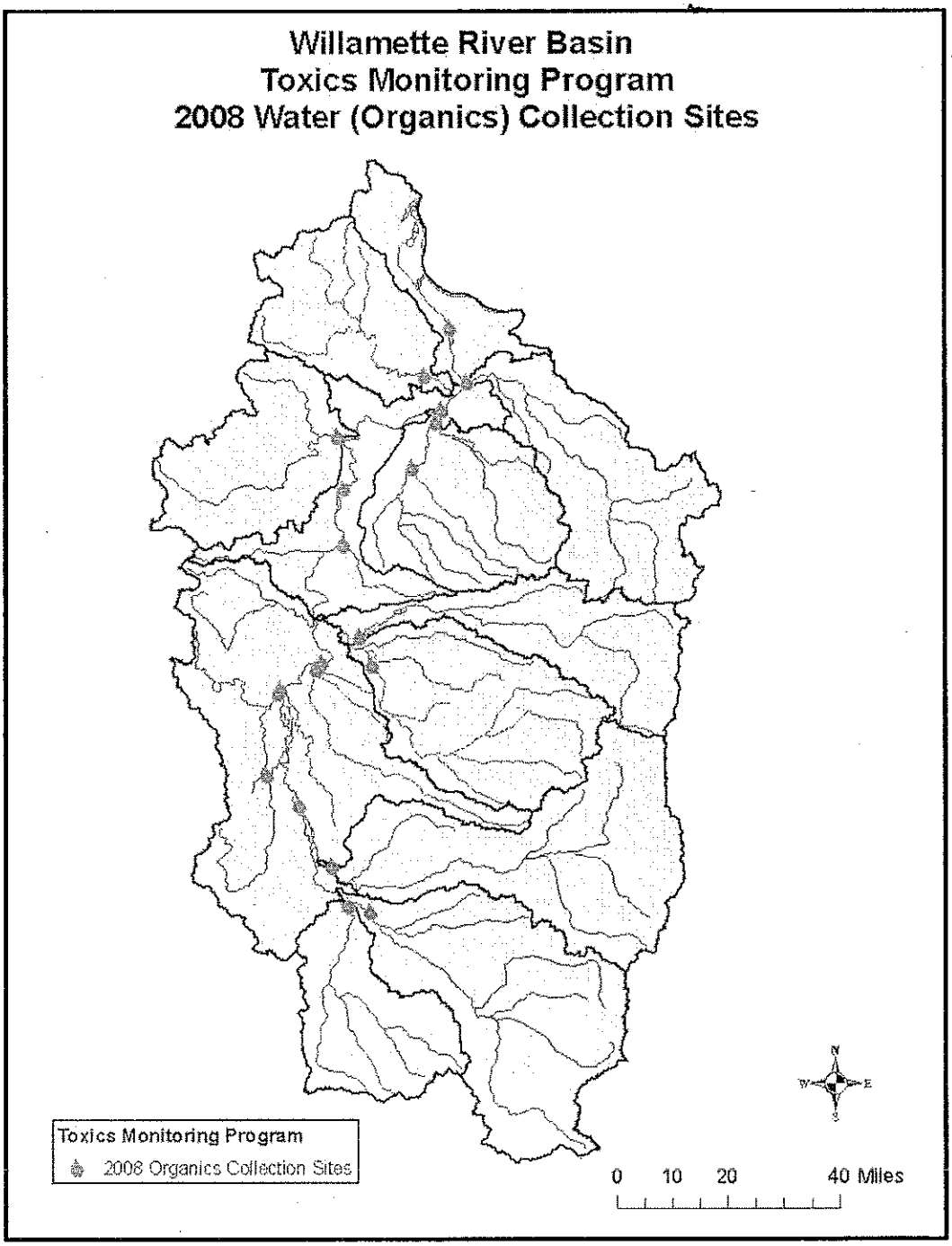
Consistency in the selection and measurement of toxic substances enhances long-term comparison of information as the toxics monitoring program is implemented throughout Oregon. However, the list of toxic pollutants and the techniques used to measure them are likely to shift over time, particularly in response to DEQ's final persistent priority pollutant list and the need for data to inform and guide the agency's Toxic Reduction Strategy. While new contaminants of concern may emerge and be added to the pollutant list or new methodologies may be adopted in time, optimizing the comparability between contemporary and historic data will remain a primary consideration.

Methods

Sampling at Primary Sites for Organic Pollutants and Metals

Water samples were collected twice in 2008 at 20 main stem and tributary sites and analyzed for organic pollutant concentrations. These sites were selected from DEQ's established ambient water quality monitoring network and were chosen to provide a balanced distribution of sites throughout the basin (Figure 1). Located on either the Willamette River or a key tributary near its confluence with the main stem Willamette, these primary monitoring locations are integrator sites. Water collected at these sites reflects or integrates natural hydrologic and landscape processes as well as upstream point and non-point source inputs of contaminants for large portions of the basin. Seven of these sites were located on the Willamette mainstem and 13 were distributed across the basin's major tributaries including the Clackamas, Tualatin, Molalla, Pudding, Yamhill, North Santiam, South Santiam, Calapooia, Mary's, Long Tom, McKenzie, Coast Fork Willamette, and Middle Fork Willamette Rivers (Table 1). Water samples were analyzed for insecticides, fungicides, herbicides, PCBs, PBDEs, solvents, personal care products, indicators of fecal contamination, combustion and industrial by-products. (Appendix A).

Figure 1. Locations of primary sampling sites where surface water was collected for organic contaminant analysis).

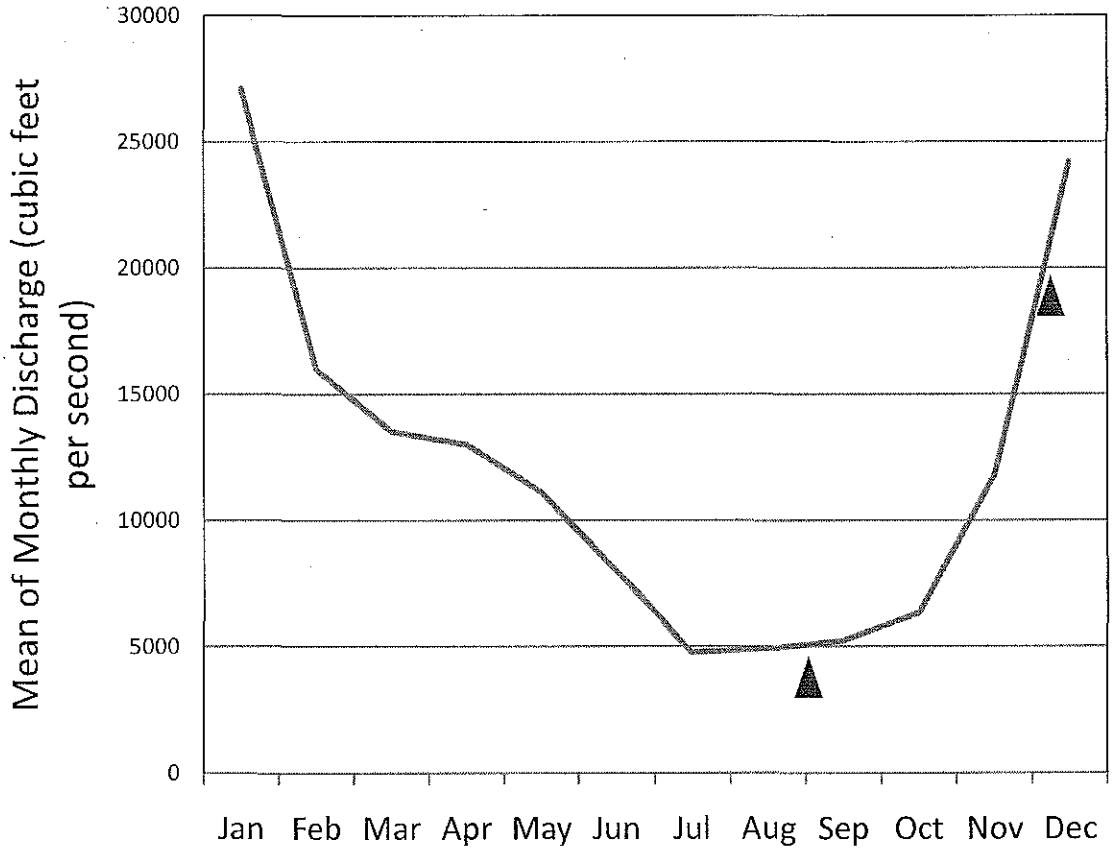


Hydrologic sampling considerations and schedule – River flows are influenced by a number of its physical characteristics including drainage area, topography, groundwater movement and precipitation. River flow can be represented graphically as a hydrograph by plotting measured discharge over time (Figure 2). The 2008 sampling dates were chosen to coincide with two phases of the typical hydrological periods characteristic of the Willamette River basin which influence the movement of toxic pollutants; namely during its low-flow' period and again during the rising limb of the basin's hydrograph corresponding to increased seasonal precipitation.

Low-Flow – Surface water collections in September were scheduled just prior to the release of water from storage reservoirs operated in the Willamette River basin by the U.S. Army Corps of Engineers. Typically, precipitation in summer and early fall months is low, resulting in yearly diminished flows of the Willamette main stem and its tributaries. Diminished flows can effectively raise the concentrations of some water-borne toxic pollutants during these periods due to a lack of dilution. Data were collected during this period to document potentially elevated concentrations of toxic pollutants at the time of annual low-flow conditions.

Rising-Flows- Surface water samples were collected in early December when precipitation, and river flows increase. Data derived from sampling during the rising limb of the basin's hydrograph document runoff of pollutants from urban sources such as streets, parking lots, and residential landscapes and agricultural non-point sources including roads, fields and drainage systems. On the other hand, pollutants from point source discharges are likely to be diluted by higher stream flows.

Figure 2. Willamette River hydrograph at Albany, Oregon (USGS Gage 1417400) for 2001-2008 illustrates low-flows in summer months and rising-flows in autumn/winter months. Triangle markers correspond to the Toxics Monitoring Program water collection dates in 2008, but not actual discharge.



Sampling at secondary sites for metals and other inorganic parameters

In a monitoring effort separate from the flow-based organic pollutant monitoring described above, DEQ staff also collected water samples at 40 sites in the basin to measure metals concentrations. Water samples were collected at the 20 primary sites where organic pollutant samples were collected and 20 secondary sites that are in DEQ's long-term ambient monitoring network. These secondary sites were distributed throughout Tualatin, Yamhill, Clackamas, Santiam, and McKenzie River sub-basins, Figure 3, Table 2. Water samples were collected according to established ambient water quality monitoring schedules for the Willamette River basin and analyzed for a suite of 17 total recoverable metals (which includes all metals present in the dissolved form or absorbed to particulate matter present in the unfiltered sample), nutrients and other water quality parameters. Unfiltered water samples were analyzed for the metals or metalloids antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, molybdenum, nickel, selenium, silver, thallium, uranium, vanadium, and zinc.

Table 1. DEQ's Laboratory Analytical Storage and Retrieval (LASAR) station numbers basin designations, descriptions and locations for TMP primary sites where whole water grab samples were collected for organic determination of organic pollutant concentrations. Whole water grab samples were also collected at these sites for metals analysis five to nine times in 2008.

Sub-Basin and USGS Hydrological Unit Classification (HUC) Code	LASAR #	Site Description	Latitude	Longitude
Lower Willamette (17090012)	10611	Willamette River at Hawthorne Bridge	45.5133	-122.6699
Clackamas (17090011)	10360	Clackamas River at Hwy 99E	45.3735	-122.6002
Tualatin (17090010)	10456	Tualatin River at Boones Ferry Road	45.3861	-122.7563
Molalla / Pudding (17090009)	10640	Pudding River at Hwy 211 (Woodburn)	45.1504	-122.7925
	10637	Molalla River at Knights Bridge RD	45.2677	-122.7092
Yamhill (17090008)	10363	Yamhill River at Dayton	45.2236	-123.0716
Middle Willamette (17090007)	10555	Willamette River at Marion Street	44.9461	-123.0415
	10344	Willamette River at Wheatland Ferry	45.0906	-123.0443
	10339	Willamette River at Canby Ferry	45.3003	-122.6907
North Santiam (17090005)	10792	North Santiam River at Greens Bridge	44.7087	-122.9711
South Santiam (17090006)	10366	South Santiam River at Hwy 226	44.6362	-122.9236
Upper Willamette (17090003)	10355	Willamette River at Harrisburg	44.2672	-123.1737
	11140	Long Tom River at Stow Pit Road	44.3429	-123.2944
	10373	Marys River at Hwy 99W (Corvallis)	44.5566	-123.2636
	10352	Willamette River at Old Hwy 34 Bridge	44.5655	-123.2554
	11180	Calapooia River at Queen Road	44.6202	-123.1275
	10350	Willamette River at Albany	44.6397	-123.1058
McKenzie (17090004)	10376	McKenzie River at Coburg Road	44.1127	-123.0462
Middle Fork Willamette (17090001)	10386	Middle Fork Willamette at Jasper	43.9982	-122.9053
Coast Fork Willamette (17090002)	11275	Coast Fork Willamette at Mt. Pisgah Park	44.0100	-122.9851

Figure 3. Locations of secondary sampling sites where surface water was collected for metals analysis.

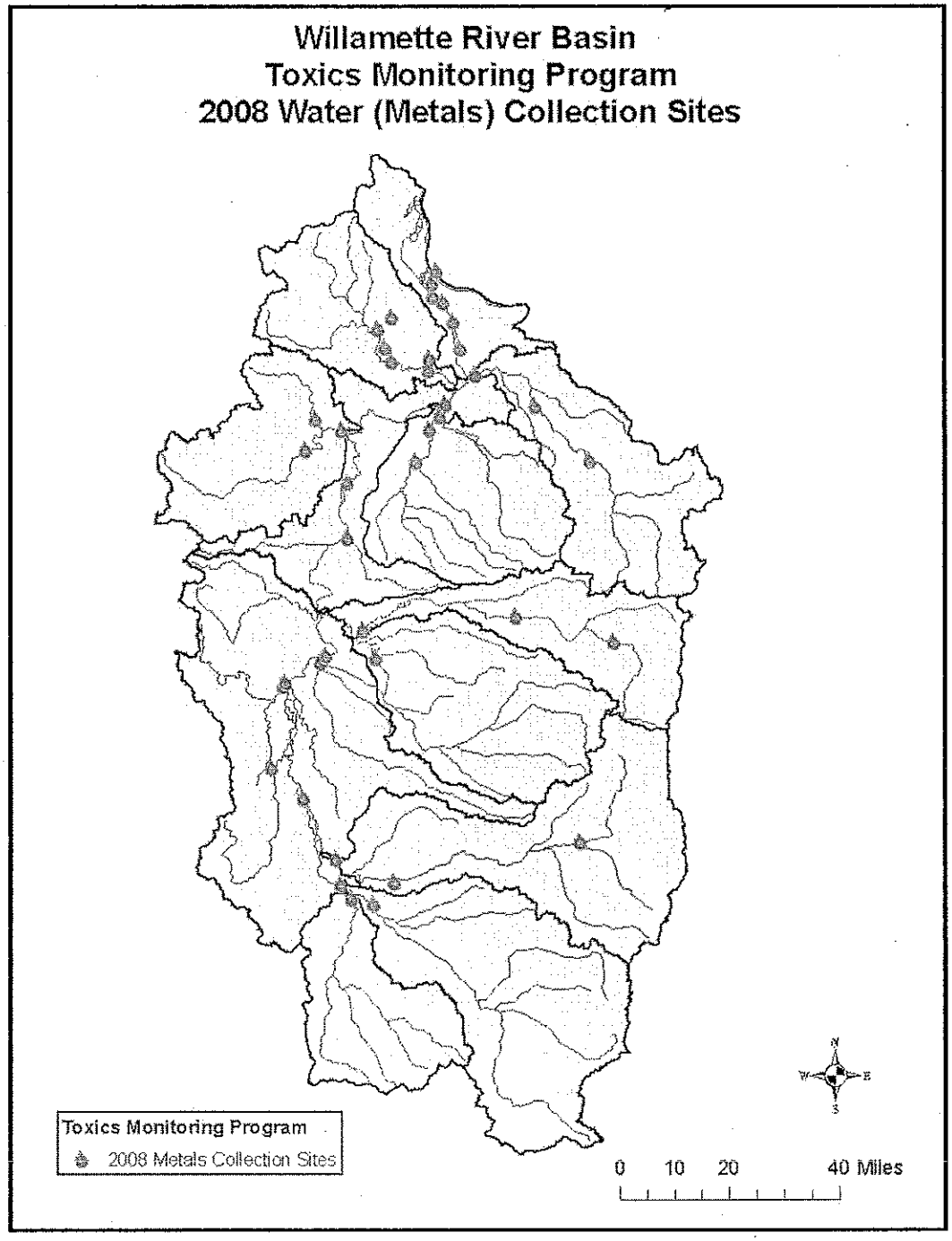


Table 2. DEQ's LASAR station numbers basin designations, descriptions and coordinates for monitoring locations where whole water grab samples were collected for metals determination (Note, locations in bold denotes primary sites where organic contaminants were also measured in 2008. Last column denotes number of samples collected for metals analysis at site).

Sub-Basin and USGS HUC	LASAR #	Site Description	Latitude	Longitude	
Lower Columbia - Sandy (17080001)	10616	Columbia River at Marker 47	45.6456	-122.7369	5
Lower Willamette (17090012)	11321	Johnson Creek at SE 17th Ave., Portland	45.4472	-122.6433	5
	10611	**Willamette River at Hawthorne Bridge**	**45.5133**	**-122.6699**	**9**
	10801	Swan Island Channel Midpoint	45.5638	-122.7091	5
	10332	Willamette River at SP&S RR Bridge	45.5779	-122.7475	5
	11201	Columbia Slough at Landfill Road	45.6105	-122.7531	5
Clackamas (17090011)	14008	Clackamas River at Memaloose RD	45.1582	-122.1515	5
	13070	Clackamas River at McIver Park	45.2994	-122.3604	5
	10360	**Clackamas River at High Rocks**	**45.3735**	**-122.6002**	**5**
Tualatin (17090010)	10461	Tualatin River at Rood Road	45.4901	-122.9506	5
	10480	Beaverton Creek at Cornelius Pass Road	45.5209	-122.8988	5
	10459	Tualatin River at Hwy 210 (Scholls)	45.4146	-122.9211	5
	10458	Tualatin River at Elsner Road	45.3882	-122.8517	5
	10469	Fanno Creek at Bonita Road	45.4151	-122.7539	5
	10456	**Tualatin River at Boones Ferry Road**	**45.3861**	**-122.7563**	**5**
Molalla / Pudding (17090009)	**10640**	**Pudding River at Hwy 211 (Woodburn)**	**45.1504**	**-122.7925**	**5**
	10917	Pudding River at Hwy 99E (Aurora)	45.2338	-122.7490	5
	10637	**Molalla River at Knights Bridge RD**	**45.2677**	**-122.7092**	**5**
Yamhill (17090008)	10929	North Yamhill River at Poverty Bend RD	45.2519	-123.1742	5
	10948	South Yamhill River at Hwy 99W	45.1687	-123.2069	5
	10363	**Yamhill River at Dayton**	**45.2236**	**-123.0716**	**5**
Middle Willamette (17090007)	**10555**	**Willamette River at Marion Street**	**44.9461**	**-123.0415**	**9**
	10344	**Willamette River at Wheatland Ferry**	**45.0906**	**-123.0443**	**5**
	10339	**Willamette River at Canby Ferry**	**45.3003**	**-122.6907**	**9**
South Santiam (17090006)	**10366**	**South Santiam River at Hwy 226**	**44.6362**	**-122.9236**	**5**
North Santiam (17090005)	12559	North Santiam River at Coopers Ridge RD	44.6932	-122.0486	5
	12553	North Santiam River at Gates School RD	44.7528	-122.4117	5
	10792	**North Santiam River at Greens Bridge**	**44.7087**	**-122.9711**	**5**
McKenzie (17090004)	12252	McKenzie River at McKenzie Bridge	44.1742	-122.1614	5
	10662	McKenzie River at Hendricks Bridge	44.0553	-122.8312	5
	10376	**McKenzie River at Coburg Road**	**44.1127**	**-123.0462**	**5**
Upper Willamette (17090003)	10359	Willamette River at Hwy 126	44.0456	-123.0268	5
	10355	**Willamette River at Harrisburg**	**44.2672**	**-123.1737**	**9**
	11140	**Long Tom River at Stow Pit Road**	**44.3429**	**-123.2944**	**5**
	10373	**Marys River at Hwy 99W (Corvallis)**	**44.5566**	**-123.2636**	**5**
	10352	**Willamette River at Old Hwy 34 Bridge**	**44.5655**	**-123.2554**	**9**
	11180	**Calapooia River at Queen Road**	**44.6202**	**-123.1275**	**5**
	10350	**Willamette River at Albany**	**44.6397**	**-123.1058**	**9**

Sub-Basin and USGS HUC	LASAR #	Site Description	Latitude	Longitude	
Coast Fork Willamette (17090002)	**11275**	**Coast Fork Willamette at Mt. Pisgah PK**	**44.0100**	**-122.9851**	**5**
Middle Fork Willamette (17090001)	**10386**	**Middle Fork Willamette at Jasper**	**43.9982**	**-122.9053**	**5**

Fish Tissue Collection

DEQ selected two resident freshwater fish species, smallmouth bass (*Micropterus dolomieu*) and northern pikeminnow (*Ptychocheilus oregonensis*) to measure contaminant concentrations in their tissue. Northern pikeminnow are native to the Willamette River basin whereas smallmouth bass are an introduced species. These two species were chosen due to their wide-spread distribution in Oregon waterways and because they eat other fish. As fish-eating predators, smallmouth bass and northern pikeminnow accumulate persistent pollutants from their prey and can be used to assess human health and ecological health risks posed by toxic pollutants in the river basin.

Fish were collected near 12 established DEQ monitoring sites within the Willamette River basin, including one location on the Multnomah Channel, six on the mainstem and five on major tributaries. Of these 12 sampling locations, six were co-located at the primary sites where water samples were collected in 2008 for organic contaminant analysis. Unlike water collections in which sampling took place at discrete locations, fish were collected from species-appropriate habitat within a mile upstream or downstream of selected DEQ monitoring locations. (Figure 4, Table 3). DEQ targeted five fish of the same species for collection from each location but were unable to obtain the desired specimens at 3 sites. Only three northern pikeminnow were collected on the McKenzie (at Coburg Road) and from the Willamette mainstem in Springfield and only 2 northern pikeminnow were collected at the Clackamas site.

Game-size fish were collected by a combination of hook & line and boat electroshocking. Fish were weighed using a spring balance and measured for total length. DEQ staff recorded the weights and lengths (total) on field data-sheets and removed scales from a standard location on the body of each fish for age determination. The ages of the fish were determined based on the number of annual growth rings visible under magnification (Table 4).

Pollutant analysis was performed on fillets prepared from the field-collected specimens. Carcass and fillet tissues were individually homogenized and placed in separate labeled containers and frozen until thawed for extraction.

Except for mercury analysis which was performed on individual fish, all reported fish fillet concentrations reflect concentrations present in composite samples for each species captured at each site.

Figure 4. Locations of 2008 TMP fish collection reaches.

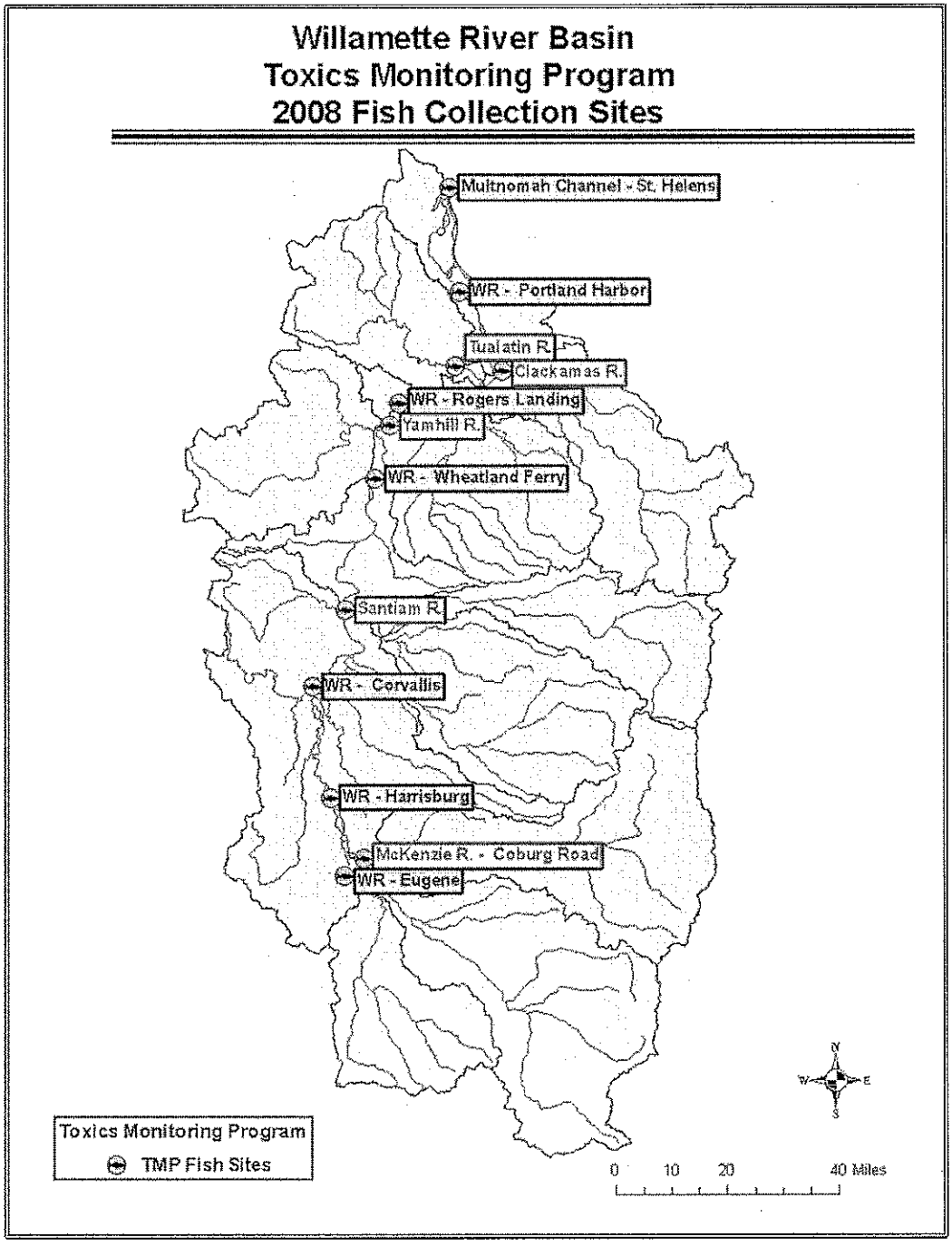


Table 3. Site description for 2008 TMP fish collection reaches. (Note Stations in bold indicate sites where water *and* fish were collected).

Site ID	LASAR Number	Lat and Longs	LOCATION
A	10549	45.8458 -122.7986	Lower Willamette - Multnomah Channel (at St. Helens)
B	10332	45.5779 -122.7475	Lower Willamette - below Johnson Creek (at SP&S RR Brdg. – Portland)
C	**11233**	**45.3787 -122.5831**	**Clackamas R. (at High Rocks - Old Hwy 213)**
D	**10456**	**45.3861 -122.7563**	**Middle Willamette - Tualatin R. - below Fanno Creek (at Boones Ferry Road)**
E	26339	45.2857 -122.9658	Middle Willamette - below Yamhill R.; above Molalla / Pudding R. (upstream of Newberg at Rogers Landing)
F	**10363**	**45.2236 -123.0716**	**Yamhill R. - below forks (at Dayton)**
G	**10344**	**45.0906 -123.0443**	**Middle Willamette - below Santiam R. above Yamhill R. (at Wheatland Ferry)**
H	10774	44.7503 -123.1404	Santiam R. – below forks (at mouth)
I	29043	44.5518 -123.2519	Upper Willamette - below Long Tom R.; above Marys R. (at Willamette Park boat ramp, Corvallis)
J	**10355**	**44.2672 -123.1737**	**Upper Willamette - below McKenzie R. , above Long Tom R. (at Hwy 99E - Harrisburg)**
K	**10376**	**44.1127 -123.0462**	**McKenzie R. – below Mohawk R. (at Coburg Road)**
L	29044	44.0674 -123.1119	Upper Willamette - above McKenzie R. (at HWY 126 -Springfield)

Table 4. Age, length, weight and gender of fish collected at selected tributary and mainstem sites in 2008 (SMB = Smallmouth Bass, NPM = Northern Pikeminnow)

Site	LASAR #	Location	Species	Length (mm)	Weight (g)	Sex	Date	Age
A	10549	Lower Willamette - Multnomah Channel (at St. Helens)	SMB01	335	650	M	9/9/08	2
			SMB02	318	490	M	9/9/08	2
			SMB03	360	790	M	9/9/08	3
			SMB04	308	420	F	9/9/08	2
			SMB05	340	520	M	9/9/08	3
B	10332	Lower Willamette - below Johnson Creek (at SP&S RR Brdg. – Portland)	SMB01	365	650	F	8/20/08	4
			SMB02	370	---	M	8/20/08	4
			SMB03	285	310	M	9/9/08	2
			SMB04	325	460	F	9/9/08	4
			SMB05	333	530	F	9/9/08	3
			SMB06	370	780	F	9/9/08	4
			SMB07	338	590	M	9/9/08	4
C	11233	Clackamas R. (at High Rocks - Old Hwy 213)	NPM01	232	120	U	10/9/08	4
			NPM02	355	425	M	10/28/09	5
D	10456	Middle Willamette - Tualatin R. - below Fanno Creek (at Boones Ferry Road)	SMB01	318	455	F	9/15/08	4
			SMB02	276	270	F	9/15/08	3
			SMB03	257	270	F	9/15/08	3
			SMB04	300	420	F	9/15/08	4
			SMB05	267	270	F	9/15/08	3
E	26339	Middle Willamette - below Yamhill R.; above Molalla / Pudding R. (upstream of Newberg at Rogers Landing)	SMB01	380	825	F	9/10/08	5
			SMB02	303	365	F	9/10/08	5
			SMB03	308	430	M	9/10/08	3
			SMB04	290	365	M	9/10/08	3
			SMB05	257	255	F	9/10/08	2
F	10363	Yamhill R. - below forks (at Dayton)	SMB03	350	555	M	9/10/08	5
			SMB04	315	390	F	9/10/08	4
			SMB05	284	290	M	9/10/08	3
			SMB06	277	325	F	9/10/08	3
			SMB07	284	300	F	9/10/08	3
G	10344	Middle Willamette - below Santiam R. above Yamhill R. (at Wheatland Ferry)	SMB01	345	720	F	9/22/08	4
			SMB02	291	350	M	9/22/08	3
			NPM01	391	635	F	9/22/08	6
			NPM02	363	420	F	9/22/08	5
			NPM03	486	1200	F	9/22/08	9
			NPM04	472	935	F	9/22/08	9
			NPM05	342	350	F	9/22/08	5
H	10774	Santiam R. – below forks (at mouth)	NPM01	435	870	F	10/7/08	9
			NPM02	502	1050	F	10/7/08	9
			NPM03	332	380	F	10/7/08	5
			NPM04	318	300	M	10/7/08	5
			NPM05	247	130	U	10/7/08	4
I	29043	Upper Willamette - below Long Tom R.: above Marys R. (at Willamette Park boat ramp, Corvallis)	NPM01	288	195	F	9/24/08	5
			NPM03	400	620	F	10/7/08	7
			NPM04	425	865	F	10/7/08	8
			NPM05	404	705	F	10/7/08	6

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Site	LASAR #	Location	Species	Length (mm)	Weight (g)	Sex	Date	Age
			NPM06	386	600	F	10/7/08	6
			NPM07	348	435	F	10/7/08	6
J	10355	Upper Willamette - below McKenzie R. , above Long Tom R. (at Hwy 99E - Harrisburg)	NPM01	425	600	F	9/24/08	7
			NPM02	455	1100	F	9/24/08	9
			NPM03	470	1000	F	9/24/08	9
			NPM04	372	455	M	9/24/08	7
			NPM05	344	415	M	9/24/08	5
K	10376	McKenzie R. – below Mohawk R. (at Coburg Road)	NPM01	300	285	M	9/23/08	5
			NPM02	335	400	F	9/23/08	6
			NPM03	318	295	M	9/23/08	5
L	29044	Upper Willamette - above McKenzie R. (at HWY 126 - Springfield)	NPM01	394	660	F	10/1/08	6
			NPM02	282	200	U	10/1/08	4
			NPM03	264	185	U	10/1/08	4

U = Unknown, unable to identify sex

Results and Discussion

Organic Contaminants in Water

Pesticides. Herbicides were the most commonly detected class of pesticides in the Willamette River basin. Herbicides were typically detected more frequently but at lower concentrations in the rising flow compared to the low-flow sampling event (Table 5). Diuron, a substituted urea herbicide used to control broadleaf weeds, grass and brush, was the most frequently detected herbicide and was found in half of the 20 samples collected during low-flows and rising flow period. No water quality criterion has been established for diuron.

USEPA has developed aquatic life benchmarks intended to estimate the risk posed by individual pesticides to aquatic organisms such as freshwater fish and aquatic plants. They have been derived from scientific literature and pesticide registration-related studies and provide USEPA's estimates of pesticide toxicity to aquatic life, but they are not equivalent to water quality criteria established by USEPA and adopted by states and tribes pursuant to the Clean Water Act. Aquatic life benchmarks serve as useful reference values when evaluating the risks posed to aquatic organisms by the concentration of individual pesticides measured in rivers and streams. USEPA has not established chronic toxicity benchmarks for nonvascular aquatic plants such as algae that may be exposed for long periods of time to low concentrations of herbicides (USEPA 2009)

Diuron concentrations were less than 1microgram per liter (µg/l), which is10 to 100 times below the USEPA aquatic life benchmarks for fish and aquatic invertebrates. Maximum concentrations measured were slightly below the 2.4 µg/L benchmark for nonvascular aquatic plants. The Oregon Department of Agriculture Pesticide Use Reporting System annual report for 2008 indicates that diuron was the third most used pesticide in the Willamette Basin at 250,000 pounds of active ingredient applied (ODA 2009). DEQ did not evaluate water samples for the most heavily applied herbicide, glyphosate (635,000 lbs), because of analytical limitations.

Atrazine, a triazine herbicide was found at a quarter of the sampling sites during the low-flow and rising-flow collection events. Measured concentrations were 10 nanograms per liter (ng/L) or 100 times less than the USEPA benchmark for acute toxicity to nonvascular aquatic plants. Another triazine herbicide, simazine was also detected at concentrations roughly 100 times lower than the aquatic benchmark for nonvascular aquatic plants.

Three insecticides were detected in water samples. Baygon is used to control a variety of crawling insects and contains a mixture of pyrethroids, carbamate, and the organophosphate chlorpyrifos. Carbaryl is a carbamate insecticide used widely in households. Imidacloprid is synthetic nicotine-based insecticide that is widely used in

structural pest control and agricultural applications. Baygon was measured near the detection limit only once during the low-flow collection period and not at all during the rising-flow collection. Carbaryl was detected in surface water once during the low-flow period and once in the rising-flow period. Water quality criteria are not available for either of these insecticides; however, the concentrations of carbaryl measured were more than 10 to 100 times less than USEPA's aquatic life benchmarks for invertebrates. Imidacloprid, was detected once during the low-flow sampling event at concentrations 30 times below the aquatic life benchmark for aquatic invertebrates.

Propiconazole is foliar fungicide used on a variety of orchard and grain crops as well as grasses grown for seed. It was quantified at three of 20 locations during the low-flow period and once during the rising flow period. Concentrations were reported at 23 ng/L or less, compared with aquatic life benchmarks for fish and vascular aquatic plants of 95 µg/L and 93µg/L, respectively.

Numeric water quality criteria do not exist for any of the pesticides detected in surface water samples in 2008. No pesticides of interest or pesticides of concern identified by ODA were detected at concentrations above USEPA aquatic benchmark. Herbicide concentrations at some locations were found to be roughly one to 10 percent of acute benchmark values for nonvascular plants. EPA benchmarks for effects on algae of long-term exposure to these widely used, and frequently detected herbicides are not available.

Table 5. Detections and measured concentrations of pesticides in water sampled in 2008.

Pesticide	Category	SB 737	Low Flow Collection			Rising Flow Collection		
			LOQ (ng/L)	Results > LOQ	Range of Reported Results (ng/L)	LOQ (ng/L)	Results > LOQ	Range of Reported Results (ng/L)
Diuron	H	Yes	2.0	10	2.5 - 225	2.3	11	2.8 - 103
Atrazine	H	No	2.0	5	4.3 – 8.4	2.3	6	2.3 – 10.4
Simazine	H	No	2.0	2	6.4 – 17.8	2.3	2	5.3 – 12.3
Metolachlor	H	Yes	5.0	2	11.3 – 41.6	5.7	2	5.5 – 23.4
Prometon	H	No	2.0	1	2.8	2.0	0	
Metribuzin	H	No	2.0	0		2.3	1	20.4
Terbutylazine	H	No	1.0	1	3.5	2.0	0	
Baygon	I	No	1.0	1	2.7	1.0	0	
Carbaryl	I	No	2.5	1	3.9	2.9	1	16.8
Imidacloprid	I	No	10	1	30	20	0	
Propiconazole	F	No	10.0	3	14.0 – 21.0	20	1	23

LOQ = DEQ Laboratory's Level of Quantitation

Category = (H - Herbicide, I – Insecticide, F – Fungicide)

Industrial chemicals and combustion byproducts PBDE congeners were measured at one site during the low-flow period, but their concentrations were near the detection limits. No PCBs were detected in surface water samples. Polyaromatic hydrocarbons (PAHs) are formed as byproducts of the combustion of hydrocarbons. They have limited solubility in water and were found near their detection limits at one site during the low-flow collection period. The site where PAHs were detected in surface water corresponded to the location of an operating automobile ferry crossing on the Willamette mainstem. PAH's found in the water from this one site may have been associated with local vehicle emissions.

Contaminants of emerging concern

The mood-stabilizer/anticonvulsant (carbamazepine), an anti-depressants (venlafaxine, a.k.a., Effexor™), and an antibiotic (sulfamethoxazole) commonly used to treat urinary tract infections were detected at low concentrations at a quarter of the sites sampled throughout the basin during low-flows and more frequently during rising flows (Table 6). Two indicators of fecal contamination, cholesterol and coprostanol were found in detectable concentrations at every site sampled during both low- and rising-flow periods. DEET (N,N-Diethyl-meta-toluamide), a widely used insect repellant, was found at low levels in surface water collected at 16 of 20 sites throughout the basin during the low-flows and at 15 of 20 sites during the rising-flows (Table 7). Water samples collected from the Tualatin River contained the most complex mixture of pollutants measured throughout the basin. Water sampled from the Tualatin included three pharmaceuticals, six herbicides and two insecticides during the low-flow period and five pharmaceuticals and four herbicides and an insecticide during the rising-flow period in 2008.

Table 6. Detections and measured concentrations of pharmaceuticals and steroids in water sampled in 2008.

Compound	SB 737	Low Flow Collection			Rising Flow Collection		
		LOQ (ng/L)	Results > LOQ	Range of Reported Results (ng/L)	LOQ (ng/L)	Results > LOQ	Range of Reported Results (ng/L)
Pharmaceuticals							
Acetaminophen	No	969	0		969	0	
Caffeine	No	200	0		130	1	260
Carbamazepine	Yes	10.0	5	10 - 150	10.0	4	11 - 110
Codeine	No	50.0	0		50.0	0	
Diphenhydramine	No	20.0	0		10.0	1	34
Venlafaxine	No	10.0	3	42 - 77	10.0	1	91
Sulfamethoxazole	No	10.0	10	9 - 150	10.0	9	12 - 280
Steroids							
Cholesterol	Yes	75	20	90 - 2200	75	20	224 - 4030
Coprostanol	Yes	5	19	7.0 - 95	5	20	7.4 - 1060
17a Estradiol	No	5.0	0		20.0	0	
17a Ethynyl Estradiol	Yes	2.0	0		5.0	0	
17B Estradiol	No	2.0	0		2.0	0	
Estriol	No	2.0	0		2.0	1	2.4
Estrone	No	5.0	0		200	0	

LOQ = DEQ Laboratory's Level of Quantitation

Table 7. Summary of detected pollutants by category and class detected in whole unfiltered grab samples collected during low- and rising- flow in the WRB in 2008.

LASAR Station	Site Description	Low-Flow						High Flow					
		Sewage Markers	PPCPs	Ancillary	Insect Repellants	Herbicides	Insecticide	Sewage Markers	PPCPs	Ancillary	Insect Repellants	Herbicides	Insecticide
10611	Willamette River at Hawthorne Bridge	XX	XX		X	X		XX	X				
10360	Clackamas River at Hwy 99E	XX			X			XX					
10456	Tualatin River at Boones Ferry Road	XX	XX X	XX	X	XX X XX X	XX	XX	XX X XX		X	XX XX	X
10640	Pudding River at Hwy 211 (Woodburn)	XX	XX X		X	XX XX		XX	XX X			XX XX	
10637	Molalla River at Knights Bridge RD	XX						XX			X		
10363	Yamhill River at Dayton	XX	XX X		X	XX XX		XX			X	X	
10555	Willamette River at Marion Street	XX	X		X	X		XX	X				
10344	Willamette River at Wheatland Ferry	XX	X		X	X		XX	X			X	

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LASAR Station	Site Description	Low-Flow						High Flow					
		Sewage Markers	PPCPs	Ancillary	Insect Repellants	Herbicides	Insecticide	Sewage Markers	PPCPs	Ancillary	Insect Repellants	Herbicides	Insecticide
10339	Willamette River at Canby Ferry	XX	XX		X	X		XX	X			X	
10792	North Santiam River at Greens Bridge	XX						XX				X	
10366	South Santiam River at Hwy 226	XX			X			XX	X				
10355	Willamette River at Harrisburg	XX			X			XX					
11140	Long Tom River at Stow Pit Road	XX			X	XX X		XX				XX X	
10373	Marys River at Hwy 99W (Corvallis)	XX				X		XX				XX	
10352	Willamette River at Old Hwy 34 Bridge	XX	X		X			XX					
11180	Calapooia River at Queen Road	XX			X	X		XX				XX X	
10350	Willamette River at Albany	XX	X		X			XX	X			X	
10376	McKenzie River at Coburg Road	XX			X			XX					
10386	Middle Fork Willamette at Jasper	X						XX					

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LASAR Station	Site Description	Low-Flow						High Flow					
		Sewage Markers	PPCPs	Ancillary	Insect Repellants	Herbicides	Insecticide	Sewage Markers	PPCPs	Ancillary	Insect Repellants	Herbicides	Insecticide
11275	Coast Fork Willamette at Mt. Pisgah Park	XX	X		X	X		XX	X			X	

Sewage Markers = Coprostanol, cholesterol
PPCP = Pharmaceuticals and Personal Care Products
Ancillary = Bromodichloromethane, Chloromethane (by-products of chlorination)
X = indicates detection of individual analytes within the pollutant category

Inorganic/Metal Contaminants in Water

Water samples were collected for metals analysis at the 20 primary program monitoring sites and an additional 20 secondary sites. Of the suite of metals analyzed, arsenic, barium, chromium, cobalt, copper, lead, nickel, uranium, vanadium, and zinc were all detected in at least one sample. Throughout the basin, copper and lead were the most frequently detected metals above water quality criteria established in Oregon to protect aquatic life (Table 8).

At the primary sites, copper was detected in at least one sample at all 20 sampling locations with a maximum concentration of 33.9 µg/L. Four samples exceeded the acute water quality criteria and nine samples exceeded the chronic water quality criteria. At the secondary sites, copper was detected at 19 of 20 sites with a maximum value of 12.5 µg/L. Six of these samples exceeded the acute criterion and eight exceeded the chronic water quality criterion. In total, samples with copper concentrations over the acute and/or chronic criteria were collected from six different primary sites and seven secondary sites throughout the basin.

Lead was detected at all primary and secondary sampling locations in at least one sample. At the primary sites, the maximum concentration detected was 8.66 µg/L with one sample exceeding the calculated acute water quality criterion and thirty-five samples exceeding the chronic criterion. At the secondary sites, the maximum concentration of lead detected was 10 µg/L. No sample results exceeded the acute criterion and twenty-one sample results exceeded the chronic criterion. Sample results with lead concentrations over criteria were spread more widely throughout the basin (in comparison to copper) with at least one sample exceeding the criteria from a total of 17 primary sites and 14 secondary sites.

Arsenic and zinc were the only other two metals measured that were above established criteria. Arsenic was measured over the criteria for human health protection from the consumption of water and fish ingestion (2.2 ng/L) in five samples. Unlike copper and lead, these five samples represent only two secondary sampling locations. Arsenic was not detected above the laboratory quantitation limit at the remaining stations. Zinc exceeded the calculated acute and chronic criteria in two samples from two secondary locations. Zinc was detected at the majority of the remaining stations but at levels below the criteria.

Water quality criteria for certain metals such as copper and lead are hardness dependant; the criteria varies from sample to sample based on measured hardness values. The range of hardness values is provided in Table 8 for reference; however, in order to calculate the corresponding criteria, the actual hardness value of each sample was used.

Table 8. Metals results from primary and secondary sites in 2008 (parameters with one or more detections included).

Parameter	N	# of Results > LOQ	# samples over acute criteria	# samples over chronic criteria	# sites with at least one sample over criteria	Maximum concentration detected (µg/L)	LOQ µg/L
Primary Sites (TMP, 20 sites)							
Barium	117	117	NA	NA	NA	61	2.0
Chromium	106	22	0	0	0	12.1	1.0
Cobalt	117	52	NA	NA	NA	5.55	0.20
Copper	117	76	4	9	6	33.9	1.5
Lead	106	82	1	35	17	8.66	0.20
Nickel	117	28	0	0	0	8.4	1.0
Silver	117	1	0	NA	0	0.16	0.10
Uranium	117	1	NA	NA	NA	0.17	0.10
Vanadium	117	34	NA	NA	NA	34.0	4.0
Zinc	117	100	0	0	0	25.6	3.0
Hardness Range – 13.5 to 71.9 mg/L							
Secondary Sites (20 sites)							
Arsenic	95	5	NA	5 [a]	2	4.6	2.0
Barium	95	82	NA	NA	NA	78.8	2.0
Chromium	85	23	0	0	0	7.6	1.0
Cobalt	95	49	NA	NA	NA	3.4	0.20
Copper	95	58	6	8	7	12.5	1.5
Lead	85	70	0	21	14	10	0.20
Nickel	95	40	0	0	0	6.9	1.0
Uranium	95	14	NA	NA	NA	0.92	0.10
Vanadium	95	43	NA	NA	NA	20.4	4.0
Zinc	95	74	2	2	2	131	3.0
Hardness Range – 12.2 – 117 mg/L							

[a] The arsenic criteria is based on human health and consumption of fish tissue and water.
N = Number of samples results for specific parameter
NA = Not applicable, no state water quality criteria currently exists.
LOQ = DEQ Laboratory's Level of Quantitation

Organic and Inorganic Contaminants in Fish

Comparative fish consumption screening values. The USEPA has developed risk-based screening values for selected bio-accumulative contaminants in fish. Screening levels are concentrations of specific contaminants in the edible portion of fish that when not exceeded are considered to be protective of human health (Table 9). To account for differences in the average amount of fish consumed by different segments of the population, screening values have been established for both recreational and subsistence anglers. These screening values assume a daily fish consumption rate of tissue of 17.5 g/day for recreational anglers and 142.4 g/day for subsistence anglers. This corresponds to weekly consumption rates of four ounces for recreational anglers and 35 ounces for subsistence anglers.

The Oregon Environmental Quality Commission recently adopted a fish consumption rate of 175 g/day for the calculation of water quality criteria in Oregon. The new fish consumption rate is 10 times the fish consumption rate for recreational fishers assumed by the USEPA. When implemented as water column criteria, Oregon water quality standards will ensure greater protection than earlier standards for consumers that eat more fish. USEPA screening values for contaminants in fish presented in this report are based on fish consumption rates of 17.5 g/day for recreational anglers and 142.4 g/day for subsistence anglers except where otherwise noted.

Table 9. Detections and measured concentrations of pesticides in fish tissues sampled in 2008.

Pesticide Group Pesticide	USEPA Screening Value		2008 Fish Fillet Results		
	Recreational Angler (ng/Kg wet weight -ww)	Subsistence Angler (ng/Kg ww)	LOQ (ng/Kg ww)	Detects > LOQ	Range of Reported Results (ng/Kg ww)
Total DDT	117000	14400	NA	14	**685 – 10675**
2,4'-DDT			8.5	10	**9 – 256**
2,4'-DDD			8.5	9	**9 – 354**
2,4'-DDE			8.5	10	**9 – 94**
4,4'-DDT			67.7	6	**92 – 2412**
4,4'-DDD			16.9	14	**26 – 2073**
4,4'-DDE			16.9	14	**649 – 5538**
Total Chlordane	114000	14000	NA	14	**81 – 2023**
Cis-Chlordane			16.9	14	**18 – 270**
Trans-Chlordane			16.9	10	**16 – 82**
Cis-Nonachlor			8.5	14	**12 – 343**
Trans-Nonachlor			33.9	14	**51 – 1180**
Oxychlordane			8.5	13	**8 – 148**
Total Endosulfans					**24.6 – 179**
Endosulfan 1			16.9	10	**24.6 -179**
Endosulfan 2			30.0	3	**22.3 – 108**
Endosulfan Sulfate			67.7	1	**235**
Hexacyclohexanes (BHC)					
Alpha-BHC			16.9	1	**16**
Beta-BHC			16.9	0	
Delta-BHC			33.9	0	
Gamma-BHC (Lindane)			67.9	0	
Dieldrin	2500	307	16.9	14	**17 – 438**
Endrins					
Endrin			16.9	0	
Endrin Aldehyde				0	
Endrin Ketone			33.9	0	
Heptachlor					
Heptachlor			67.7	0	
Heptachlor Epioxide			16.9	2	**18 – 30**
Hexachlorobenzene	25000	3070	169	4	**171 – 447**
Mirex			8.5	8	**11 – 44**

Organochlorine Pesticides and Total DDT. In the current study, concentrations of DDT and its breakdown products were quantified and related compounds were combined and reported as total DDT. All composite fillet samples of fish collected at all mainstem and tributaries sites sampled in the Willamette River basin contained measurable amounts of total DDT (Figure 5, Table 9). Concentrations of total DDT in fillets ranged from below 1000 ng/kg (wet weight) in the upper basin to roughly ten-times that amount (~ 11000 ng/kg - wet weight) in the lower basin. The highest concentrations were found in the fish collected in Portland, near the Portland Harbor Superfund site. However, total DDT concentrations in fish tissues were generally lower compared to historic values measured in the Willamette River basin. Concentrations of DDT in fish fillets were below the USEPA screening levels for both recreational and subsistence anglers. DDT concentrations in fish fillets sampled in this study were below the calculated tissue target of 11700 ng/kg for subsistence anglers using the increased fish consumption rate of 175 g/day adopted by the EQC.

PCBs In an approach similar to that used to report total DDT concentrations, individual PCB congeners detected in fish tissue were summed and expressed as total PCB. Total PCBs were detected in every composited fish fillet sample collected in the Willamette River basin (Figure 6). PCBs (total) were detected near or above the USEPA screening levels for recreational anglers and well above those considered safe for subsistence anglers at every site sampled indicating that PCB concentrations in fish remain a human health concern. PCB concentrations measured in fish fillets were also above the tissue target of 2000 ng/kg calculated using the increased fish consumption rate of 175 g/day adopted by the EQC.

With one notable exception, most PCB values were lower at sites in the southern basin compared to those proximal to the Portland metro area (including higher PCB concentrations found in fish collected in the Multnomah Channel). The exception to this pattern was concentrations of total PCBs in northern pikeminnow collected in the Eugene/Springfield area. Fish collected at that site contained the highest concentrations of PCBs measured in the basin.

Dioxin and Furans. Polychlorinated dioxins (dioxins) and polychlorinated furans (furans) are related compounds and are commonly found together in environmental samples. Both classes of these compounds include up to 210 individual forms or congeners. Furans were by far the most common class of chlorinated bi-phenyl measured in the fish fillets. The most toxic form of either the dioxins or furans is 2,3.7.8 tetrachlorodibenzo dioxin which is also known as 2,3,7,8 TCDD. The concentrations of the individual congeners of the PCDD and PCDF can be summed and expressed as 2,3,7,8 TCDD toxic equivalents (TEQs). Concentrations of 2,3,7,8 TCDD TEQs were found in fish fillets at levels above USEPA screening values for both recreational and subsistence anglers (Figure 7). These concentrations also exceed tissue concentration targets for subsistence anglers of 0.0256 ng/kg calculated using the increased fish consumption rate of 175 g/day adopted by the EQC. While fish fillets from at all sites exceeded USEPA screening levels, the highest concentrations of TEQs were found at near the Portland Harbor which was added to the USEPA National Priorities List in December 2000. Contaminants of concern in the heavily industrialized river reach between Swan and Sauvie Islands includes PCBs, toxic metals (especially mercury), organochlorine pesticides as well as dioxin and furan.

Polybrominated diphenyl ethers (PBDEs) Measurable PBDEs concentrations were found in the tissue of fish at every site sampled in 2008, ranging from the low 1,900 to over 13,000 ng/kg. Concentrations do not follow any discernable upstream to downstream pattern and were found at relatively high concentrations in the tributaries sampled as well as the mainstem river (Figure 8). As stated earlier, no USEPA screening level criteria are available to compare with 2008 results.

Mercury. Mercury concentrations measured in individual fish were often at or above the federal and state 0.35 mg/Kg criteria (Figure 9). Mercury levels were generally greater in northern pikeminnow compared to that measured in smallmouth bass. The concentrations of mercury in northern pikeminnow demonstrated a greater range among individuals collected at each site. Data collected in 2008 will be used to evaluate and update the 2006 Willamette Basin TMDL for mercury scheduled for revision in 2012.

Figure 5. Summary of total DDT concentrations in composited fillet tissue samples of freshwater fish collected from sites in the WRB in 2008.

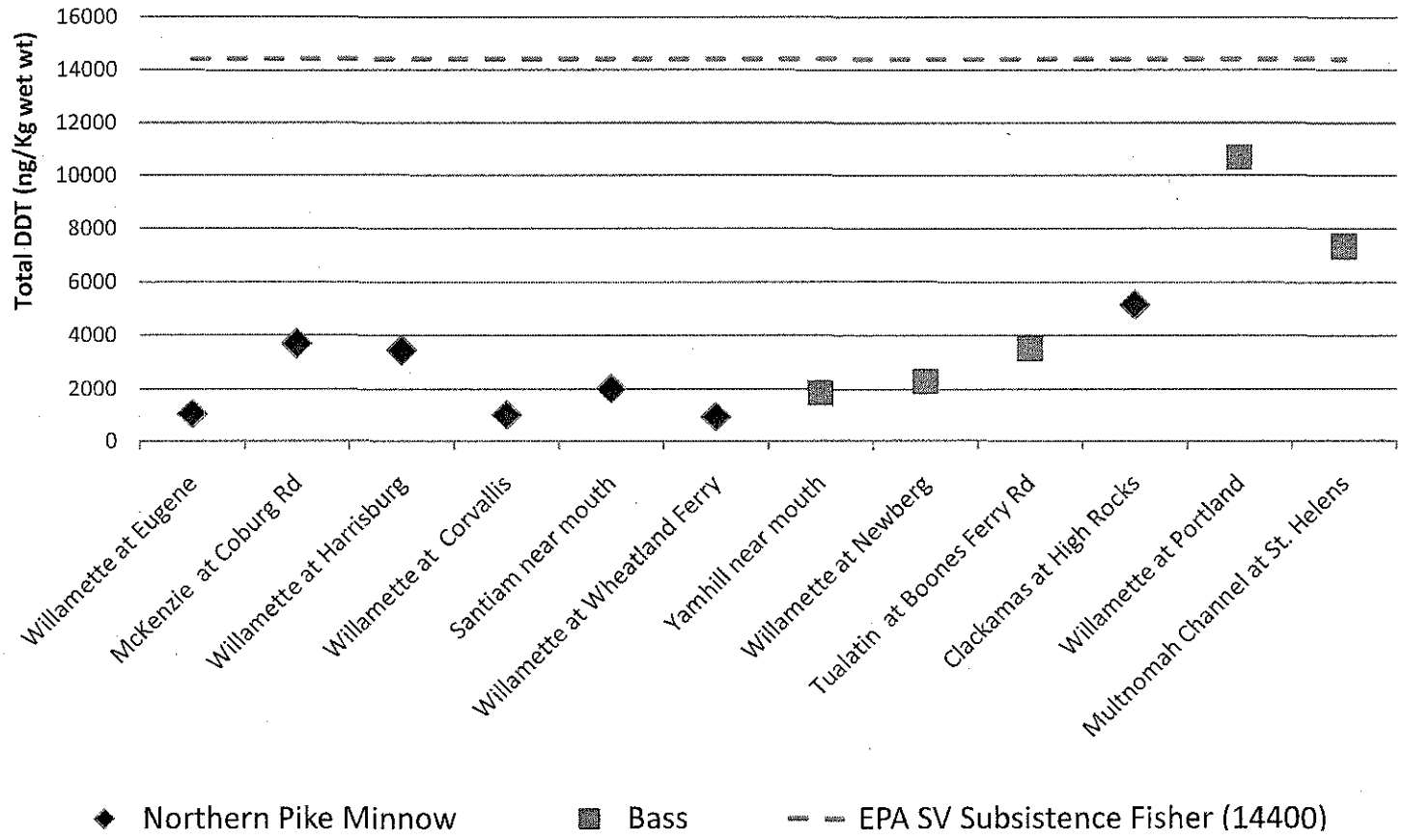


Figure 6. Summary of total PCBs concentrations in composited fillet tissue samples of freshwater fish collected from sites in the WRB in 2008.

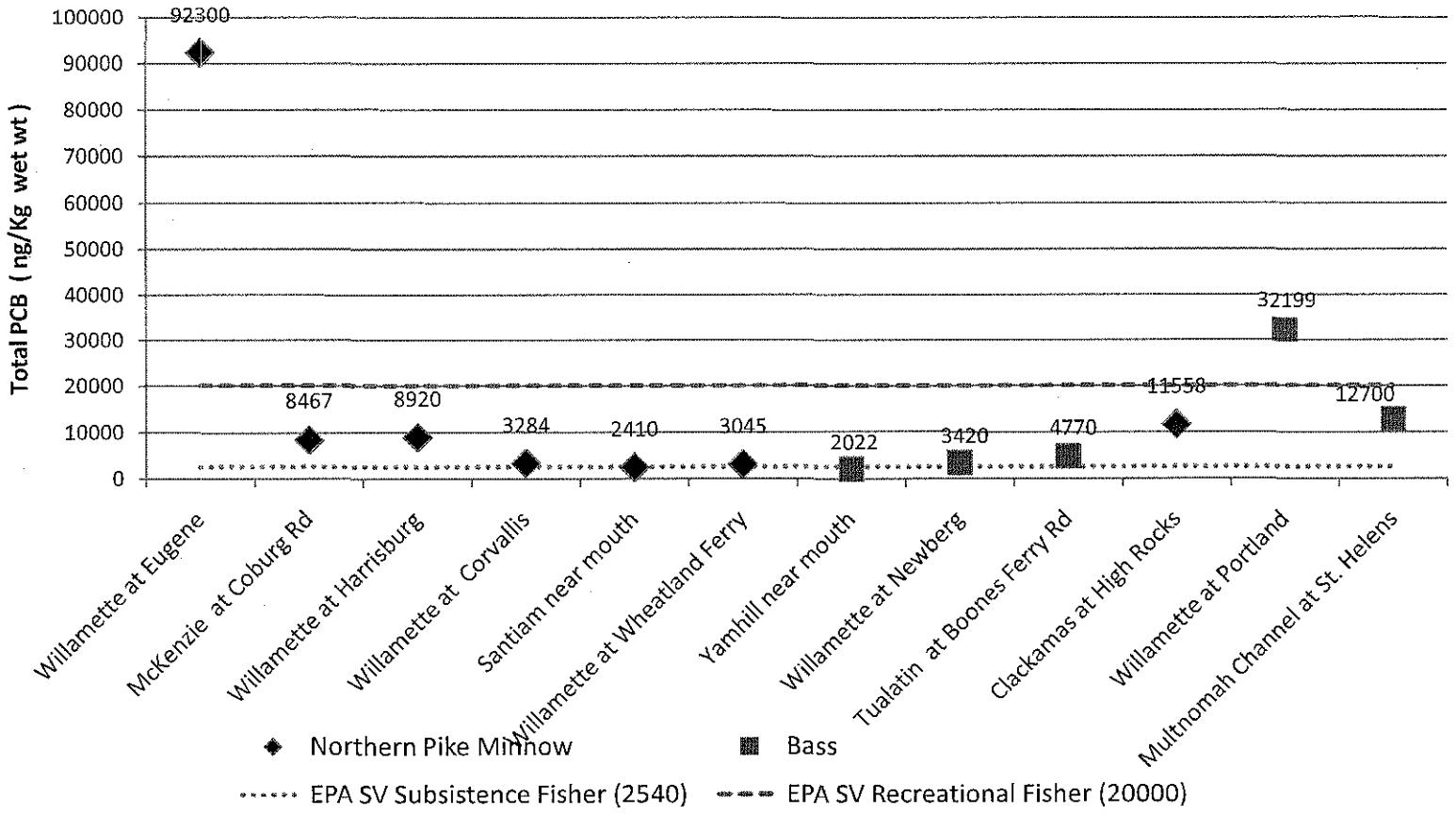


Figure 7. 2,3,7,8 TCDD TEQ concentrations in composited fillet tissue samples of resident fish collected from sites in the WRB in 2008.

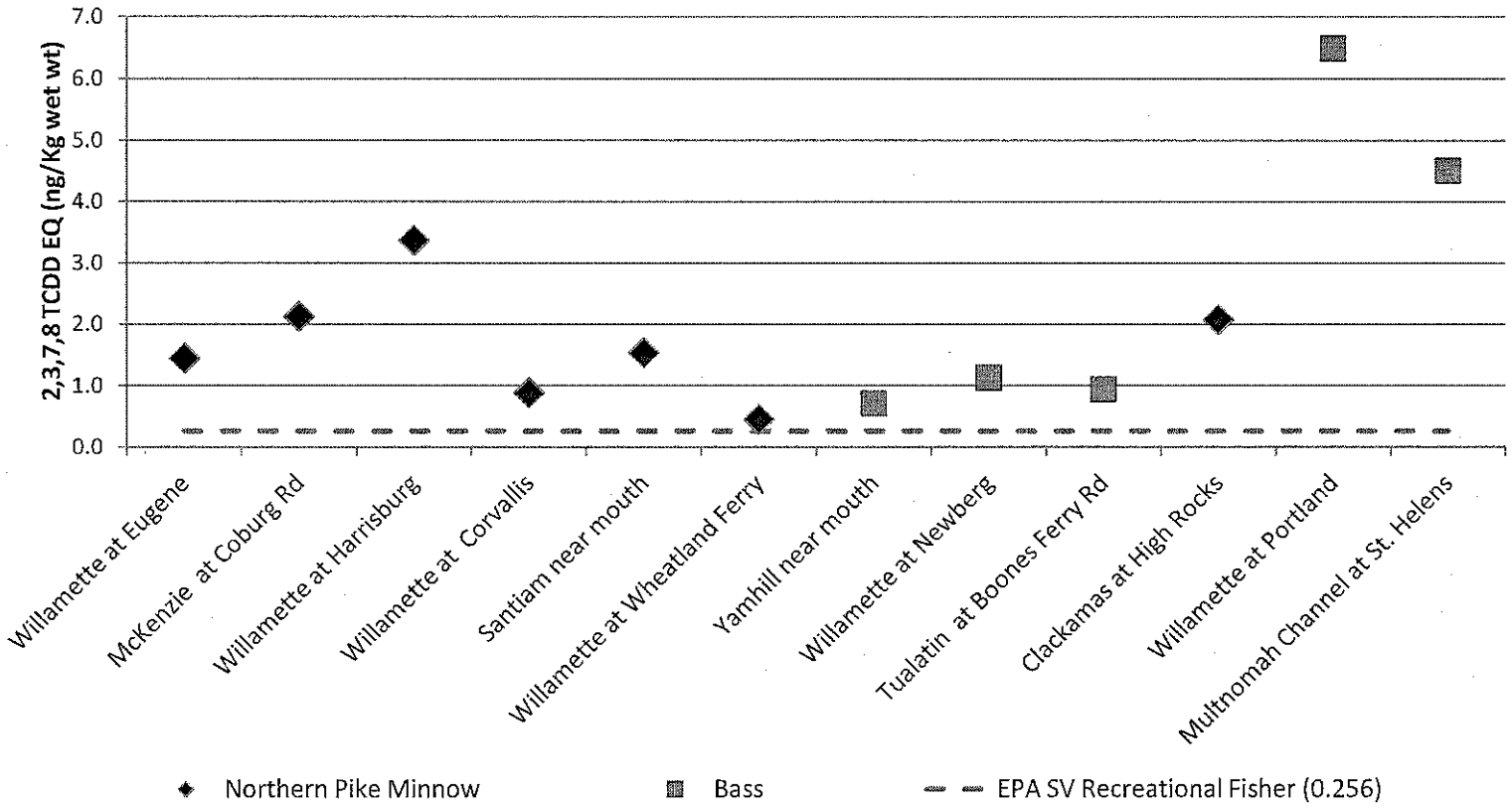


Figure 8. Summary of total PBDE concentrations in composited fillet tissue samples of freshwater fish collected from sites in the WRB in 2008.

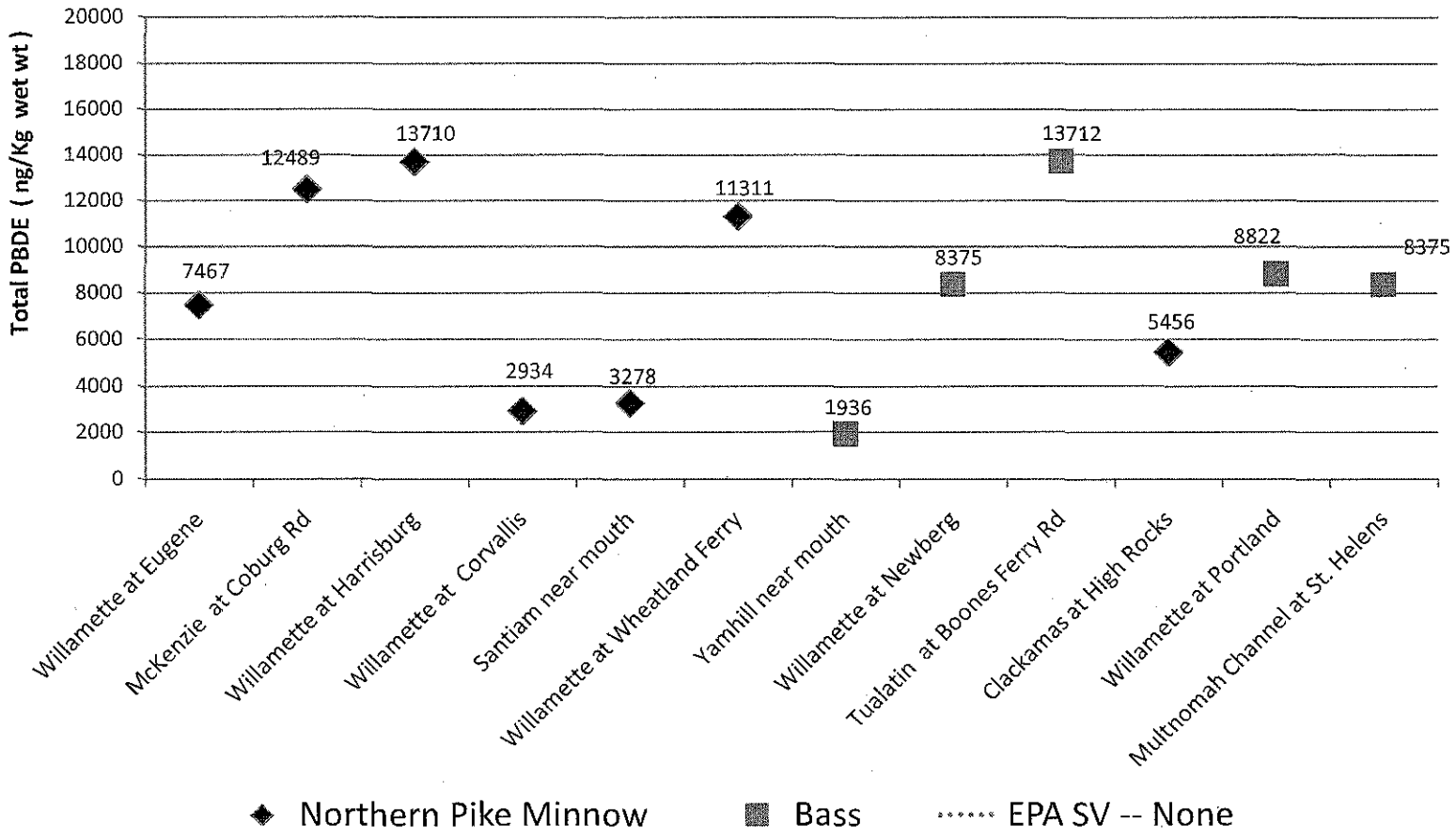
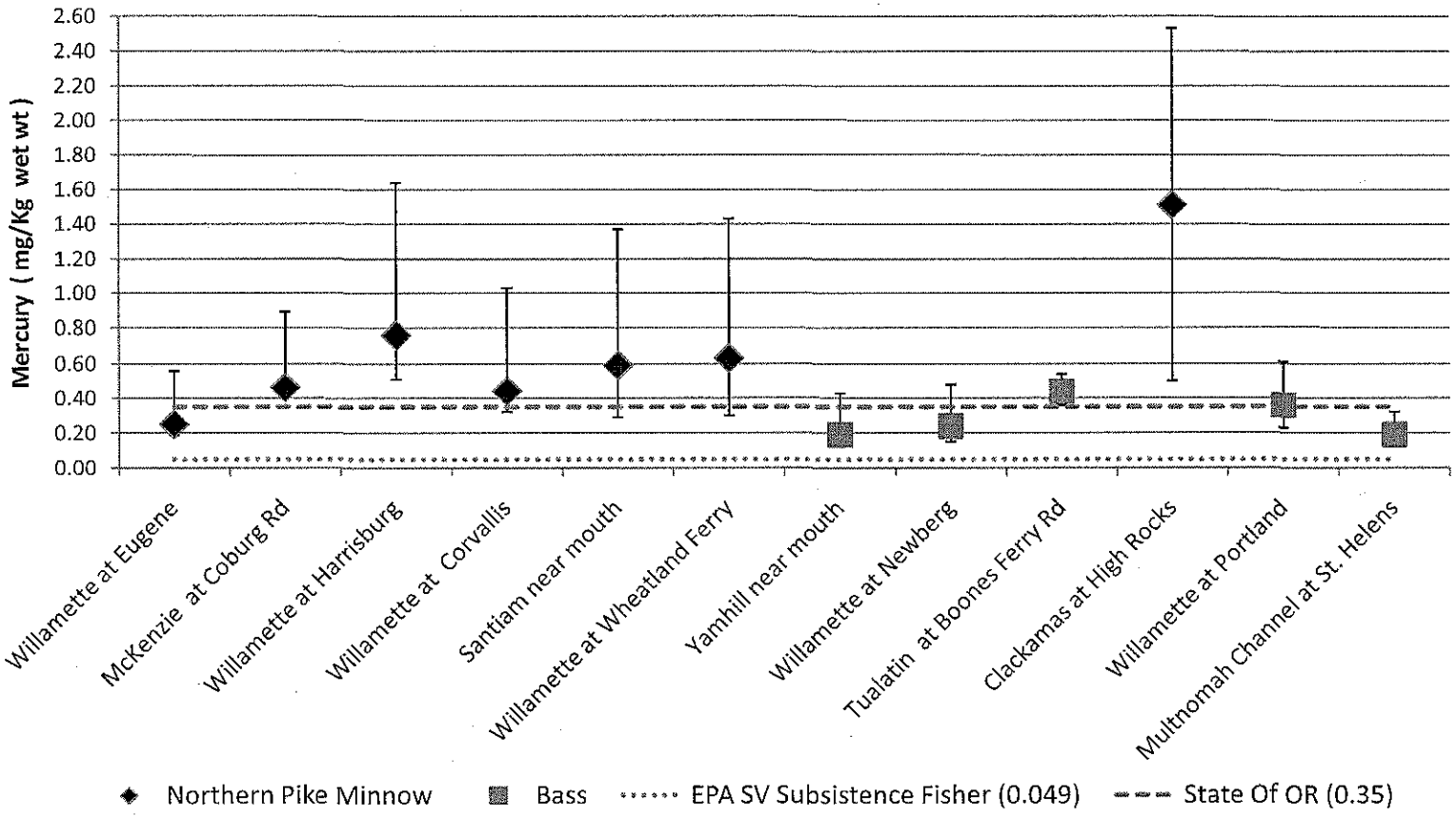


Figure 9. Summary of individual mercury concentrations in fillet tissue samples of freshwater fish collected from sites in the WRB in 2008.



Next Steps

In 2009 DEQ will repeat analysis of organic contaminants in surface water collected from the same 20 Willamette River basin primary sites sampled in 2008. To maximize comparability with the 2008 sampling, water collections at the primary sites for organic pollutant analysis will be conducted during the same low- and rising-flow periods as those sampled in 2008. In addition to planned sampling events, surface water sampling was conducted in early May 2009 at primary sites to provide additional information on contaminant concentrations during spring flow conditions. Preliminary results indicate pesticide concentrations were higher than found in 2008 monitoring events and sampling will be repeated in spring of 2010. Also in 2009, DEQ continued its collection of surface water at all 40 sites sampled in 2008 for total recoverable metals, including the primary and secondary sampling sites.

In addition to the follow-up water sampling planned for 2009, DEQ will conduct additional fish collection from 5 additional sites located upstream and downstream of the site in Springfield where elevated concentrations of total PCBs were found in the fillets of northern pikeminnow. This sampling is intended to confirm the 2008 findings and provide additional spatial resolution concerning the concentrations of PCBs and other organic contaminants in fish fillets from the area.

Five northern pikeminnow will be collected in October 2009 from the following sites:

Sub-basin	LASAR #	Site Description
McKenzie	10376	McKenzie R. below Mohawk R. (at Coburg Rd.)
Coast Fork Willamette	11275	Coast Fork Willamette R. (between Hwy 58 bridge (Dilley Landing) and Seavy Loop Rd.)
Middle Fork Willamette	10386	Middle Fork Willamette R. (between Jasper bridge ramp and Clearwater Park boat ramp)
Upper Willamette	10355	Willamette R. (between Marshall Island boat ramp and Harrisburg Park boat ramp)
Upper Willamette	29044	Willamette R. (between I-5 Bridge and the McKenzie R. at Greenway bike bridge, Eugene)
Upper Willamette	10359	Willamette R. (between Middle Fork Willamette R. and Highway 126 Bridge, Eugene/Springfield)

DEQ plans to evaluate the use of passive sampling devices in 2010. These devices are available in two configurations which sample a broad range of organic contaminants with varying degrees of water

solubility. Semi-permeable membrane devices are suitable for monitoring many hydrophobic pollutants such as organochlorine pesticides, PCBs and PBDEs. Polar organic chemical integrative samplers may be used to sample for numerous current use pesticides, pharmaceuticals and personal care products. They are typically field-deployed at fixed installations for up to 28 days. Semi-permeable membrane devices are designed to accumulate organic contaminants directly from the water, thereby simulating the uptake of these chemicals by fish. Unlike resident fish which occupy a home range, passive samplers remain fixed in place during their deployment. Information from this type of sampling may be particularly valuable in contaminant sources identification applications because they can be strategically placed upstream and downstream of suspected sources.

Also, in 2009 DEQ is developing its strategy to extend the Toxics Monitoring Program and setting the upcoming monitoring implementation schedule for all of the other major river basins in the state. This plan will build on operational and analytical experience gained in 2008 and 2009 and address the inclusion of persistent priority pollutants recommended by the SB 737 workgroup. Program staff seek opportunities to collaborate with and support other DEQ programs such as the NPDES Permitting Program, Pesticide Stewardship Partnership, Toxics Reduction Strategy and Drinking Water Source Protection Program. Staff will explore opportunities to partner and coordinate with other state agencies, especially Oregon Department of Human Services, Oregon Department of Agriculture's Water Quality Pesticide Management Team as well as locally-based watershed organizations.

In following years annual reports will be available to DEQ staff and stakeholders through web-based portals that document program developments. In 2013 DEQ will have completed the first round of toxics monitoring in all major river basins in Oregon. Data will be available to characterize the distribution and magnitude of pollutants well known in the Willamette River Basin, but rarely investigated in other regions. New field collection techniques and laboratory analytical methods will have been developed for legacy contaminants, current use pesticides and chemicals of emerging concern. Baseline data will be available throughout Oregon for many of these pollutants that will inform DEQ programs and pollution control and reduction strategies.

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Appendix A – Analyte Information

Names, Chemical Abstract Services (CAS) codes, minimum reporting levels (MRLs), units and analytical methods used to measure organic pollutants in water at primary sampling sites. Samples were collected in September and December 2008. Similar shading denotes chemical class. Yellow shading indicates that compound was measured using two analytical methods.

Name / Class	CAS	MRL	units	Method Number	Method Note
Volatile Organic Chemicals					
1,1,1,2-Tetrachloroethane	630206	0.0005	mg/L	8260 B	VOC by GC/MS
1,1,1-Trichloroethane	71556	0.0005	mg/L	8260 B	VOC by GC/MS
1,1,2,2-Tetrachloroethane	79345	0.0005	mg/L	8260 B	VOC by GC/MS
1,1,2,2-Tetrachloroethylene	127184	0.0005	mg/L	8260 B	VOC by GC/MS
1,1,2-Trichloroethane	79005	0.0005	mg/L	8260 B	VOC by GC/MS
1,1-Dichloroethane	75343	0.0005	mg/L	8260 B	VOC by GC/MS
1,1-Dichloroethylene	75354	0.0005	mg/L	8260 B	VOC by GC/MS
1,1-Dichloropropene	563586	0.0005	mg/L	8260 B	VOC by GC/MS
1,2,3-Trichlorobenzene	87616	0.0005	mg/L	8260 B	VOC by GC/MS
1,2,3-Trichloropropane (TCP)	96184	0.0005	mg/L	8260 B	VOC by GC/MS
1,2,4-Trichlorobenzene	120821	0.0005	mg/L	8260 B	VOC by GC/MS
1,2,4-Trimethylbenzene	95636	0.0005	mg/L	8260 B	VOC by GC/MS
1,2-Dibromo-3-chloropropane (DBCP)	96128	0.001	mg/L	8260 B	VOC by GC/MS
1,2-Dibromoethane (EDB)	106934	0.0005	mg/L	8260 B	VOC by GC/MS
1,2-Dichlorobenzene	95501	0.0005	mg/L	8260 B	VOC by GC/MS
1,2-Dichloroethane	107062	0.0005	mg/L	8260 B	VOC by GC/MS
1,2-Dichloropropane	78875	0.0005	mg/L	8260 B	VOC by GC/MS
1,2-Dimethylbenzene	95476	0.0005	mg/L	8260 B	VOC by GC/MS
1,3,5-Trimethylbenzene	108678	0.0005	mg/L	8260 B	VOC by GC/MS
1,3-Dichlorobenzene	541731	0.0005	mg/L	8260 B	VOC by GC/MS
1,3-Dichloropropane	142289	0.0005	mg/L	8260 B	VOC by GC/MS
1,4/1,3-Dimethylbenzene	106423/108383	0.001	mg/L	8260 B	VOC by GC/MS
1,4-Dichlorobenzene	106467	0.0005	mg/L	8260 B	VOC by GC/MS
2,2-Dichloropropane	594207	0.0005	mg/L	8260 B	VOC by GC/MS
2-Butanone (MEK)	78933	0.05	mg/L	8260 B	VOC by GC/MS
2-Chloroethyl Vinyl Ether	110758	0.0005	mg/L	8260 B	VOC by GC/MS
2-Chlorotoluene	95498	0.0005	mg/L	8260 B	VOC by GC/MS
4-Chlorotoluene	106434	0.001	mg/L	8260 B	VOC by GC/MS
4-isopropyltoluene	99876	0.0005	mg/L	8260 B	VOC by GC/MS
4-Methyl-2-Pentanone (MIBK)	108101	0.0012	mg/L	8260 B	VOC by GC/MS
Acetone	67641	0.0015	mg/L	8260 B	VOC by GC/MS
Acrolein (2-Propenal)	107028	0.0015	mg/L	8260 B	VOC by GC/MS
Benzene	71432	0.0005	mg/L	8260 B	VOC by GC/MS
Bromobenzene	108861	0.0005	mg/L	8260 B	VOC by GC/MS
Bromochloromethane	74975	0.0005	mg/L	8260 B	VOC by GC/MS
Bromodichloromethane	75274	0.0005	mg/L	8260 B	VOC by GC/MS
Bromoform	75252	0.0005	mg/L	8260 B	VOC by GC/MS
Bromomethane	74839	0.0005	mg/L	8260 B	VOC by GC/MS
Carbon Disulfide	75150	0.0005	mg/L	8260 B	VOC by GC/MS
Carbon Tetrachloride	56235	0.0005	mg/L	8260 B	VOC by GC/MS
Chlorobenzene	108907	0.0005	mg/L	8260 B	VOC by GC/MS

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Name / Class	CAS	MRL	units	Method Number	Method Note
Chloroethane	75003	0.0005	mg/L	8260 B	VOC by GC/MS
Chloroform	67663	0.0005	mg/L	8260 B	VOC by GC/MS
Chloromethane	74873	0.0005	mg/L	8260 B	VOC by GC/MS
cis-1,2-Dichloroethylene	156592	0.0005	mg/L	8260 B	VOC by GC/MS
cis-1,3-Dichloropropene	10061015	0.0005	mg/L	8260 B	VOC by GC/MS
Dibromochloromethane	124481	0.0005	mg/L	8260 B	VOC by GC/MS
Dibromomethane	74953	0.0005	mg/L	8260 B	VOC by GC/MS
Dichlorodifluoromethane	75718	0.0005	mg/L	8260 B	VOC by GC/MS
Ethyl Benzene	100414	0.0005	mg/L	8260 B	VOC by GC/MS
Hexachloro-1,3-Butadiene	87683	0.0005	mg/L	8260 B	VOC by GC/MS
Isopropylbenzene (Cumene)	98828	0.0006	mg/L	8260 B	VOC by GC/MS
Methylene Chloride	75092	0.0005	mg/L	8260 B	VOC by GC/MS
MtBE	1634044	0.0005	mg/L	8260 B	VOC by GC/MS
Naphthalene	91203	0.0005	mg/L	8260 B	VOC by GC/MS
n-butylbenzene	104518	0.0005	mg/L	8260 B	VOC by GC/MS
n-Propylbenzene	103651	0.0005	mg/L	8260 B	VOC by GC/MS
sec-Butylbenzene	135988	0.001	mg/L	8260 B	VOC by GC/MS
Styrene	100425	0.0005	mg/L	8260 B	VOC by GC/MS
Tentatively Identified Compound		NA	mg/L	8260 B	VOC by GC/MS
tert-Butylbenzene	98066	0.0005	mg/L	8260 B	VOC by GC/MS
Toluene	108883	0.0005	mg/L	8260 B	VOC by GC/MS
trans-1,2-Dichloroethylene	156605	0.0005	mg/L	8260 B	VOC by GC/MS
Trichloroethylene	79016	0.0005	mg/L	8260 B	VOC by GC/MS
Trichlorofluoromethane	75694	0.0005	mg/L	8260 B	VOC by GC/MS
trans-1,3-Dichloropropene	10061026	0.0005	mg/L	8260 B	VOC by GC/MS
Vinyl Chloride	75014	0.0005	mg/L	8260 B	VOC by GC/MS
Semi-volatile organic chemicals					
2,2',3,4,4',5',6-Heptabromodiphenyl ether (PBDE 183)	207122165	20	ng/L	8270 C	SVOC by GC/MS
2,2',3,4,4',5'-Hexabromodiphenyl ether (PBDE 138)	182677301	20	ng/L	8270 C	SVOC by GC/MS
2,2',3,4,4'-Pentabromodiphenyl ether (PBDE 85)	32534819	20	ng/L	8270 C	SVOC by GC/MS
2,2',4,4',5,5'-Hexabromodiphenyl ether (PBDE 153)	68631492	20	ng/L	8270 C	SVOC by GC/MS
2,2',4,4',5,6'-Hexabromodiphenyl ether (PBDE 154)	207122154	20	ng/L	8270 C	SVOC by GC/MS
2,2',4,4',5-Pentabromodiphenyl ether (PBDE 99)	60348609	20	ng/L	8270 C	SVOC by GC/MS
2,2',4,4',6-Pentabromodiphenyl ether (PBDE 100)	189084648	20	ng/L	8270 C	SVOC by GC/MS
2,2',4,4'-Tetrabromodiphenyl ether (PBDE 47)	5436431	20	ng/L	8270 C	SVOC by GC/MS
2,2',4-Tribromodiphenyl ether (PBDE 17)	147217752	20	ng/L	8270 C	SVOC by GC/MS
2,3',4,4'-Tetrabromodiphenyl ether (PBDE 66)	189084615	20	ng/L	8270 C	SVOC by GC/MS
2,3',4',6-Tetrabromodiphenyl ether (PBDE 71)	189084626	20	ng/L	8270 C	SVOC by GC/MS
2,4,4'-Tribromodiphenyl ether (PBDE 28)	41318756	20	ng/L	8270 C	SVOC by GC/MS
2,4-Dinitrotoluene	121142	40	ng/L	8270 C	SVOC by GC/MS
2,6-Dinitrotoluene	606202	20	ng/L	8270 C	SVOC by GC/MS
4,4`-DDD		20	ng/L	8270 C	SVOC by GC/MS
4,4`-DDE		20	ng/L	8270 C	SVOC by GC/MS
4,4`-DDT		20	ng/L	8270 C	SVOC by GC/MS
Acenaphthene	83329	20	ng/L	8270 C	SVOC by GC/MS
Acenaphthylene	208968	20	ng/L	8270 C	SVOC by GC/MS

Name / Class	CAS	MRL	units	Method Number	Method Note
Alachlor	15972608	5	ηg/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Alachlor	15972608	20	ηg/L	8270 C	SVOC by GC/MS
Aldrin	309002	20	ηg/L	8270 C	SVOC by GC/MS
alpha-BHC	319846	20	ηg/L	8270 C	SVOC by GC/MS
Ametryn	834128	1	ηg/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Ametryn	834128	20	ηg/L	8270 C	SVOC by GC/MS
Anthracene	120127	20	ηg/L	8270 C	SVOC by GC/MS
Atraton	1610179	80	ηg/L	8270 C	SVOC by GC/MS
Atrazine	1912249	2	ηg/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Atrazine	1912249	80	ηg/L	8270 C	SVOC by GC/MS
Azinphos Methyl	86500	10	ηg/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Azinphos Methyl	86500	20	ηg/L	8270 C	SVOC by GC/MS
Benzo(a)anthracene	-99999	20	ηg/L	8270 C	SVOC by GC/MS
Benzo(a)pyrene	-99999	20	ηg/L	8270 C	SVOC by GC/MS
Benzo[b]fluoranthene	205992	20	ηg/L	8270 C	SVOC by GC/MS
Benzo[g,h,i]perylene	191242	20	ηg/L	8270 C	SVOC by GC/MS
Benzo[k]fluoranthene	207089	20	ηg/L	8270 C	SVOC by GC/MS
beta-BHC	319857	40	ηg/L	8270 C	SVOC by GC/MS
Bis(2-ethylhexyl)adipate	103231	100	ηg/L	8270 C	SVOC by GC/MS
Bis(2-ethylhexyl)phthalate	117817	500	ηg/L	8270 C	SVOC by GC/MS
Bromacil	314409	20	ηg/L	8270 C	SVOC by GC/MS
Butachlor	23184669	20	ηg/L	8270 C	SVOC by GC/MS
Butylate	2008415	70	ηg/L	8270 C	SVOC by GC/MS
Butylbenzylphthalate	85687	200	ηg/L	8270 C	SVOC by GC/MS
Carboxin	5234684	20	ηg/L	8270 C	SVOC by GC/MS
Chlorobenzilate(a)		20	ηg/L	8270 C	SVOC by GC/MS
Chloroneb	2675776	20	ηg/L	8270 C	SVOC by GC/MS
Chlorothalonil	-99999	20	ηg/L	8270 C	SVOC by GC/MS
Chlorpropham	101213	20	ηg/L	8270 C	SVOC by GC/MS
Chlorpyriphos (Dursban)		20	ηg/L	8270 C	SVOC by GC/MS
Chrysene	218019	20	ηg/L	8270 C	SVOC by GC/MS
cis-Chlordane	-99999	20	ηg/L	8270 C	SVOC by GC/MS
Cyanazine	21725462	20	ηg/L	8270 C	SVOC by GC/MS
Cycloate	1134232	20	ηg/L	8270 C	SVOC by GC/MS
Dacthal	1861321	20	ηg/L	8270 C	SVOC by GC/MS
DEET	134623	2.5	ηg/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
DEET	134623	20	ηg/L	8270 C	SVOC by GC/MS
delta-BHC	319868	20	ηg/L	8270 C	SVOC by GC/MS
Diazinon	333415	20	ηg/L	8270 C	SVOC by GC/MS
Dibenz[a,h]anthracene		20	ηg/L	8270 C	SVOC by GC/MS
Dichlorvos	62737	20	ηg/L	8270 C	SVOC by GC/MS
Dieldrin	60571	20	ηg/L	8270 C	SVOC by GC/MS
Diethylphthalate	84662	40	ηg/L	8270 C	SVOC by GC/MS
Dimethoate	60515	20	ηg/L	8270 C	SVOC by GC/MS
Dimethylphthalate	131113	20	ηg/L	8270 C	SVOC by GC/MS
Diphenamid	0	20	ηg/L	8270 C	SVOC by GC/MS
Disulfoton	-99999	20	ηg/L	8270 C	SVOC by GC/MS
Endosulfan I	959988	20	ηg/L	8270 C	SVOC by GC/MS
Endosulfan II	33213659	20	ηg/L	8270 C	SVOC by GC/MS

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Name / Class	CAS	MRL	units	Method Number	Method Note
Endosulfan sulfate	1031078	20	ng/L	8270 C	SVOC by GC/MS
Endrin	72208	80	ng/L	8270 C	SVOC by GC/MS
Endrin Aldehyde	7421934	40	ng/L	8270 C	SVOC by GC/MS
EPTC (Eptam)	759944	20	ng/L	8270 C	SVOC by GC/MS
Ethoprophos		20	ng/L	8270 C	SVOC by GC/MS
Etridiazole	2593159	20	ng/L	8270 C	SVOC by GC/MS
Fenamiphos	22224926	20	ng/L	8270 C	SVOC by GC/MS
Fenarimol	60168889	20	ng/L	8270 C	SVOC by GC/MS
Fenvalerate+Esfenvalerate		100	ng/L	8270 C	SVOC by GC/MS
Fluoranthene	206440	20	ng/L	8270 C	SVOC by GC/MS
Fluorene	86737	20	ng/L	8270 C	SVOC by GC/MS
Fluridone	59756604	20	ng/L	8270 C	SVOC by GC/MS
Heptachlor	76448	20	ng/L	8270 C	SVOC by GC/MS
Hexachlorobenzene	118741	20	ng/L	8270 C	SVOC by GC/MS
Hexachlorocyclopentadiene	77474	20	ng/L	8270 C	SVOC by GC/MS
Hexazinone	51235042	20	ng/L	8270 C	SVOC by GC/MS
Imidan (Phosmet)	732116	20	ng/L	8270 C	SVOC by GC/MS
Indeno[1,2,3-cd]pyrene	193395	20	ng/L	8270 C	SVOC by GC/MS
Isophorone	78591	40	ng/L	8270 C	SVOC by GC/MS
Lindane	-99999	40	ng/L	8270 C	SVOC by GC/MS
Malathion	121755	20	ng/L	8270 C	SVOC by GC/MS
Methoxychlor	72435	20	ng/L	8270 C	SVOC by GC/MS
Metolachlor	51218452	5	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Metolachlor	51218452	20	ng/L	8270 C	SVOC by GC/MS
Metribuzin	21087649	2	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Metribuzin	21087649	20	ng/L	8270 C	SVOC by GC/MS
Methyl paraoxon	950356	20	ng/L	8270 C	SVOC by GC/MS
Methyl Parathion	-99999	20	ng/L	8270 C	SVOC by GC/MS
MGK-264	113484	40	ng/L	8270 C	SVOC by GC/MS
Molinate	2212671	20	ng/L	8270 C	SVOC by GC/MS
Napropamide	15299997	20	ng/L	8270 C	SVOC by GC/MS
Norflurazon	27314132	20	ng/L	8270 C	SVOC by GC/MS
PCB-1 (2-Chlorobiphenyl)	2051607	20	ng/L	8270 C	SVOC by GC/MS
PCB-154 (2,2',4,4',5,6'-Hexachlorobiphenyl)		20	ng/L	8270 C	SVOC by GC/MS
PCB-171 (2,2`,3,3`,4,4`,6-Heptachlorobiphenyl)	52663715	20	ng/L	8270 C	SVOC by GC/MS
PCB-200 (2,2',3,3',4,5',6,6'-Octachlorobiphenyl)		20	ng/L	8270 C	SVOC by GC/MS
PCB-29 (2,4,5-Trichlorobiphenyl)	15862074	20	ng/L	8270 C	SVOC by GC/MS
PCB-47 (2,2`,4,4`-Tetrachlorobiphenyl)	2437798	20	ng/L	8270 C	SVOC by GC/MS
PCB-5 (2,3-Dichlorobiphenyl)	16605917	20	ng/L	8270 C	SVOC by GC/MS
PCB-98 (2,2',3',4,6-Pentachlorobiphenyl)		20	ng/L	8270 C	SVOC by GC/MS
Pebulate	1114712	20	ng/L	8270 C	SVOC by GC/MS
Pendimethalin	40487421	20	ng/L	8270 C	SVOC by GC/MS
Pentachlorophenol	87865	0.1	µg/L	6640B	Chlorinated acids Micro Liquid/Liquid and GC/ECD
Pentachlorophenol	87865	80	ng/L	8270 C	SVOC by GC/MS
Permethrin	52645531	40	ng/L	8270 C	SVOC by GC/MS
Phenanthrene	85018	20	ng/L	8270 C	SVOC by GC/MS
Prometryn		20	ng/L	8270 C	SVOC by GC/MS
Pronamide	23950585	20	ng/L	8270 C	SVOC by GC/MS
Propachlor	1918167	20	ng/L	8270 C	SVOC by GC/MS

Name / Class	CAS	MRL	units	Method Number	Method Note
Propazine	139402	2	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Propazine	139402	20	ng/L	8270 C	SVOC by GC/MS
Pyrene	129000	20	ng/L	8270 C	SVOC by GC/MS
Pyriproxyfen	95737681	50	ng/L	8270 C	SVOC by GC/MS
Tebuthiuron	34014181	20	ng/L	8270 C	SVOC by GC/MS
Tentatively Identified Compound		NA	ng/L	8270 C	SVOC by GC/MS
Terbacil	5902512	20	ng/L	8270 C	SVOC by GC/MS
Terbufos	13071799	40	ng/L	8270 C	SVOC by GC/MS
Terbutryne		1	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Terbutryne		20	ng/L	8270 C	SVOC by GC/MS
Tetrachlorvinphos	961115	20	ng/L	8270 C	SVOC by GC/MS
trans-Chlordane	5103742	20	ng/L	8270 C	SVOC by GC/MS
trans-Nonachlor	39765805	20	ng/L	8270 C	SVOC by GC/MS
Triadimefon		20	ng/L	8270 C	SVOC by GC/MS
Tricyclazole	41814782	20	ng/L	8270 C	SVOC by GC/MS
Trifluralin	1582098	20	ng/L	8270 C	SVOC by GC/MS
Vernolate	1929777	20	ng/L	8270 C	SVOC by GC/MS
Steroids and Hormones					
17a-Estradiol	57910	5	ng/L	1698	Steroids and Hormones by HRGC/MS
17a-Ethynyl Estradiol	57636	2	ng/L	1698	Steroids and Hormones by HRGC/MS
17ß-Estradiol	50282	2	ng/L	1698	Steroids and Hormones by HRGC/MS
Cholesterol	57885	75	ng/L	1698	Steroids and Hormones by HRGC/MS
Coprostanol	360689	5	ng/L	1698	Steroids and Hormones by HRGC/MS
Estriol	50271	2	ng/L	1698	Steroids and Hormones by HRGC/MS
Estrone	53167	5	ng/L	1698	Steroids and Hormones by HRGC/MS
Chlorinated Acids					
2,4,5-T	93765	0.1	µg/L	6640B	Chlorinated acids Micro Liquid/Liquid and GC/ECD
2,4-D	94757	0.1	µg/L	6640B	Chlorinated acids Micro Liquid/Liquid and GC/ECD
2,4-DB	94826	0.6	µg/L	6640B	Chlorinated acids Micro Liquid/Liquid and GC/ECD
3,5-Dichlorobenzoic acid	513655	0.3	µg/L	6640B	Chlorinated acids Micro Liquid/Liquid and GC/ECD
Acifluorfen	72178020	0.2	µg/L	6640B	Chlorinated acids Micro Liquid/Liquid and GC/ECD
Bentazon	25057890	0.6	µg/L	6640B	Chlorinated acids Micro Liquid/Liquid and GC/ECD
Chloramben	133904	0.6	µg/L	6640B	Chlorinated acids Micro Liquid/Liquid and GC/ECD
Dicamba	1918009	0.3	µg/L	6640B	Chlorinated acids Micro Liquid/Liquid and GC/ECD
Dichloroprop	120365	0.3	µg/L	6640B	Chlorinated acids Micro Liquid/Liquid and GC/ECD
Dinoseb	88857	0.3	µg/L	6640B	Chlorinated acids Micro Liquid/Liquid and GC/ECD
MCPA	94746	20	µg/L	6640B	Chlorinated acids Micro Liquid/Liquid and GC/ECD
MCPP	7085190	50	µg/L	6640B	Chlorinated acids Micro Liquid/Liquid and GC/ECD
Pentachlorophenol	87865	0.1	µg/L	6640B	Chlorinated acids Micro Liquid/Liquid and GC/ECD
Picloram	1918021	0.6	µg/L	6640B	Chlorinated acids Micro Liquid/Liquid and GC/ECD
Silvex	93721	0.1	µg/L	6640B	Chlorinated acids Micro Liquid/Liquid and GC/ECD
Triclopyr	55335063	0.3	µg/L	6640B	Chlorinated acids Micro Liquid/Liquid and GC/ECD
Pharmaceuticals / Personal Care Products					
Acetaminophen		500	ng/L	1694	Pharmaceuticals and Personal Care Products by LC/MS/MS
Caffeine	58082	125	ng/L	1694	Pharmaceuticals and Personal Care Products by LC/MS/MS
Carbamazepine		10	ng/L	1694	Pharmaceuticals and Personal Care Products by LC/MS/MS
Codeine		25	ng/L	1694	Pharmaceuticals and Personal Care Products by LC/MS/MS
Diphenhydramine		10	ng/L	1694	Pharmaceuticals and Personal Care Products by

Name / Class	CAS	MRL	units	Method Number	Method Note
					LC/MS/MS
Sulfamethoxazole		10	ng/L	1694	Pharmaceuticals and Personal Care Products by LC/MS/MS
Venlafaxine		10	ng/L	1694	Pharmaceuticals and Personal Care Products by LC/MS/MS
Solvent Extractable, Non-Volatile Compounds					
Acetochlor		5	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Alachlor	15972608	5	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Ametryn	834128	1	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Aminocarb	2032599	1	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Atrazine	1912249	2	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Azinphos Methyl	86500	10	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Baygon	114261	1	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Carbaryl	63252	2.5	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Carbofuran	1563662	1	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
DEET	134623	2.5	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Diuron	330541	2	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Fluometuron	NA	2	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Imazapyr		20	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Imidacloprid		10	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Linuron	330552	2	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Methiocarb	2032657	2	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Methomyl	16752775	1	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Metolachlor	51218452	5	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Metribuzin	21087649	2	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Mexacarbate		1	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Neburon	555373	2.5	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Oxyamyl		1	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Prometon	1610180	2	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Prometryn		1	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Propazine	139402	2	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Propiconazole	NA	10	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Pyraclostrobin		2	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Siduron	1982496	1	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS

Name / Class	CAS	MRL	units	Method Number	Method Note
Simazine	122349	2	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Simetryn	1014706	2	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Terbutryne		1	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS
Terbutylazine		1	ng/L	8321	Solvent Extractable Non-Volatile Compounds by HPLC/ TS/ MS

Appendix B – List of Acronyms

2,3,7,8 TCDD	2,3,7,8 tetrachloro dibenzodioxin
2,4,5 T	2,4,5 trichloro phenoxyacetic acid
CWA	Clean Water Act
DDT	Dichloro diphenyl trichloroethane
DEET	N,N-Diethyl-meta-toluamide
DEQ	Oregon Department of Environmental Quality
DHS	Oregon Department of Human Services
EQC	Enivronmental Quality Commission
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
HUC	Hydrological Unit Code
LASAR	DEQ Laboratory Analytical Storage and Retrieval database
LOQ	Level of Quantitation
mg/kg	milligrams per kilogram
µg/L	micrograms per liter
MRL	Method Reporting Limit
ng/kg	nanograms per kilogram
ng/L	nanograms per liter
NPDES	National Pollutant Discharge Elimination System
NPM	Northern pikeminnow
OAR	Oregon Administrative Rules
ODA	Oregon Department of Agriculture
P3 List	Senate Bill 737 Priority Pollutant List
PAH	Polyaromatic hydrocarbon
PBDE	Polybrominated diphenyl ether
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxin
PCDF	Polychlorinated dibenzofuran
POCIS	Polar Organic Chemical Integrative Sampler
PPCP	Pharmaceuticals and personal care products
SMB	Smallmouth bass
SPMD	Semi-permeable Membrane Devices
SVOC	Semi-volatile organic compound
TMP	Toxics Monitoring Program
USEPA / EPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VOC	Volatile organic compound
WQPMT	Water Quality Pesticide Management Team
WRB	Willamette River Basin

State of Oregon
Department of Environmental Quality Memorandum

Date: September 29, 2009

To: Environmental Quality Commission

From: Dick Pedersen, Director

Subject: Agenda Item F, Informational and Discussion Item: Draft Willamette Basin Rivers and Streams Assessment Report
October 22-23, 2009 EQC Meeting

Why this is Important

DEQ works to restore, maintain and enhance the quality of Oregon's air, land and water. Part of this work is evaluating the current and historical conditions of Oregon's environment, and having high-quality scientific data to support policy decisions. The Willamette Basin Rivers and Streams Assessment is based on a long-term study of water quality conditions related to land use in the Willamette River Basin and illustrates a number of themes in water quality and ecological health.

Background

For over ten years, DEQ, the Environmental Protection Agency, watershed councils, municipalities and university students have been collecting data on biological, chemical and habitat conditions in the Willamette River Basin. Much of this work was done under the Oregon Plan for Salmon and Watersheds. In 2008, the Oregon Watershed Enhancement Board provided funding for DEQ to summarize this information. The information was collected using similar protocols and compatible sampling designs, which allowed DEQ staff to combine the data sets into an integrated assessment of the conditions of rivers and streams in the Willamette Basin.

Results

DEQ found that 80 percent of agricultural and urban lands, and 20 percent of forest lands, in the Willamette Basin had impaired conditions for aquatic insects, fish and amphibians. Warm water temperatures, inadequate streamside vegetation and excessive streambed sediment were the most extensive and severe stresses on the biological conditions. The water quality condition, as shown by the Oregon Water Quality Index, strongly related to the conditions of the biological communities. Poor water quality indicated struggling biological communities, and good water quality indicated thriving biological communities.

This draft report suggests that stronger actions to protect streamside vegetation would benefit biological conditions in the Willamette Basin.

Key Issues

Laboratory managers would like this opportunity to engage the commission in a conversation to discuss:

- How this draft report and assessment links to other DEQ programs;
- Why this draft report does not look at trends in the Willamette Basin; and
- Why a statistically based and large-scale assessment like the Willamette Basin Streams and Rivers Assessment is of interest to DEQ.

Questions for Discussion

Based on the conversation and discussion outlined above, staff at DEQ would like EQC's feedback and discussion on:

- Is this type of assessment part of DEQ's core water quality activities;
- What are the implications of this data in our work with other agencies;
- How should this information be used to achieve more effective water quality management programs and how do we do so while maintaining the scientific objectivity of the assessment reporting; and
- How we can combine the results of all our many and diverse assessment activities to better communicate with the public about the overall conditions of Oregon's waters.

EQC Involvement

The commission will review the report, discuss the questions above and suggest feedback based on the report and presentation.

Attachments

A. Draft Willamette Basin Streams and Rivers Assessment Report – file on CD

Approved:

Division:



Report Prepared By: Aaron Borisenko
Phone: (503) 693-5723

State of Oregon
Department of Environmental Quality Memorandum

Date: September 29, 2009

To: Environmental Quality Commission

From: Dick Pedersen, Director

Subject: Agenda Item G, Informational Item: Klamath Falls Fine Particulate Matter ($PM_{2.5}$) Attainment Plan
October 22-23, 2009 EQC Meeting

Purpose of Item This item informs the Environmental Quality Commission about the development of a $PM_{2.5}$ attainment plan for Klamath Falls. Klamath Falls currently violates the daily $PM_{2.5}$ standard and DEQ must develop a $PM_{2.5}$ attainment plan to bring the area back into compliance.

Background

What are the federal standards for $PM_{2.5}$?
In September 2006, the U.S. Environmental Protection Agency strengthened the $PM_{2.5}$, or fine particulate, standard by lowering the daily level from 65 $\mu g/m^3$ to 35 $\mu g/m^3$ and EPA retained the annual $PM_{2.5}$ standard of 15 $\mu g/m^3$. Fine particulate matter is a mixture of extremely small particles and droplets in the air and is known to cause or contribute to respiratory disease, asthma attacks, heart problems, and premature death. The EPA designates areas in violation of the $PM_{2.5}$ standard, based on the most recent three years of federal reference monitoring data, as "nonattainment areas." Two communities in Oregon, Klamath Falls and Oakridge, violate the daily $PM_{2.5}$ standard. At least three additional communities in Oregon have elevated levels of fine particulate but do not currently violate the federal standard.

How does this affect Klamath Falls?
This is not the first time Klamath Falls has had to implement measures to meet air quality standards. In 1991, Klamath Falls violated the federal carbon monoxide standard and the federal particulate matter, PM_{10}, standard. DEQ developed separate carbon monoxide and PM_{10} plans with specific strategies to reduce pollution. As a result of the plans, the area was able to meet and continue to meet the standards. In fact, the PM_{10} strategies were so successful in maintaining clean air that Klamath Falls met the EPA's initial $PM_{2.5}$ standard in 1997.

Currently, Klamath Falls violates the 2006 daily $PM_{2.5}$ health standard and EPA will classify it a $PM_{2.5}$ nonattainment area in 2009 or 2010. As with the earlier PM_{10} standard, violations of the $PM_{2.5}$ standard tend to occur during the winter

months and are thought to be largely caused by home wood heating smoke, but are also affected by industrial emissions, transportation and other sources. DEQ will conduct a comprehensive evaluation of all $PM_{2.5}$ emission sources in the community to identify appropriate strategies to restore and maintain healthy air quality. DEQ and Klamath Falls must develop a plan that will bring air quality into compliance with the standard as soon as possible, and submit the plan to EPA by 2012-2013, within three years of EPA officially designating Klamath Falls as a nonattainment area.

Key Issues

Process for the developing the Klamath Falls $PM_{2.5}$ attainment plan
DEQ will develop an attainment plan to improve air quality. DEQ will work in coordination with Klamath County to:

1) Develop a scientific foundation for the plan, including an analysis of air monitoring and other data to develop an emission inventory, source characterization, and an attainment demonstration showing how the area will meet the standard based on permanent and enforceable emission reduction measures.

2) Form an advisory committee to select emission reduction strategies to reduce $PM_{2.5}$ emissions. These emission reduction strategies will ensure the community is able to attain the standards. The standards may affect the public and business sources by focusing on efforts to reduce wood smoke pollution, open burning emissions, controls on agricultural and forestry burning, industrial controls, and motor vehicle emission reduction programs.

Next Steps

DEQ plans to proceed with developing an attainment plan and associated rules over the next three years.

EQC Involvement

The Klamath Falls attainment plan will be presented as part of Oregon's Clean Air Act state implementation plan and will require EQC action.

Attachments

None

Available Upon Request

1. DEQ's comments to EPA on the proposed $PM_{2.5}$ nonattainment boundary for Klamath Falls

Approved:

Section:

Division:

Report prepared by: Rachel Sakata and Larry Calkins
DEQ Air Quality – Planning and Eastern Region
Phone: (503) 229-5659 and (541) 567-8297, Ext 225

Klamath County provided this copy of its clean air ordinance for your information only. No action is necessary.

BOARD OF COUNTY COMMISSIONERS

KLAMATH COUNTY, OREGON

IN THE MATTER OF REPEALING THE CURRENT CHAPTER 406 AND ADOPTING A NEW CHAPTER 406, KLAMATH COUNTY CLEAN AIR ORDINANCE, OF THE KLAMATH COUNTY CODE	ORDINANCE NO. 63.05

WHEREAS, Klamath County passed the Clean Air Ordinance on July 31, 1991, in order to meet the standards of the 1990 Federal Clean Air Act; and

WHEREAS, the United States Environmental Protection Agency adopted new standards for ambient air quality particulate matter (PM-2.5) in December 2006; and

WHEREAS, Klamath County desires to revise the Klamath County Clean Air Ordinance to require the removal of non-certified wood stoves from building at the time of sale, eliminate the use of burn barrels within the Air Quality Zone, reduce the length of the Open Burning Windows within the Air Quality Zone and establish a volunteer Air Quality Advisory Committee; and

NOW, THEREFORE, the Board of County Commissioners ordains that the current Chapter 406 is repealed in its entirety and a new Chapter 406, Klamath County Clean Air Ordinance, of the Klamath County Code is adopted and will read as follows:

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CHAPTER 406
KLAMATH COUNTY CLEAN AIR ORDINANCE

406.001 **Policy and Purpose** 3

406.005 **Definitions** 3

406.100 **Air Quality Pollution Control Requirements** 6

406.150 **Air Quality Pollution Requirements Applying Within the Air Quality Zone** 8

406.200 **Certificate of Exemption** 9

406.250 **Certificates of Variance and Certificates of Waiver** 9

406.300 **Enforcement** 10

406.400 **Penalties** 11

406.500 **Severability** 11

406.550 **Contingency Strategies and Information on an Air Quality Advisory Committee** 11

Exhibits:

Exhibit A ..... Air Quality Zone

Exhibit B ..... Ringlemann Smoke Chart

Ordinance No. 63.00 - 07/31/91

Ordinance No. 63.01 - 06/25/97

Ordinance No. 63.02 - 12/23/97

Ordinance No. 63.03 – 08/23/2001

Ordinance No. 63.04 - 10/05/2004

Ordinance No. 63.05

CHAPTER 406

KLAMATH COUNTY CLEAN AIR ORDINANCE

406.001 Policy and Purpose

To control and address air quality problems and identify the Air Quality Zone, so that Klamath County will have clean air for the benefit of its citizens' health and welfare; to be in compliance with requirements of the Federal Clean Air Act of 1990 and applicable revisions or updates, and not exceed the National Ambient Air Quality Standard for particulate matter; and to improve economic development opportunities.

406.005 Definitions

Except where the context otherwise requires, the definitions given in this section govern the construction of this Chapter.

(1) AIR QUALITY ADVISORY - A means, declared and provided by the Klamath County Environmental Health Division based on the Air Quality Forecast, to inform area residents of what the air quality is or potentially will be. The advisories shall be:

(a) Red Advisory Period - A period of time when an Air Quality Forecast predicts that particulate matter concentrations have the potential to exceed or are exceeding an estimate of 150 μg/m3 of PM-10 or 30 μg/m3 for PM-2.5 for a 24-hour average. Such pollution concentrations have a high probability of being unhealthy.

(b) Yellow Advisory Period - A period of time when the Air Quality Forecast predicts that particulate matter concentrations are less than what would be considered for the Red Advisory Period, but would likely exceed estimates of 80 μg/m3 of PM-10 or 16 μg/m3 of PM-2.5 for a 24-hour average. Such pollution concentrations have a high probability of impacting public health.

(c) Green Advisory Period - A period of time when an Air Quality Forecast predicts daily particulate matter concentrations for a 24-hour average will not exceed 80 μg/m3 of PM-10; or 16 μg/m3 of PM-2.5.

(2) AIR QUALITY FORECAST - A method of using available data including, but not limited to, local weather conditions, current and anticipated particulate levels, and weather forecasts to determine the PM-10 and PM-2.5 particulate matter concentrations.

(3) AIR QUALITY INSPECTOR – Air Quality Inspectors may be staff of the Klamath County Environmental Health Division, the Klamath County Code Compliance Office, the Code Enforcement Office of the City of Klamath Falls, or the County Fire Districts who will act within their scope of authority. The primary role of an Air Quality Inspector is to observe and document violations of Chapter 406 and to educate the public with respect to this Chapter and the documented violation.

(4) AIR QUALITY ZONE An area within the County as depicted on the map and legal description in Exhibit A.

(5) AGRICULTURAL OPERATION - An activity including an irrigation operation on land currently used, or intended to be used primarily for the purpose of obtaining a profit by raising, harvesting and selling crops, or by raising and selling livestock and/or poultry, or the products thereof. Agricultural operation also means activities conducted by not-for-profit agricultural research organizations, which activities are necessary to serve that purpose. It does not include the

construction and use of dwellings customarily provided in conjunction with the agricultural operation.

(6) BUILDING - All residential or commercial structures including manufactured homes.

(7) BURN-DOWN TIME - A period of time allowed for fires in solid fuel-fired appliances and open/outdoor burning, to die down prior to the beginning of enforcement activities. Such burn-down time applies to Red or Yellow Advisory Period.

(8) CERTIFICATE OF EXEMPTION - A written approval issued by the Klamath County Environmental Health Division to use a solid fuel-fired appliance in a manner normally in violation of the requirements of this Chapter.

(9) CERTIFICATE OF VARIANCE - A written approval issued to a person by the Klamath County Environmental Health Division to open or outdoor burn in a manner normally in violation of the requirements of this Chapter.

(10) CERTIFICATE OF WAIVER - A written approval issued by the Klamath County Environmental Health Division to allow open/outdoor burning in a manner normally in violation of the requirements of this Chapter.

(11) CERTIFIED WOODSTOVE OR FIREPLACE INSERT - A solid fuel-fired space heating appliance that has been certified by the Oregon Department of Environmental Quality (DEQ) or bears an Environmental Protection Agency certification label indicating that the model is built in accordance with EPA emission certification.

(12) COOK STOVE - A wood burning stove installed in the kitchen, which is primarily designed for cooking and has a stovetop and an oven. It may also be equipped with gas burners or electric heat elements.

(13) EXEMPT SOLID-FUEL FIRED APPLIANCE - A solid fuel-fired appliance that is exempt from the Oregon Department of Environmental Quality (DEQ) or the United States Environmental Protection Agency (EPA) requirements for certification for its installation. Exempt stoves are pellet stoves, antique stoves (built before 1940 with ornate construction and a substantially higher current market value), open masonry fireplaces, cook stoves, or other stoves that have a valid letter of exemption from DEQ, or do not meet the definition of a "woodstove" or "wood heater" as defined in DEQ's Oregon Administrative Rules for Residential Wood Heating.

(14) FIRE DEPARTMENT - The unit of municipal government or county approved Local Fire District having the authority and responsibility to extinguish unintended fires and to promote fire safety.

(15) FIREPLACE – A framed opening made in a chimney to hold an open fire.

(16) KLAMATH COUNTY AIR QUALITY ADVISORY COMMITTEE - A volunteer committee appointed by the Klamath County Board of Commissioners. The purpose of the Air Quality Advisory Committee is to evaluate relevant air quality data, identify significant contributing emission sources, recommend appropriate emission reduction strategies and recommend action to the Board of County Commissioners.

(17) LOW INCOME PERSON - A person or family who demonstrates economic need by certifying through proof that their total household income is less than the very low-income guidelines established by the United States Department of Housing and Urban Development.

(18) NON-CERTIFIED WOOD STOVE OR FIREPLACE INSERT - A solid fuel-fired residential space heating device that has not been certified by either the Oregon Department of Environmental Quality or the Environmental Protection Agency (EPA) as complying with smoke

emission standards. "Non-certified wood stove or fireplace insert" does not include fireplaces, nor devices exempt from certification requirements as defined in Section 406.005(13).

(19) NOTICE OF NONCOMPLIANCE - A letter notifying a violator of this Chapter of the specific violation and the corrective action necessary.

(20) OPEN/OUTDOOR BURNING – This section refers to all open or outdoor fires intended for heating or the combustion of waste, and those included in the definition of "Open Burning" in Oregon Administrative Rule Chapter 340 Division 264. Outdoor cooking fires are not included.

(21) PARTICULATE MATTER TEN MICRONS AND LESS (PM-10) - Airborne particulate matter with an aerodynamic diameter of ten (10) microns in size or less. PM-10 is normally measured by weight per unit volume of air in micrograms per cubic meter (μg/m3). The National Ambient Air Quality Standard is 150 μg/m3 for a 24-hour period beginning at 12:01 AM.

(22) PARTICULATE MATTER TWO AND ONE-HALF MICRONS OR LESS (PM-2.5) - Airborne particulate matter with an aerodynamic diameter of two-point-five (2.5) microns in size or less. PM-2.5 is normally measured by weight per unit volume of air in micrograms per cubic meter (μg/m3). The National Ambient Air Quality Standards are 35 μg/m3 for a 24-hour period beginning at 12:01 AM, with a 15 μg/m3 annual average.

(23) PELLET STOVE – A wood burning heating appliance which uses wood pellets as its primary source of fuel.

(24) PERSON - Any individual, partnership, corporation, company or other association.

(25) PROHIBITED MATERIALS - Any combustible material as defined by the State's prohibited materials open burning rule which include wet garbage, plastic, wire insulation, automobile parts, asphalt, petroleum product, petroleum treated material, rubber products, or animal or vegetable matter resulting from the handling, preparation, cooking or service of food that normally results in dense or noxious smoke when burned. Also included are coal and any open burned materials that cause a public or private nuisance or a hazard to public safety.

(26) RESPONSIBLE PERSON – A person eighteen (18) years of age or older, authorized by the property owner to attend an open burning event and who is capable of and has the necessary equipment to extinguish the fire.

(27) SALE OF REAL PROPERTY - Any transaction whereby the ownership of a building as defined by the Klamath County Development Code, or the real property upon which a building is located, is transferred by an agreement for the sale and purchase of the building or the real property.

(28) SOLE SOURCE OF HEAT - One or more residential solid fuel-fired appliances that constitute the only source of space heat in a private residence. No residential solid fuel-fired appliance or devices shall be considered to be the sole source of heat if the private residence is equipped with a permanently installed working system such as: oil, natural gas, electric, geothermal, solar or propane heating system, whether connected or disconnected from its source.

(29) SOLID FUEL-FIRED APPLIANCE - A device designed for solid fuel combustion, including cordwood stoves (wood stoves and fireplace stove inserts), fireplaces, solid fuel-fired cook stoves and combination fuel furnaces or boilers, which burn solid fuels.

(30) URBAN GROWTH BOUNDARY (UGB) - An area of the county surrounding and including the City of Klamath Falls which has been designated by the Klamath County Board of Commissioners and the City of Klamath Falls as an area of potential growth which may impact both governmental bodies.

(31) WASTE

(a) Agricultural Waste - Any waste materials generated or used by an agricultural operation.

(b) Commercial Waste – Waste Materials from offices, warehouses, restaurants, mobile home parks, dwellings (apartments) containing more than four (4) family units, hotels, motels, schools, or wholesale or retail yards.

(c) Construction Waste - Any waste material produced by a building or construction project. Examples of construction waste are wood, lumber, paper, wood pallets, crating and packing materials used during construction, materials left after completion of construction and materials collected during cleanup of a construction site.

(d) Demolition Waste - Any material produced by the complete or partial destruction, or tearing down, of any man-made structure the clearing of any site for land improvement; or cleanup such as the removal of trees, brush or stumps, excluding agricultural waste, Section 406.005(31)(a), or domestic waste, Section 406.005(31)(e).

(e) Domestic Waste - Household materials including paper, cardboard, clothing, yard debris, Section 406.005(31)(h), or other material generated in or around a dwelling of four (4) or less family units, or on the real property adjacent to the dwelling. Once domestic waste is removed from the property of origin it becomes commercial waste.

(f) Forest Slash - Forest debris or woody vegetation related to the management of forestlands, used for the growing and harvesting of timber.

(g) Industrial Waste - Any materials (including process wastes) produced as a direct result of any manufacturing or industrial process.

(h) Yard Debris - Wood, needle or leaf material from trees, shrubs, or plants on real property adjacent to a dwelling of not more than four (4) family dwelling units. Once yard debris is removed from the property of origin, it becomes commercial waste. Section 406.005(31)(b).

(32) WOODSTOVE/WOODHEATER – An enclosed, wood burning appliance capable of and intended for space heating or domestic water heating that meets all of the following:

(a) An air-to-fuel ratio in combustion chamber averaging less than 35-1 as determined by the test procedure prescribed in federal regulations, 40 CFR Part 60, Subpart AAA, Section 60.534 performed at an accredited laboratory;

(b) A usable firebox volume of less than 20 cubic feet;

(c) A minimum burn rate less than 5 kg/hr as determined by the test procedure prescribed in federal regulation, 40 CFR, Part 60, Subpart AAA, Section 60.534 performed at an accredited laboratory; and

(d) A maximum weight of 800 kg (1,760 lb). In determining the weight of an appliance for these purposes, fixtures and devices that are normally sold separately, such as flue pipe, chimney, heat distribution ducting, and masonry components that are not an integral part of the appliance or heat distribution ducting, shall not be included.

406.100 County Wide Air Quality Pollution Control Requirements

(1) AIR QUALITY ADVISORIES - The Klamath County Environmental Health Division shall determine and issue Air Quality Advisories at least daily during the winter heating season and at other times of the year as needed according to the definitions provided in Section 406.005(1). Air Quality Advisories will be provided to the public.

(2) PUBLIC RESPONSIBILITIES - Each person that burns outdoors or in a solid fuel-fired-appliance in Klamath County is required to comply with the requirements of this Chapter.

(3) SOLID FUEL-FIRED APPLIANCES

(a) Appliance Resale and Installation:

(i) The resale or installation of a non-certified solid fuel-fired appliance or any appliance not meeting the requirements of Section 406.005(31) is prohibited.

(ii) The resale, or installation of an exempt solid fuel-fired appliance, is allowed in accordance with state and local requirements.

(iii) A Klamath County Building Division permit is required for the installation of a solid fuel-fired appliance.

(b) Disclosure of Solid Fuel-Fired Appliances upon the Sale of Real Property - The presence of all solid fuel-fired appliances including wood stoves, fireplace inserts, fireplaces, and pellet stoves in the building shall be disclosed by the seller to the buyer as part of the sale and purchase of any building. The disclosure shall state whether any solid fuel-fired appliances are certified, non-certified, exempt or pellet.

(c) Removal of Non-Certified Woodstoves and Fireplace Inserts upon the Sale of Real Property - Non-certified wood stoves and fireplace inserts must be removed from building upon sale of any building containing them. The removal shall be accomplished prior to the closing of any real estate transaction involving the building containing the non-certified wood stove(s) or fireplace insert(s).

(d) Sole Heating Source - It shall be unlawful for a solid fuel-fired appliance to be the sole source of heat in any non-owner (tenant) occupied dwelling unit within Klamath County.

(e) Solid Fuel-fired Appliance Fuel - Only dry, seasoned cordwood, pressed sawdust logs, organic charcoal or pellets specifically manufactured for the appliance may be burned in a solid fuel-fired appliance.

(f) Prohibited Materials - Prohibited materials as defined in Section 406.005(25) and Oregon Administrative Rule 340-264-0060(3), shall not be burned in fireplaces, solid fuel-fired appliances, pellet stoves or cook stoves within Klamath County. An exception is the burning of re-refined used oil in an approved oil-burning device.

(4) OPEN/OUTDOOR BURNING REQUIREMENTS - This section pertains to burning as defined in Section 406.005(20).

(a) All open burning is prohibited during Red or Yellow Advisory Periods within Klamath County unless a Certificate of Variance has been issued by the Klamath County Environmental Health Division in accordance with Section 406.250.

(b) Open Burning Hours:

(i) Open burning fires are not to be started until one hour after sunrise and must be completely out one hour before sunset, unless otherwise directed by the local fire department.

(ii) Burning conducted for forest or ecosystem management, for example slash fires, are not required to be out by sunset.

(c) Local Fire Permit Required - Persons burning, shall adhere to all municipal, local Fire Department, State Fire Marshal or Oregon Department of Forestry or DEQ rules, ordinances, or restrictions.

(d) Responsible Person:

(i) A responsible person, as defined in Section 406.005(26), must constantly attend all open burning.

(ii) This person must also completely extinguish the fire before leaving it.

(e) Prohibited Materials – Burning of Prohibited materials as defined in Section 406.005(25) and Oregon Administrative Rule 340-264-0060(3), in outdoor or open fires is prohibited.

406.150 Air Quality Pollution Requirements Applying Within the Air Quality Zone.

In addition to the requirements in Section 406.100 the following requirements apply:

(1) SOLID FUEL-FIRED APPLIANCES - This section applies to the use of solid fuel-fired appliances for residential and commercial heating **within the Air Quality Zone**.

(a) During a Red Advisory Period, no person shall operate any solid fuel-fired appliance except a pellet stove.

(b) During a Yellow Advisory Period, no person shall operate an non-certified wood stove, non-certified wood stove insert, or fireplace. Only certified solid fuel-fired appliances and pellet stoves may be operated.

(c) During a Green Advisory Period, non-certified wood stoves, non-certified wood stove inserts, fireplaces, certified wood stoves, certified wood stove inserts and pellet stoves may be used for indoor heating.

(d) Visible Air Contaminant Emissions. No person operating a solid fuel-fired appliance within the Air Quality Zone shall allow smoke of an opacity of greater than 20%, or comparable to that described in the Ringelmann Smoke Chart (Exhibit B), to be vented to the atmosphere for more than three (3) minutes in any one (1) hour period. Emissions created during a ten (10) minute start-up period are exempt.

(e) Burn-down time. A Burn-down time, not to exceed three (3) hours, will be given on Red or Yellow Advisory Periods. No enforcement action described in Section 406.300 will take place for visible air contaminant emissions emitted during the burn-down time.

(f) Emergency Conditions. An exemption to Section 406.150 may be issued by the Klamath County Environmental Health Division to allow the use of normally prohibited solid fuel-burning appliances within the Air Quality Zone, during periods when:

(i) utility suppliers declare energy shortages;

(ii) electric power or outages occur;

(iii) interruptions occur of natural gas supplies; or

(iv) temporary failure occurs of a resident's heating system when there is an immediate need to operate a solid fuel space-heating device to protect family/individual health and welfare.

(2) OPEN BURNING - Except as specified in this section or allowed by Section 406.250, open burning is prohibited within the Air Quality Zone.

(a) Open Burning Window: The Klamath County Environmental Health Division Manager, in consultation with the Board of County Commissioners, the City of Klamath Falls Code Compliance Officer and Fire Districts No. 1 and No. 4 may declare two specific fifteen (15) day periods a year during which times the open burning of residential yard debris, as defined

in Section 406.005(31)(h), will be allowed within the Air Quality Zone. Open Burning Windows within the Air Quality Zone will occur in Spring and Fall. Each window will include three (3) weekends.

(i) During the Open Burning Window, the Klamath County Environmental Health Division may temporarily prohibit open burning should poor ventilation episodes occur, or be forecast.

(ii) The Klamath County Environmental Health Division Manager in consultation with the Board of County Commissioners, the City of Klamath Falls Code Compliance Officer, and Fire Districts No. 1 and No. 4 may extend the Open Burning Window one day for every day in which open burning has been prohibited during the Open Burning Window due to poor ventilation or weather conditions.

(b) All agricultural open burning is prohibited at all times in the Air Quality Zone unless allowed by a Certificate of Variance.

(c) The use of burn barrels and other outdoor burning devices is prohibited.

(d) A Certificate of Variance, as defined in Section 406.250(1), to allow Open Burning outside the Spring or Fall Open Burning Windows, may be issued on a case by case basis within the Air Quality Zone when an emergency, or substantial need, is documented.

406.200 Certificates of Exemption

(1) ISSUANCE - The Klamath County Environmental Health Division Manager or designee may issue a Certificate of Exemption to allow the use of solid fuel-fired appliances within the Air Quality Zone for residential space heating purposes during Red or Yellow Advisory Periods.

(a) All applications for Certificates of Exemption shall be on forms provided by the Klamath County Environmental Health Division.

(b) Within five (5) working days of receiving a completed application, the Klamath County Environmental Health Division shall review and: 1) approve the application; 2)approve the application with conditions; or 3) deny the application.

(c) Klamath County Environmental Health Division shall not charge a fee for processing an application or issuing a Certificate of Exemption.

(d) All Certificates of Exemption expire on May 15 of each year.

(e) Applying for the renewal of all Certificates of Exemption is the responsibility of the registrant.

(2) LOW INCOME EXEMPTION - A low-income person, either tenant or owner, after submitting adequate documentation, may be granted a Certificate of Exemption to use a solid fuel-fired appliance, for residential heating, during Red and Yellow Advisory Periods.

406.250 Certificates of Variance and Certificates of Waiver

Certificates of Variance or Certificates of Waiver, issued by Klamath County Environmental Health Division, are required for all Open Burning not conforming to the requirements of Section 406.100(4) and Section 406.150(2).

(1) CERTIFICATE OF VARIANCE.

(a) All applications for Certificates of Variance shall be on forms provided by the Klamath County Environmental Health Division and submitted at least ten (10) working days prior to the proposed or desired starting date of the variance.

(b) Within ten (10) working days of receiving a completed application, the Klamath County Environmental Health Division shall review and: 1) approve the application; 2) approve the application with conditions; or 3) deny the application.

(c) Klamath County Environmental Health Division shall not charge a fee for processing an application or issuing a Certificate of Variance.

(d) Inside the Air Quality Zone, Klamath County Fire Districts No.1 and No.4, the City of Klamath Falls, and the Klamath County Environmental Health Division may develop an interagency agreement to expedite the processing of applications.

(2) CERTIFICATE OF WAIVER - The Klamath County Environmental Health Division Manager, or designate, may issue a Certificate of Waiver for an area of the county when the meteorological conditions are expected to be different from those forecast for other parts of the county.

406.300 Enforcement

(1) Klamath County Environmental Health Division Staff will monitor and enforce compliance with this Chapter countywide. Minor violations of this Chapter will result in a Notice of Noncompliance being sent to the violator. Repeated or major violations will result in the issuance of a Citation and Summons to the violator to appear in court.

(2) When a Klamath County Air Quality Inspector has observed a violation of this Chapter, he or she shall transmit this information, along with the documentation, to the Klamath County Environmental Health Division Manager. The Environmental Health Manager will review the submitted documentation and:

(a) If the documentation is complete, the Environmental Health Manager will issue a Notice of Noncompliance, a Citation and Summons to the violator to appear in court, or other legal action depending on the severity and frequency of the violation.

(b) If the documentation is not complete, the Environmental Health Manager will issue a Notice of Noncompliance to the alleged violator, and send a copy of the documents to the Air Quality Inspector who observed the violation.

(3) NOTICE OF NONCOMPLIANCE - A Notice of Noncompliance as defined in Section 406.005(19) may be issued to the violator as the sole enforcement action, or in addition to a citation.

(a) The notice shall contain the date, time and street name and number and the violation observed.

(b) The notice shall specify the corrective action that must be taken and the time in which it must be accomplished.

(c) The notice may require that within ten (10) days of correcting the violation, the violator shall in writing notify the Klamath County Air Quality Inspector that the corrective action has been taken.

(4) AIR QUALITY CITATIONS - An appropriate law enforcement officer or a Klamath County Environmental Health Division Manager may issue a Citation and Summons to appear in court for a violation of this Chapter.

406.400 Penalties

Failure to comply with the provisions of this Chapter shall be subject to fines of up to $720.00 for a one-time occurrence, and fines of not more than $1,000.00 for a continuing, or repeated offense. This provision will be enforced in accordance with Chapter 800, Uniform Civil Violation Procedure of the Klamath County Code.

406.450 Severability

If any section, subsection, sentence, clause, phrase or portion of this Chapter is for any reason held invalid or unconstitutional in a court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision, and shall not affect the validity of the remaining portion thereof.

406.500 Contingency Strategies and Formation of an Air Quality Advisory Committee

Klamath County Board of Commissioners hereby establishes the Klamath County Air Quality Advisory Committee. The purpose of the Committee is to evaluate relevant air quality data; identify significant contributing emission sources; develop appropriate emission reduction strategies such as the expansion of the Air Quality Zone and will recommend action to the Board of County Commissioners. The committee will meet semi-annually, once in the spring and again in the fall, and at other times as deemed necessary. The Committee will be composed of interested persons representing industry, the general public and governmental agencies.

DONE and DATED this _____ day of August, 2007.

KLAMATH COUNTY BOARD OF COMMISSIONERS

_____	_____	_____
Chairman	Commissioner	Commissioner

APPROVED FOR LEGAL SUFFICIENCY:

_____
Klamath County Counsel

RECORDING SECRETARY:

_____
Administrative Assistant

Exhibit A – Air Quality Zone

WOOD SMOKE ORDINANCE
AIR QUALITY ZONE BOUNDARY DESCRIPTION
Exhibit A

Beginning at the Corner common to T.37S.,R.8E., T.37S.,R.9E., T.38S.,R.9E. and T.38S.,R.8E.W.M.; thence North along the West Line of Section 31, approximately 0.5 miles to the West 1/4 corner of Section 31; thence East along the East-West center Section line of Sections 31 and 32, approximately 1.5 miles to the N.E. Corner of the S.W. 1/4 Section of Section 32; thence South along the North-South center Section line of Section 32, T.37S.,R.9E. and Sections 5 and 8, T.38S.,R.9E.W.M., approximately 2.5 miles to the North 1/4 Corner of Section 17; thence East along the North Line of Section 17, approximately 0.5 miles to the N.E. Corner of Section 17; thence South along the East line of Section 17, approximately 1.0 mile to the N.W. Corner Section 21; thence East along the North line of Section 21, approximately 1.0 mile to the N.E Corner of Section 21; thence North along the West line of Section 15, approximately 1.0 mile to the N.W. Corner of Section 15; thence East along the North line of Sections 15 and 14, approximately 1.5 miles to the North 1/4 Corner of Section 14; thence South along the North-South center section line of Section 14, approximately 1.0 mile to the South 1/4 Corner of Section 14; thence East along the North line of Sections 23 and 24, approximately 1.5 miles to the N.E. Corner of Section 24; thence South along the East line of Sections 24, 25 and 36, approximately 3.0 miles to the N.W. Corner of Section 6, T.39S.,R.10E.W.M.; thence East along the North line of Section 6, approximately 0.5 miles to the North 1/4 Corner of Section 6; thence South along the North-South centerline of Section 6, approximately 1.0 miles to the South 1/4 Corner of Section 6; thence East along the North line of Sections 7, 8, 9 and 10, approximately 3.0 miles to the North 1/4 Corner of Section 10; thence South along the North-South center Section line of Section 10 and 15 to the intersection with the North Right-of-Way of the abandoned Oregon-California and Eastern (O.C.&E.) Railroad; thence Northwesterly along the North Right-of-Way line to the intersection with the North-South center Section line of Section 17; thence South along the North-South center Section line of Sections 17, 20 and 29 to the S.E. corner of the N.W. 1/4 of Section 29; thence West along the East-West center Section line of Sections 29 and 30, T.39S.,R.10E. and Section 25, T.39S.,R.9E.W.M., approximately 2.5 miles to the West 1/4 Corner of Section 25; thence South along the East line of Section 26, approximately 0.5 miles to the S.E. corner of Section 26; thence

West along the South line of Section 26, approximately 0.7 miles to the intersection with the East Right-of-Way of the Union Pacific Railroad; thence Northwesterly along the Easterly Right-of-Way line to the intersection with the East-West Center Section line of Section 22; thence West along the East-West center Section line of Sections 22,21,20 and 19, T.39S.,R.9E. and Sections 24 T.39S.,R.8E.W.M., approximately 4.3 miles to the West ¼ corner of said Section 24; thence North approximately 4040 feet to the northerly right-of-way line of State Highway 66 and the boundary of the Keno Rural Fire Protection District; thence Northeasterly along the northerly right-of-way line of said State Highway 66 and said boundary of the Keno Rural Fire Protection District to the intersection with the boundary of the Klamath County Fire District #4; thence Northeasterly along said District's boundaries to the C-E-W-W 1/256 corner of Section 13, T.39S.,R.8E. W.M.; thence North approximately 2640 feet to the E-W-W 1/256 corner of said Section 13; thence West approximately 3630 feet along the north line of said Section 13 and Section 14 T.39S.,R.8E. W.M., to the North 1/4 Corner of said Section 14; thence North along the North-South center Section Line of Sections 11 and 2 T.39S.,R.8E. and Section 35 T.38S.,R8E, approximately 2.75 miles to the South Right-of-way line of Highway 140; thence Northwesterly along the South Right-of-way of Highway 140, approximately 0.25 miles to the intersection of Highway 140 and South line of Section 26; thence West along the South Section line of Section 26, approximately 0.35 miles to the S.W. Corner of Section 26; thence North along the West line of Sections 26 and 23, approximately 1.5 miles to the South right-of-way line of Lakeshore Drive; thence Northwesterly along the South right-of-way line Lakeshore Drive, approximately 1.0 mile to the South right-of-way line of Highway 140; thence Northwesterly along the South Right-of-way line of Highway 140,approximately 2.2 miles to the intersection of Highway 140 and the West Line of Section 8; thence North along the West line of Section 8 and 5 approximately 1.5 miles to the N.W. Corner of Section 5; thence East along the North line of Section 5, 4, 3, and 2, across Klamath Lake, then along the North line of Section 1, approximately 5.0 miles to the point of beginning.

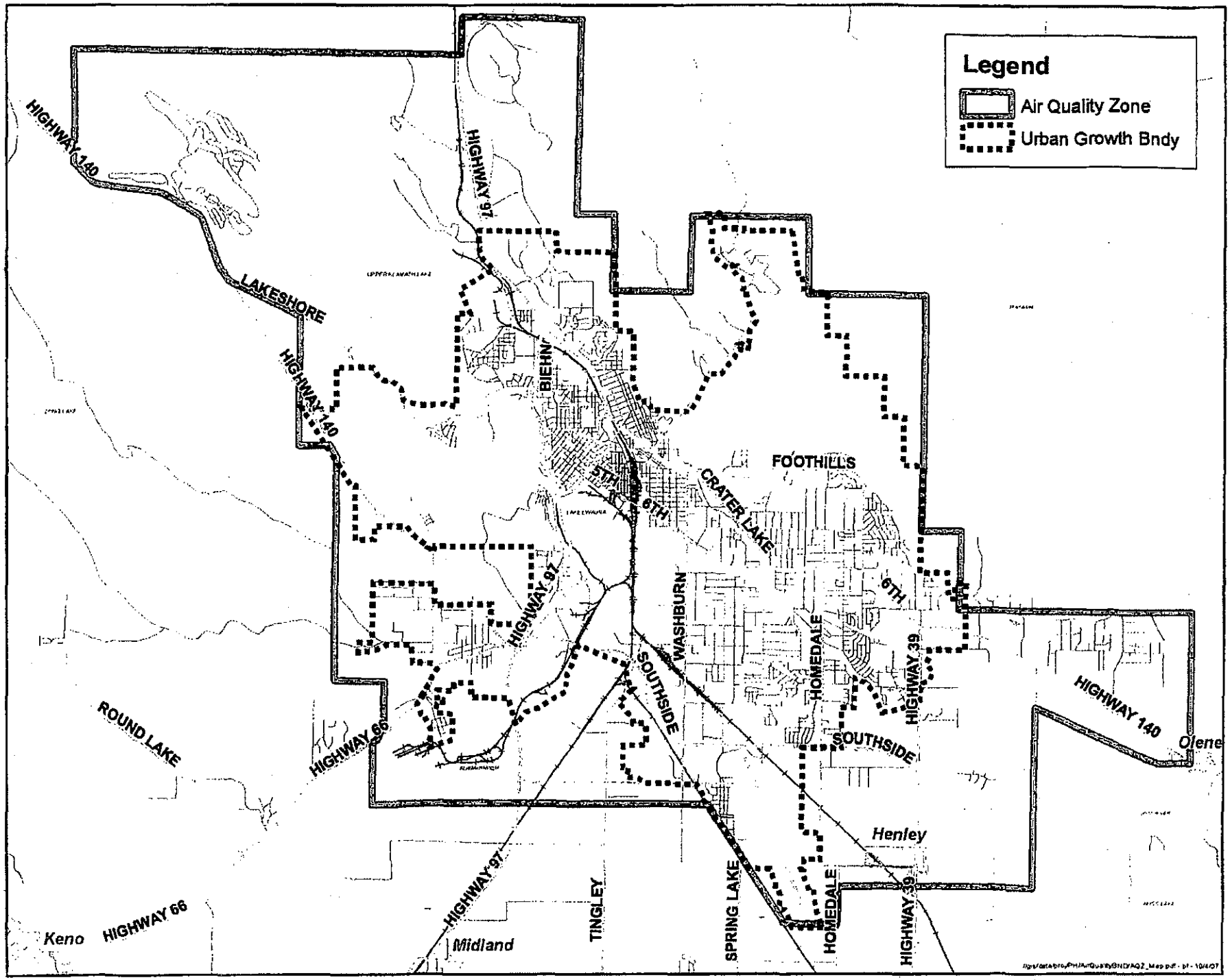

Legend
Air Quality Zone
Urban Growth Bndy
HIGHWAY 140
HIGHWAY 97
LAKESHORE
HIGHWAY 140
BIEHN
5TH
6TH
FOOTHILLS
CRATER LAKE
HIGHWAY 97
WASHBURN
SOUTHSIDE
HOMEDALE
6TH
HIGHWAY 39
SOUTHSIDE
HIGHWAY 140
Olene
ROUND LAKE
HIGHWAY 66
Henley
HIGHWAY 97
TINGLEY
SPRING LAKE
HOMEDALE
HIGHWAY 39
Keno
HIGHWAY 66
Midland

Exhibit B - Ringlemann Smoke Chart

(See http://www.cdc.gov/niosh/mining/pubs/pdfs/ic8333.pdf)

State of Oregon
Department of Environmental Quality Memorandum

Date: September 29, 2009

To: Environmental Quality Commission

From: Dick Pedersen, Director

Subject: Agenda Item H, Rule Adoption: Amend the Clean Water State Revolving Fund, OAR Chapter 340, Division 54
October 22-23, 2009 EQC Meeting

Why this is Important

DEQ is implementing the American Recovery and Reinvestment Act of 2009 through its Clean Water State Revolving Fund loan program under temporary administrative rules. The temporary rules are effective for 180 days and will expire October 28, 2009. To ensure DEQ's program is able to continue to meet the requirements and administer the funds under the Act, a permanent rulemaking is necessary.

DEQ Recommendation and EQC Motion

The Department of Environmental Quality recommends that EQC adopt the proposed permanent rule revisions to OAR Chapter 340, Division 54, as presented in attachment A.

Background and Need for Rulemaking

DEQ administers Oregon's Clean Water State Revolving Fund loan program with support of an annual capitalization grant, generally about $10 million, from the U.S. Environmental Protection Agency and from loan repayments. These repayments are from past years' loans and go into the program for future loans. Additionally, while the American Recovery and Reinvestment Act of 2009 allocated about $44 million to DEQ's state revolving fund program in February 2009, DEQ's administrative rules at that time did not allow for the additional subsidization required by the Act.

EQC adopted temporary administrative rules in April 2009 that addressed the Act's additional requirements. The temporary rules define project eligibility, the use and allocation of funds and financial terms for loans. The temporary rules expire October 28, 2009 and it is necessary to establish permanent rules that will ensure DEQ complies with the Act's requirements.

The proposed permanent rules include minor refinements to the temporary rules:

- The September 1, 2009 date in the temporary rules was deleted in the proposed rules as DEQ committed all Act funds prior to that date;
- the rules clarify that if there are remaining funds, the funds will be offered to an eligible applicant on the project priority list in rank order;
- the proposed language maintains a $5 million limit on the amount of a loan to an applicant, and clarifies that DEQ has the authority to determine the amount of funding provided to an applicant within that limit; and

- the proposed rules clarify that an applicant has to complete all Clean Water State Revolving Fund requirements for a project to be eligible for a loan.

Effect of Rule

The proposal will establish rules in OAR 340-054-0098 through OAR 340-054-0108 (see page 9, attachment A). These rules will govern the use of Act funds when those funds are utilized within the Clean Water State Revolving Fund loan program and will define the use of the funds, the types of eligible projects and activities, the allocation of the funds and specific financial terms.

In addition to proposing to adopt OAR 340-054 0098 through OAR 340-054-0108, DEQ made minor edits to OAR 340-054-0024, 0025 and 0035 to clarify the terminology used for design or construction loans. The language in OAR 340-054-0025 was modified to ensure that DEQ can update its Clean Water State Revolving Fund Intended Use Plan more frequently when necessary.

Commission Authority

The EQC has authority to take this action under Oregon Revised Statutes 468.020 and 468.423 - 468.440.

Stakeholder Involvement

DEQ worked closely with applicants and various organizations in early 2009, including the Oregon Association of Clean Water Agencies, the League of Oregon Cities, Oregon Water Resources Congress, Association of Oregon Counties, Special Districts Association of Oregon, and the Oregon Association of Conservation Districts when the temporary rules were developed to address ARRA requirements.

DEQ did not convene a stakeholder advisory committee during the development of the proposed rules since only minor clarifications were made to the temporary rules. DEQ did provide a notice of the proposed permanent rules by U.S. mail to cities, counties and special services districts, and to the Oregon Association of Clean Water Agencies, Oregon Water Resources Congress and Oregon Association of Conservation Districts by email.

Public Comment

DEQ provided a public comment period from July 23 to Aug. 24, 2009 and held public hearings in Medford, Bend and Portland. Results of the public hearings are provided in attachment C.

Key Issues

The permanent rulemaking process included the opportunity for the public to comment on the proposed rule revisions. The temporary rules passed in April 2009 were recommended with the intent that DEQ would follow-up with a permanent rulemaking, and many of the key issues from the temporary rules are relevant for this proposed permanent rulemaking. These issues included the Act's requirements that additional subsidization of at least 50 percent must be provided to eligible applicants, and that loans made prior to October 1, 2008 are not eligible

for funding. DEQ would not be able to continue to implement the Act's requirements without permanent rules.

Next Steps

If adopted, these permanent rules will be filed with the office of the Secretary of State's office before October 28, 2009. These rules will update the current temporary administrative rules, and will become effective upon filing. DEQ will use the rules to administer the Clean Water State Revolving Fund loan program and implement Act requirements.

Attachments

A. Redline version of the proposed rule revisions
B. Summary of public comments and DEQ's responses
C. Presiding officer's report on public hearings
D. Relationship to federal requirements questions
E. Statement of need and fiscal and economic impact
F. Land use evaluation statement

Available Upon Request

1. Legal notice of hearing
2. Cover memorandum from public notice
3. Rule implementation plan

Approved:

Section:

Division:

Report Prepared By: Larry McAllister
Phone: (503) 229-6412

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 54

CLEAN WATER STATE REVOLVING FUND PROGRAM

340-054-0024

Design Loans and Construction Loans

The Department will administer design loans or construction loans to address point source or nonpoint source pollution. Applications may be submitted in response to the Department's annual solicitation or at anytime during the program year. The Department may require different application forms for point source projects and nonpoint source projects.

(1) General Requirements and Provisions. Applicants applying for CWSRF financing for design loans or construction loans must submit:

(a) A fully executed and complete application on a form provided by the Department;

(b) A completed Checklist of Exhibits and Requirements and associated documents;

(c) Evidence that the Applicant has the authority to undertake the project;

(d) Audited financial statements for the previous three years and the Applicant's current budget (unless waived by the Department in its discretion);

(e) All pertinent requirements listed in OAR 340-054-0035; and

(f) Any other information requested by the Department.

(2) Design Loans ~~and~~ or Construction Loans. The Department will administer loans for activities that result in the design or construction of sewage facilities, nonpoint source control or estuary management projects. When approved by the Department, security measures intended to prevent intrusion or damage to such facilities or projects, or interruption of a facility or project's processes are eligible design or construction costs. Design loans ~~and~~ or construction loans have the following terms and conditions:

(a) The maximum loan amount must be in accordance with OAR 340-054-0025(6);

(b) If not implementing a sponsorship option, the interest rate and corresponding loan terms for design ~~and~~ or construction loans must be in accordance with OAR 340-054-0065(5)(f), or OAR 340-054-0065(5)(g).

(c) The loan repayment period (as defined in the loan agreement) must begin on the outstanding principal and interest balance in accordance with OAR 340-054-0065(9); and

(d) The annual loan fee must be imposed on any unpaid balance in accordance with OAR 340-054-0065(7).

(3) Sponsorship Option for protection or restoration of water resources.

(a) A public agency (sponsoring community) may apply to the Department for a CWSRF loan to finance a sewage collection system or sewage treatment facility project combined with a water resource activity. Within this sponsorship option, the CWSRF program may fund both projects under a single CWSRF loan if the Department determines that the water resource activity meets program eligibility, funds are available, and the ranking of the sewage project allows its funding.

(b) The interest rate for the consolidated financing will be reduced whenever possible to a rate resulting in the semi-annual payment for the joint project being equal to the expected semi-annual payment with a traditional CWSRF loan for the sewage collection system or sewage treatment facility project only.

(c) A public agency that participates in this sponsorship option may either implement the water resource activity itself or may enter into a sponsorship agreement with an implementing partner who will implement the water resource activity. The sponsoring community remains responsible, however, for both the successful completion of the water resource activity and for the repayment of the CWSRF loan. The implementing partner will not be responsible for any repayment to the CWSRF program.

(d) All applicants for the sponsorship option must submit:

(A) A completed sponsorship application and project description using a form provided by the Department;

(B) Evidence that the sponsoring community and implementing partner (if an implementing partner is involved) have authority to undertake the water resource activity;

(C) An executed copy of the sponsorship agreement entered into with the implementing partner, if applicable; and

(D) Any other information requested by the Department.

(e) Financial terms of the sponsorship option will be as follows:

(A) The interest rate for the sponsorship option must be in accordance with OAR 340-054-0065(5)(h); and

(B) The requirements of OAR 340-054-0065 will be applicable to the sponsorship option except as specifically modified in this rule.

(f) The Department will determine the total amount of CWSRF funds to be allocated at the reduced interest rate through the sponsorship option in each program year.

Stat. Auth.: ORS 468.423 - ORS 468.440
Stats. Implemented: ORS 468.429 & ORS 468.439
Hist.: DEQ 10-2003, f. & cert.ef. 5-27-03

340-054-0025

Application Process; Project Priority List; Intended Use Plan; Allocation of Funds

The Department will periodically, but not less than annually, develop and submit an Intended Use Plan (IUP) to EPA as described in section 606 of the CWA and 40 CFR § 35.3150. The IUP will describe the proposed uses of the CWSRF and will include a project priority list numerically ranking all eligible applications received. The Department will develop the IUP using the following processes in this rule.

(1) Notice: The Department will notify interested parties at least annually of the opportunity to submit applications. Interested parties include, but are not limited to, watershed councils, counties, soil and water conservation districts, special districts and all of the incorporated cities listed in the current edition of the Oregon Blue Book.

(2) Applications: For a project to be considered for the project priority list, an Applicant must submit a completed application; the application must address an imminent, actual or threatened water quality problem; and the project must be eligible for funding under OAR 340-054-0015.

(3) Timing: In addition to applications received in response to the solicitation for applications indicated in OAR 340-054-0025(1), the Department will accept applications at any time.

(4) Project Priority List Ranking:

(a) The Department will develop a project priority list by ranking all eligible proposed projects using the criteria in **Table 1** of this rule. Projects will be numerically ranked based on the sum of the points awarded each proposed project. A maximum of one hundred (100) points is available for a proposed project.

(b) The Department will update the project priority list and the IUP at least every four months or upon receipt by the Department of five eligible applications, whichever timeframe is shorter. If no eligible applications are received during a four month period, the project priority list will not be updated.

TABLE 1

CWSRF Project Ranking Criteria

Category 1: Proposed Project's anticipated benefit for water quality or public health

1A--(0 or 8 points)--Project addresses water quality or public health issue within a "special status" water body

1B--(0-6 points)--Project addresses noncompliance with water quality standards, a public health issue or effluent limits related to surface waters

1C--(0-6 points)--Project addresses noncompliance with water quality standards or a public health issue related to groundwater

1D--(0-12 points)--Project ensures that a source already in compliance maintains that compliance.

1E--(0-8 points)--Project improves or sustains aquatic habitat supporting state or federally threatened or endangered species

1F--(0-12 points)--Project incorporates wastewater reuse or a water quality-related conservation process

1G--(0-7 points)--Project improves water quality by mitigating any of the following pollutants: temperature, dissolved oxygen, contaminated sediments, toxics on the EPA Priority Pollutants List, bacteria or nutrients

1H--(0-5 points)--Project supports the implementation of a Total Maximum Daily Load (TMDL) allocation or action plan for a Ground Water Management Area

1I--(0-6 points)--Project addresses a water quality or public health issue involving "Persistent Bioaccumulative Toxics" (PBT's)

Category 2: Potential water quality or public health consequences of not funding the proposed project

2A--(0-5 points)--If the proposed project is not implemented, water quality standards are likely to be exceeded or existing exceedances are likely to worsen

2B--(0-5 points)--If the proposed project is not implemented, the resulting impact is likely to cause a public health problem

2C--(0-5 points)--A unique opportunity to implement the proposed project currently exists due to timing, finances or other limitations that would not allow this project to be implemented in the future

Category 3: Other considerations

3A--(0-3 points)--Project has significant educational or outreach component

3B--(0-3 points)--Project demonstrates innovative technology which is transferable

3C--(0-3 points)--Project is a partnership with other group(s), incorporating self-help, financial or in-kind support

3D--(0-5 points)--Project incorporates monitoring, reporting or adaptive management

3E--(0 or 1 point)--Project addresses or includes risk management, safety or security measures

3F--(0-minus 5 points)--Applicant's past performance with previous Department loans or grants such as, but not limited to, failure to satisfy match requirements of a grant, failure to complete the project or failure to submit any other required deliverable in a timely manner.

(5) Draft Intended Use Plan, Public Notice and Review:

(a) The Department will update the IUP whenever changes are made to the PPL.

(b) With each update the Department will notify all applicants whose projects are included within the draft IUP of their ranking on the PPL.

(c) The Department will provide notice and an opportunity for the public to comment on proposed changes to the IUP, and will make the draft IUP available to the public.

(d) Except for revisions to the IUP resulting from applications for expedited loans, the Department will provide at least 30 days for public comments on the draft IUP. The Department will provide at least 5 days for comment on changes to the IUP resulting from new applications for expedited loans.

(e) During the comment period, any Applicant may request the Department to reevaluate a project's rank on the proposed project priority list or to make other changes to the IUP.

(f) The Department will consider all comments submitted during the comment period before finalizing the IUP.

(6) Allocation of Funds:

(a) During any Department program year (July 1 through June 30), no Borrower on the project priority list (including either loan increases or new project loans) may be allocated more than the greater of $2.5 million or 15% of the total available funds as reported in the initial IUP for that program year. If CWSRF moneys are available after allocating this limit to each eligible Applicant, additional funds may be allocated above this limit.

(b) The Department will establish the following funding categories within the CWSRF: Expedited Loan Reserve, Small Community Reserve, Planning Reserve, and general fund. The Department will first allocate annual funds to the three reserves in accordance with the criteria in sections (6)(c)(A), (6)(c)(B) and (6)(c)(C). Funds not allocated to one of the reserves will be allocated to the CWSRF general fund.

(c) The Department will assign projects on the priority list to an appropriate reserve or to the CWSRF general fund. Requests for increases to existing loans will be awarded first. Increases will be awarded from the appropriate reserve or the general fund. Following any allocations for increases, the Department will award loans to projects within each reserve and the general fund for new projects as described in sections (6)(c)(A), (6)(c)(B), (6)(c)(C) and (6)(c)(D)

(A) Expedited Loans Reserve. A reserve of $2 million will be established to fund expedited loans. The Director may increase the cap on this reserve. Individual urgent repair loans are limited to $150,000. The maximum amount available for a single emergency loan is $1.85 million. Emergency loans and urgent repair loans will be awarded in rank order. Unused funds still remaining in the expedited loan reserve on May 31 of the program year can be reallocated to the CWSRF general fund.

(B) Small Community Reserve. A maximum of 15% of the total CWSRF monies will be available in each program year for allocation to small community loans. Local community, design ~~and~~ or construction projects eligible within this reserve will be awarded loans in rank order.

(i) Each project allocation from this reserve will be for not more than the greater of $750,000 or 25% of the reserve, until all eligible small community requests have been allocated funds. If reserve funds still remain on March 1st of the program year, these remaining funds may be allocated to any unfunded portions of a small community loan request in the order the loan agreements were executed;

(ii) After reallocating as directed in OAR 340-054-0025(6)(c)(B)(i) above, any funds still remaining in the small community reserve can be moved to the CWSRF general fund.

(C) Planning Loan Reserve. A maximum of $3 million of the total CWSRF will be available in each program year for allocation to planning loans. Projects will be selected from the project priority list in rank order for this reserve.

(i) Each individual allocation from the planning loan reserve will initially not exceed $150,000. If reserve funds still remain on March 1st of the program year, these remaining funds may be reallocated to any unfunded portions of planning loan requests in the order the loan agreements were executed;

(ii) After reallocating as directed in OAR 340-054-0025(6)(c)(C)(i) above, any funds still remaining in the planning reserve can be moved to the CWSRF general fund.

(D) General Fund. All new design or construction project loans not funded from a reserve will be allocated from the general fund. Any remaining emergency or urgent repair, small community or planning projects not already allocated funds from their respective reserves, or allocated less than the total loan amount requested, may be awarded funding in rank order subject to available funds and the maximum loan amount for the program year.

(E) Loan Increases. Upon request, the Department may increase the funding for previously financed projects up to the maximum loan amount defined for each borrower in section 6(a) of this rule. These loan increases may be offered by either providing an additional loan at the current interest rate or increasing the amount of the existing loan. Awards for loan increases will be awarded in rank order.

(7) Project Priority List Modification:

(a) The following conditions apply to projects on the project priority list.

(A) Ranked projects may remain on the project priority list for up to 36 months while pursuing funding. After 36 months, the Department will notify the Applicant in writing that the project is being removed from the list.

(B) Applicants whose projects are removed from the project priority list because they have exceeded the 36 month limit may resubmit their projects to the program for ranking and incorporation into the next update of the IUP.

(C) The Department may provide one six-month extension to applicants requesting to remain on the list beyond the 36 month limit. Applicants requesting an extension must submit a progress report indicating the status of their effort in pursuing CWSRF financing and an updated time frame indicating when they expect to have completed all requirements necessary to be awarded funding.

(D) The Department may remove a project from the project priority list upon written notice to the applicant at any time the Department determines that the project does not meet eligibility requirements, the Borrower no longer requires CWSRF financing or the Applicant requests removal.

Stat. Auth.: ORS 468.423 - ORS 468.440
Stats. Implemented: ORS 468.433 & ORS 468.437
Hist.: DEQ 2-1989, f. & cert. ef. 3-10-89; DEQ 30-1990, f. & cert. ef. 8-1-90; DEQ 1-1993, f. & cert. ef. 1-22-93; DEQ 3-1995, f. & cert. ef. 1-23-95; DEQ 10-2003, f. & cert.ef. 5-27-03

340-054-0035

Final Stage of Application Process for Design Loans or Construction Loans

The Department will administer loans for design ~~and~~ or construction of both point source and nonpoint source projects.

(1) In addition to the loan application and items specified in OAR 340-054-0024(1), applicants applying for a CWSRF loan for a design or construction project must submit the following documents to be considered for loan approval:

(a) A planning document that the Department determines adequately documents the efficacy and appropriateness of the proposed project to remediate the identified water pollution control problem. For sewage collection systems or sewage treatment facilities, the planning document must meet the requirements of the Department's CWSRF Procedures Manual (February 1, 2008) and other planning guidance in effect at the time of submittal

(b) In accordance with OAR 340-018-0050, a Land Use Compatibility Statement (LUCS) from the appropriate planning jurisdiction demonstrating compliance with the Department of Land Conservation and Development's (DLCD) acknowledged comprehensive land use plan and statewide land use planning goals.

(c) An environmental review prepared in accordance with the requirements of the EPA approved State Environmental Review Process (SERP) described in the CWSRF Procedures Manual (February 1, 2008).

(d) Any other information requested by the Department.

(2) In addition to the requirements of section (1) of this rule, applicants for a CWSRF loan for the design or construction of sewage collection systems or sewage treatment projects must submit the following documents to be considered for loan approval:

(a) A Department approved sewer use ordinance adopted by all municipalities and service districts serviced by this project that meets the provisions of this section. The sewer use ordinances must prohibit any new connections from inflow sources into the sewage collection system; and require that no wastewater introduced into the sewage collection system contain toxics or other pollutants in amounts or concentrations that have the potential of endangering public safety or adversely affecting the project or precluding the selection of the most cost-effective alternative for the project.

(b) A demonstration that the Applicant has adopted a user charge system that meets the requirements of the User Charge System section of the CWSRF Procedures Manual (February 1, 2008).

(c) For projects serving two or more municipalities, the Applicant must submit the executed inter-municipal agreements, contracts or other legally binding instruments necessary for the financing, building and operation of the proposed sewage collection system or sewage treatment facility.

(d) In accordance with OAR Chapter 340, division 052, Applicants for construction-only loans must submit Department approved plans and specifications for the project as applicable.

(e) For projects with estimated costs in excess of $10 million, the Applicant must submit a value engineering study prepared in accordance with the requirements of the CWSRF Procedures Manual (February 1, 2008).

Stat. Auth.: ORS 468.423 - 468.440
Stats. Implemented: ORS 468.433 & 468.437
Hist.: DEQ 2-1989, f. & cert. ef. 3-10-89; DEQ 1-1993, f. & cert. ef. 1-22-93; DEQ 3-1995, f. & cert. ef. 1-23-95; Administrative correction 10-29-98; DEQ 10-2003, f. & cert.ef. 5-27-03; DEQ 2-2008, f. & cert. ef. 2-27-08

Funding under the 2009 American Recovery and Reinvestment Act (Act)

340-054-0098
Definitions

The following definitions apply to OAR 340-054-0098 through OAR 340-054-0108:

(1) "Act" means the American Recovery and Reinvestment Act of 2009, Public Law 111-5, signed into law on February 17, 2009.

(2) "Principal forgiveness" means the portion of the total amount borrowed that is not required to be repaid.

Stat. Auth.: ORS 468.020, ORS 468.440
Stats. Implemented: ORS 468.423 to 468.440

340-054-0100
Implementation within the Clean Water State Revolving Fund Program

(1) OAR 340-054-0098 through OAR 340-054-0108 prescribe the use of Act funds through the Clean Water State Revolving Fund (CWSRF) when such funds are available to the department.

(2) When Act funds are available to the department, these funds must be awarded to public agencies in accordance with the Act and are subject to the requirements of the Clean Water State Revolving Fund.

(3) All requirements for projects funded under the Act not specifically addressed in OAR 340-054-0098 through OAR 340-054-0108 are subject to OAR 340-054-0001 through OAR 340-054-0065.

Stat. Auth.: ORS 468.020, ORS 468.440
Stats. Implemented: ORS 468. 423 to 468.440

340-054-0102
Project Eligibility under the Act

(1) Eligibility for funding under the Act is the same as prescribed in OAR 340-054-0015(1) except planning, as defined in OAR 340-054-0010(38), is not eligible.

(2) The acquisition of land for any purpose, or the development or purchase of an easement are not eligible under the Act.

Stat. Auth.: ORS 468.020, ORS 468.440
Stats. Implemented: ORS 468.423 to ORS 468.440

340-054-0104
Use of Funds, Intended Use Plan under the Act

(1) Funding purpose. Notwithstanding OAR 340-054-0020, funding provided under the Act may be used only for the following CWSRF purposes:

(a) To make loans, or purchase bonds,
(b) To pay CWSRF program administration costs to the extent allowed by federal law,
(c) To earn interest on fund accounts.

(2) Loan Increases. Notwithstanding OAR 340-054-0025(6)(c), loan increases using Act funding will only be made to loans funded by the Act and only to the extent consistent with OAR 340-054-0106.

(3) Existing loan agreement. A borrower with a loan agreement executed prior to October 1, 2008 is not eligible to receive funding under the Act for a project as described and funded under that existing loan agreement.

(4) Loan reserve. Notwithstanding OAR 340-054-0065(2)(c)(B), the required reserve of any individual loan cannot be funded with CWSRF loan proceeds provided from the Act.

(5) Intended Use Plan (IUP):

(a) A project must be listed in the Intended Use Plan to be eligible for funding under the Act.

(b) Notwithstanding OAR 340-054-0025(5)(d), the department must provide at least 14 days for public comments on the draft Intended Use Plan.

Stat. Auth.: ORS 468.020, ORS 468.440
Stats. Implemented: ORS 468.423 to 468.440

340-054-0106
Allocation of Act Funds

Notwithstanding OAR 340-054-0025(6), funds made available by the Act must be allocated as follows:

(1) Funding of applicants. Funds will be offered to an applicant on the project priority list in rank order, subject to eligibility. A project is not eligible unless all required documentation is complete and appropriate environmental review, including any required notice and opportunity for public comment, has been completed at the time the department finalizes the intended use plan.

(2) Applicant's funding limit. The department will determine the amount of funding to be provided to an applicant, but the amount of any loan may not exceed $5 million per applicant, except as provided in section (3) of this rule.

(3) Allocation of remaining funds. If there are no applicants on the project priority list eligible for a loan under the Act, a borrower that has received partial funding under the Act may be allocated additional funding. The department may allocate the remaining funds to a borrower based on rank order not to exceed 25 percent of the remaining funds or $2 million, whichever is greater.

(4) Green Project Reserve. The department must establish a green project reserve with 20 percent of the funding received under the Act for projects to address green infrastructure, water or energy efficiency improvements or other environmentally innovative activities. If the department determines and certifies there are insufficient eligible projects for funding under this reserve, the reserve may be allocated to other eligible projects under the Act.

(5) Funding categories. Funds available under the Act may not be used to establish an Expedited Loan reserve, a Small Community reserve or a Planning reserve.

Stat. Auth.: ORS 468.020, ORS 468.440
Stats. Implemented: ORS 468.423 to 468.440

340-054-0108
Financial Terms

Notwithstanding OAR 340-054-0065, the following financial terms apply to any loan funded under the Act.

(1) Interest rates. A loan may be provided at a zero percent interest rate.

(2) Principal forgiveness.

(a) A loan made to a small community as defined in OAR 340-054-0010(48) must include 75 percent principal forgiveness on the total amount borrowed.

(b) All other loans must include 50 percent principal forgiveness on the total amount borrowed.

(c) Principal forgiveness is granted upon execution of the loan agreement.

Stat. Auth.: ORS 468.020, ORS 468.440
Stats. Implemented: ORS 468.423 to 468.440

Summary of Public Comment and Agency Response

Title of Rulemaking: Amend the Clean Water State Revolving Fund – Permanent Rules

Prepared by: Larry McAllister **Date: August 25, 2009**

Comment period

The public comment period opened on July 23, 2009, and closed at 5 p.m. on August 24, 2009. DEQ held three public hearings:

- August 17, 2009 at 6 p.m. at the Jackson County Courthouse auditorium in Medford, Oregon. One person attended this hearing. No comments either orally or written were received at this hearing.
- August 18, 2009 at 6 p.m. at the eastern region DEQ office in Bend, Oregon. No one attended this hearing.
- August 19, 2009 at 6 p.m. at the DEQ Headquarters in Portland, Oregon. No one attended this hearing.

During the public comment period, DEQ received two comments by email and one oral comment during the public forum agenda at the August 21 Environmental Quality Commission meeting in Newport, Oregon.

Organization of comments and responses

Summaries of individual comments and the Department's responses are provided below. The persons who provided each comment are referenced by a letter. A list of commenters and their reference letter follows the summary of comments and responses.

Summary of Comments and Agency Responses	
Comment 1 Commenter A	I would like to thank the DEQ SRF program staff for their hard work in allocating the ARRA (American Recovery and Reinvestment Act) funding. The SRF loan received by CCSD No.1 and its initial funding from ARRA will help provide much needed sanitary sewer service to a portion of Clackamas County that has long wanted this service. CCSD No.1 will need additional allocations to this first loan to assure successful financing of the entire project. Does the source of funds for the initial allocation under this SRF loan agreement have any impact on the ability of CCSD No. 1 to receive additional allocations to this agreement from other funds available to the SRF program? Is this initial allocation, funded by the ARRA, a "one-time" thing and once spent, requires that either the funded project be completed or, if not, be resubmitted to the SRF program for another review and ranking in order to obtain the remaining funding necessary?

DEQ Response	An initial allocation funded by ARRA does not restrict a borrower from requesting an increase of funding from conventional SRF funding. Once funded, a project with the original scope of work does not have to be resubmitted, reviewed and ranked again to acquire an increase in funding. Because the program has limited funds to provide increases to projects, any increases are allocated based on a project's rank and the availability of funds to provide such increases. No changes were made in response to these comments.
Comment 2 Commenter B	ACWA supports the proposed rules. We appreciate our strong working relationship with Oregon DEQ and its willingness to involve local governments in developing this approach to the additional federal stimulus dollars dedicated to clean water infrastructure projects in Oregon. ACWA members are very interested in green infrastructure projects, and many communities are incorporating green elements into their wastewater and stormwater utility improvements including green infrastructure, energy efficiency and renewable energy projects. Loans at 0% interest and the principle forgiveness provisions are very important to the communities that are able to secure a loan under the State Revolving Loan Fund rules. 0% interest rates and principle forgiveness translate into direct savings for rate payers in the communities receiving those funds.
DEQ Response	Comments noted. No changes were made in response to these comments.
Comment 3 Commenter C	DEQ's proposed permanent rules frustrate the intent of Congress and the American Recovery and Reinvestment Act of 2009 (ARRA) by conservatively interpreting how ARRA funds can be spent. ARRA restrictions indicate funds cannot be used to refinance or restructure loans existing before October 1, 2008. ARRA does not restrict states from providing supplemental ARRA funded loans to communities with existing Clean Water State Revolving Fund loans. Congressional intent in establishing ARRA was to fund projects that are ready to proceed and provide the best opportunity to stimulate the local economy. DEQ is proposing that funding be limited to new projects only. Existing projects, evidently because they have arranged for potential funding and completed preliminary ground work, will not be eligible for ARRA funding under the DEQ rule. Inhibiting funding from existing projects will result in a lost opportunity to stimulate the economy. The proposed rules will frustrate the intent of ARRA and the opportunities meant for cities like Coburg. DEQ should follow regulations intended by Congress and the Environmental Protection Agency and not propose additional restrictions on the use of ARRA funds.

DEQ Response	DEQ consulted with EPA in developing the rules and wrote rules to support the intent of the Act to fund new projects that would provide and create jobs. DEQ's intent was not to provide a better loan deal to existing projects, but rather fund new projects, and therefore developed rules based on the agency's appropriate discretion in developing policy to address the use of ARRA funds for new projects. No changes were made in response to these comments.

List of Commenters and Reference Letter

Reference Letter	Name	Organization	Address	Submittal Date
A	Doug Waugh, Finance Manager	Water Environment Services, Clackamas County	150 Beavercreek Road, Oregon City, OR 97045	July 29, 2009
B	Janet Gillaspie, Executive Director	Oregon Association of Clean Water Agencies	537 SE Ash, Suite 12, Portland, OR 97214	August 19, 2009
C	Milo Meacham, Attorney	Lane Council of Governments, representing the City of Coburg	859 Willamette Street, Suite 500 Eugene, OR 97401-2910	August 21, 2009

State of Oregon
Department of Environmental Quality **Memorandum**

Presiding Officer's Report

Date: August 25, 2009

To: Environmental Quality Commission

From: Larry McAllister, Presiding Officer

Subject: Presiding Officer's Report for Rulemaking Hearing
Title of Proposal: Amend the Clean Water State Revolving Fund – Permanent Rules

Hearing #1

Hearing Date and Time: **August 17, 2009, 6 p.m.**
Hearing Location: Jackson County Courthouse Auditorium, **Medford, Oregon**

The Department convened the rulemaking hearing on the proposal referenced above at 6:10 p.m. and closed it at 7:02 p.m. People were asked to sign registration forms if they wished to present comments. People were also advised that the hearing was being recorded.

Chuck Root, representing Rogue Valley Sewer Services, attended the hearing; but chose not to comment orally or submit a written comment.

Before opening the hearing for comments, the presiding officer briefly explained the rulemaking proposal and procedures for the hearing. No comments, either oral or written were submitted at this hearing.

Hearing #2

Hearing Date and Time: **August 18, 2009, 6 p.m.**
Hearing Location: DEQ Eastern Regional Office, **Bend, Oregon**

The Department convened the rulemaking hearing on the proposal referenced above at 6:15 p.m. and closed it at 7:03 p.m.

With the exception of the Presiding Officer, no other persons attended the hearing and no comments were submitted.

Hearing #3

Hearing Date and Time: **August 19, 2009, 6:00 p.m.**
Hearing Location: DEQ Headquarters, **Portland, Oregon**

The Department convened the rulemaking hearing on the proposal referenced above at 6:20 p.m. and closed it at 7:04 p.m.

With the exception of the Presiding Officer, no other persons attended the hearing and no comments were submitted.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Relationship to Federal Requirements

Amend the Clean Water State Revolving Fund – Permanent Rules

Answers to the following questions identify how the proposed rulemaking relates to federal requirements and the justification for differing from, or adding to, federal requirements. This statement is required by OAR 340-011-0029(1).

1. Is the proposed rulemaking different from, or in addition to, applicable federal requirements? If so, what are the differences or additions?

DEQ's Clean Water State Revolving Fund (CWSRF) is administered in Oregon under the federal Clean Water State Revolving Fund program authorized by title VI of the Clean Water Act. This rulemaking will amend DEQ's CWSRF program to also address requirements of the American Recovery and Reinvestment Act of 2009.

The proposed amendments are not different from or in addition to requirements of either the Clean Water Act or the American Recovery and Reinvestment Act. Both federal programs allow states flexibility in how federal program requirements are implemented. DEQ is exercising this flexibility both in defining eligible projects and the level of incentives to be incorporated in loans.

The American Recovery and Reinvestment Act (the Act) provides economic stimulus funds to states to be incorporated into their CWSRF programs. The U.S. Environmental Protection Agency (EPA) determined funds may not be used to provide assistance for the purchase or refinancing of municipal debt or restructuring outstanding CWSRF loans unless the initial debt was incurred on or after October 1, 2008. DEQ is imposing limitations beyond the Act, making any project funded by the CWSRF loan program prior to the October 1, 2008 date ineligible.

Another important provision of the Act requires at least fifty percent of the grant received by a state provide "additional subsidization" to eligible recipients. Yet, the Act allows each state to decide if that additional incentive will be offered as a negative interest rate, grants, principal forgiveness or a combination of these. DEQ chose to provide principal forgiveness. So the proposed amendments to DEQ's CWSRF loan program will establish incentives different from the incentives offered by other states, but allowed under the flexible requirements of the Act.

If adopted, the proposed amendments will align DEQ's CWSRF program with the requirements of both the Clean Water Act and the American Recovery and Reinvestment Act.

2. If the proposal differs from, or is in addition to, applicable federal requirements, explain the reasons for the difference or addition (including as appropriate, the public health, environmental, scientific, economic, technological, administrative or other reasons).

The proposed amendments are not different from, or in addition to, either the Clean Water Act or the American Recovery and Reinvestment Act. Describing any reasons here for any differences is not necessary.

3. If the proposal differs from, or is in addition to, applicable federal requirements, did DEQ consider alternatives to the difference or addition? If so, describe the alternatives and the reason(s) they were not pursued.

DEQ considered the alternatives available within the Act in providing an additional subsidization, but no alternatives outside the Act itself were considered.

DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 340
Proposed Rulemaking
STATEMENT OF NEED AND FISCAL AND ECONOMIC IMPACT

Amend Clean Water State Revolving Fund - Permanent Rules

This form accompanies a Notice of Proposed Rulemaking

Title of Proposed Rulemaking	Amend Clean Water State Revolving Fund - Permanent Rules. Chapter 340, Division 54
Statutory Authority or other Legal Authority	The Oregon Department of Environmental Quality (DEQ) and the Environmental Quality Commission (EQC) have the statutory authority to address this issue under ORS 468.020 and 468.423 - 468.440. Additional authority is provided by the American Recovery and Reinvestment Act of 2009 (Public Law 111-5).
Statutes Implemented	These proposed rules implement ORS 468.423 - 468.440.
Need for the Rule(s)	President Obama signed the American Recovery and Reinvestment Act of 2009 (the Act) in February 2009. The Act provides economic stimulus funds to the federal Clean Water State Revolving Fund (CWSRF) loan program that is administered by the U.S. Environmental Protection Agency (EPA). The EPA allocated $44.3 million in funds to Oregon DEQ's CWSRF program. In April 2009, the EQC adopted temporary amendments to DEQ's CWSRF program administrative rules to ensure the program addressed all requirements of the Act and therefore was eligible to receive the $44 million capitalization grant. By law, the temporary amendments adopted by the EQC in April will expire in 180 days (late October). This permanent rulemaking is necessary to ensure DEQ is able to meet the requirements of the Act and to receive possible additional funds from the Act if those funds become available after October 2009. The intention of this rulemaking is to permanently adopt the temporary amendments with only minimal changes in language necessary to ensure DEQ and borrowers are able to comply with requirements of the Act.
Documents Relied Upon for Rulemaking	The principal documents relied upon in preparing this rulemaking include: • The American Recovery and Reinvestment Act of 2009; • U.S. Environmental Protection Agency Memo dated March 2, 2009 from the EPA Office of Wastewater Management – guidance document on awarding capitalization grants under the Act; • Oregon administrative rules, chapter 340, division 54. These documents are available from DEQ's Water Quality Division, 811 SW Sixth Avenue, Portland Oregon. To arrange to review these documents call Larry McAllister, (503) 229-6412.
Requests for Other Options	**Pursuant to ORS 183.335(2)(b)(G), DEQ requests public comment on whether other options should be considered for achieving the rule's substantive goals while reducing negative economic impact of the rule on business.**
Fiscal and Economic Impact, Statement of Cost Compliance	
Overview	Adoption of the proposed rule amendments will allow DEQ's CWSRF program to address certain requirements of the American Recovery and Reinvestment Act. As a result of addressing those requirements, DEQ's CWSRF loan program was eligible for $44.3 million in funding from the Act. The

	additional funds will be used for loans incorporating zero percent interest rates and substantial principal forgiveness. The incentives of these loans will make it possible for borrowers to substantially reduce the cost of needed water quality improvement projects These loans will be available to cities, counties and other public entities. There are additional reporting requirements under ARRA associated with the loans, but the cost of that reporting are expected to be negligible.	
Impacts on the General Public	The adoption of the proposed rules will have no direct impact on the general public. Borrowers of these loans are limited to public agencies and they will benefit from the additional subsidization of the loans offered under the rules in financing their water quality projects. For example, a loan made to a small community would include a subsidy of 75% principal forgiveness. In this example, only $250,000 of a $1 million loan would have to be repaid to DEQ. The public should benefit from the water quality improvements made possible by projects receiving CWSRF loans. Due to variables such as the type and size of the project and a community's population, quantifying specific fiscal impacts to the public from this rulemaking is beyond the scope of this fiscal analysis.	
Impacts to Small Business (50 or fewer employees – ORS183.310(10))	Small businesses are not eligible applicants to the CWSRF loan program, so the proposed rules will have no measurable direct impact on Oregon's small businesses. DEQ's funding of additional water quality improvement projects may increase the demand for some services provided by Oregon's small businesses such as consulting and construction services.	
Cost of Compliance on Small Business (50 or fewer employees – ORS183.310(10))	a) Estimated number of small businesses subject to the proposed rule	Small businesses are not eligible applicants to the CWSRF program and are not subject to the proposed rules.
	b) Types of businesses and industries with small businesses subject to the proposed rule	There are various types and numbers of companies who might indirectly benefit from the proposed rules. These primarily include consultants and contractors who would be employed to design and construct funded projects.
	c) Projected reporting, recordkeeping and other administrative activities required by small businesses for compliance with the proposed rule, including costs of professional services	The Act does require additional reporting by borrowers. As contractors or consultants to borrowers, small businesses may be required to report regularly on the number of jobs created and hours worked.
	d) The equipment, supplies, labor, and increased administration required by small businesses for compliance with the proposed rule	This information is not available. The additional reporting (see above) is the only identified additional administrative activities associated with CWSRF loans using Act funds.
	e) A description of the manner in which DEQ involved small businesses in the development of this rulemaking	Small businesses were not involved in the development of the proposed rules.
Impacts on Large Business (all businesses that are not "small businesses" under ORS183.310(10))	If adopted, the proposed rules are not expected to have any measurable direct impact on Oregon's large businesses. Businesses are not eligible applicants to the CWSRF loan program and so are not expected to be impacted by the proposed changes in the loan program.	

Impacts on Local Government	Local governments are the primary borrowers of CWSRF loans. The proposed rule revisions will ensure that local governments (borrowers) remain in compliance with the requirements of the Act. The generous incentives within these loans would result in measurable project cost savings compared to most other financing options available. Again, as an example, a small community in Oregon with a population of 5,000 or less might qualify for 75% of the cost of their wastewater project being forgiven. Other communities with larger populations qualifying for these loans might have 50% of their loan amount forgiven if the proposed rules are adopted. Determining specific fiscal impacts to local governments requires information on variables that is beyond the scope of this fiscal analysis.
Impacts on State Agencies other than DEQ	It is not expected the proposed rules will have a measurable impact on other state agencies, although certain agencies play a role in the CWSRF loan program's environmental review process. For instance, the Department of Land Conservation and Development (DLCD) is responsible for evaluating certain environmental impacts of projects receiving CWSRF funding. Additional projects (due to Act funding) may result in additional environmental review work by staff at DLCD.
Impacts on DEQ	Adoption of the proposed rule amendments will have no significant impact on DEQ's CWSRF program or the Department. The related activities due to the availability of the Act funding are being addressed with current DEQ resources.
Assumptions	The proposed permanent rules are critical for DEQ to successfully implement the American Recovery and Reinvestment Act. The rules will ensure Oregon's CWSRF loan program and its borrowers continue to meet the requirements of the Act at that time the temporary rules expire.
Housing Costs	DEQ has determined that this proposed rulemaking will have no measurable 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.
Administrative Rule Advisory Committee	An advisory committee was not used in developing this permanent rulemaking. Because this rulemaking does not address new policy issues, an advisory committee was not convened. A financial work group provided policy direction during the development of the earlier temporary rule language.

Larry McAllister — Prepared by
Larry McAllister — Printed name
7-14-09 — Date

James Roys — Approved by DEQ Budget Office
James Roys — Printed name
7-14-09 — Date

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Land Use Evaluation Statement

Rulemaking Proposal
for

Amend the Clean Water State Revolving Fund - Permanent Rules

1. **Explain the purpose of the proposed rules.**
   The American Recovery and Reinvestment Act of 2009 (the Act) allows the U.S. Environmental Protection Agency to allocate $44.3 million to Oregon DEQ's Clean Water State Revolving Fund to create jobs and promote economic recovery. To meet the requirements of the Act, the Environmental Quality Commission (EQC) adopted temporary amendments to DEQ's CWSRF loan program administrative rules in April 2009. By law, these temporary rules will expire in October 2009. The adoption of this permanent rulemaking will replace these temporary rules and ensure DEQ's program will meet the requirements of the Act.

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?**

   Yes X **No** ____

   a. **If yes, identify existing program/rule/activity:**
      Oregon administrative rule 340-018-0030(5)(b) identifies the approval of a state revolving loan application as one of DEQ's programs and actions determined to have significant effects on land use.

   b. **If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?**

   Yes X **No** ____ **(if no, explain):**

   c. **If no, apply the following criteria to the proposed rules.**
      NA

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.**
   NA

TOWN HALL MEETING

Environmental Quality Commission Meeting
Klamath Falls, Oregon
October 22, 2009

Name	Affiliation or Interest	Phone or Email	Add to email list?
Ken Kestner	Lake Co / Septic	541-947-6004 KKestner@co.lake.or.us	
Mark Willett	City of K.F.	541-883-5360	
Kurt Schmidt	Public	Leahschmidt@msn.com	-ltr

TOWN HALL MEETING

Environmental Quality Commission Meeting
Klamath Falls, Oregon
October 22, 2009

Name	Affiliation or Interest	Phone or Email	Add to email list?

State of Oregon

Department of Environmental Quality Memorandum

Date: October 19, 2009

To: Environmental Quality Commission

From: Dick Pedersen, Director

Subject: Agenda Item K, Informational Item: Director's Dialogue
October 22-23, 2009 EQC meeting

Underground storage tanks compliance inspection program

Last month, I accompanied one of our tanks inspectors on his inspections of underground fuel tanks at a hospital emergency generator facility and a "mom and pop" retail store in Coos Bay. I was able to appreciate first-hand the level of effort it takes our staff to inspect almost 1800 tank facilities statewide at least once every three years, as EPA requires.

Given the staff time needed for each of these inspections and the fact that we have only five full-time inspectors statewide, I am impressed with how the tanks program has been so successful in increasing overall compliance rates. Between 1998 and 2003, overall compliance rates were as low as 28 percent. Between 2004 and 2009, compliance rates rose to 85 percent. When the tanks program enters its third cycle of inspections at all facilities beginning July 2010 and we anticipate that compliance rates will approach 90 percent.

The success of the program is the result of three changes since 2003: DEQ began inspecting facilities at least once every three years, we implemented one of the first station operator training programs in the nation and began issuing field citations, which was a new program for us. DEQ made the field citation program permanent in 2007, and it was the model used for the expedited enforcement offer rulemaking that you adopted in October 2008.

By using field citations rather than traditional enforcement actions like warning letters and civil penalty assessments, our tanks inspectors can encourage compliance with significantly less staff time. The most common violations result in a $150 field citation penalty. This penalty amount is significant enough to discourage future non-compliance and is an efficient use of staff time. Another key factor to our success is staffs' effective communication, training and relationship building with tank owners and their contractors

Greenhouse gas reporting

The first reports for Oregon greenhouse gas emissions are due in March 2010 for 2009 emissions from sources with Title V air permits. These sources emit at least 2,500 tons per year of greenhouse gases. DEQ is finalizing the emission quantification methods and providing technical assistance to those subject to reporting.

On September 22, EPA unexpectedly finalized a national greenhouse gas reporting rule for sources that emit at least 25,000 tons per year of greenhouse gas. Reporting under the federal rule will begin in 2011 for emissions from 2010. DEQ does not plan to change our current reporting threshold of 2,500 tons of greenhouse gas emissions per year.

On September 21, Washington released its draft greenhouse has reporting rule. The Washington rule differs from Oregon's rule in a few key areas:

- Washington initially requires reporting from stationary sources and non-road fleets emitting 25,000 metric ton CO2, decreasing to 10,000 metric tons in 2010. Oregon has a 2,500 metric ton requirement;
- Fleet reporting for non-road vehicles includes ships, airplanes and rail. Oregon does not require fleet reporting;
- Fleet reporting at a 2,500 metric ton threshold for highway vehicles. Oregon does not require fleet reporting.

Senate Bill 38 expanded greenhouse gas reporting to include electricity importers and fuel distributors. These new reporters are required to submit the first report in 2011 for their 2010 emissions. Senate Bill 103 authorized fees for existing reporters to fund the reporting program. DEQ has reconvened its greenhouse gas reporting advisory committee to recommend rule revisions to implement 2009 legislation. Mark Reeve, former EQC chair and chair of DEQ's low emission vehicle advisory committee, chairs the committee, which held its first meeting on September 23. The committee will discuss streamlining with the new federal reporting rule and consider a possible recommendation for new legislation that would calculate fees differently than current rules.

Greenhouse gas reporting protocols

On September 8, DEQ began a 30-day public comment period for feedback on protocols developed by the Western Climate Initiative to estimate 2009 emissions from Oregon facilities. EPA's greenhouse gas reporting rules, released September 22, included federal emission quantification methods or reporting protocols. Due to EPA's release, DEQ canceled the initial comment period and proposed a new list consistent with the federal protocols. The federal emission protocols offer a number of benefits over WCI's protocols. The federal protocols allow for more useful comparisons of reports from 2009 and 2010, enable reporters to develop expertise in one set of protocols rather than shifting from one to another, and allow for more useful comparisons of Oregon's reports to those of other states.

DEQ is currently seeking comments on whether facilities have collected the data needed to comply with the proposed protocol for 2009 reporting. If a facility isn't monitoring or reporting data specified by the protocol, we are asking the facility to propose an alternative method that can be used to comply only for 2009. Comments are due to DEQ by November 9.

Transportation-related greenhouse gas reduction measures

DEQ is forming an advisory committee to help develop rules for a low carbon fuel standard authorized by House Bill 2186. The committee is meeting for the first time November 3 in Portland, and will discuss a number of key policy issues, including carbon intensity values, deferrals, adjustments for land use impacts, phase-in schedules and implementation issues. DEQ is coordinating closely with other Oregon agencies, Washington, California and Northeast states in conducting technical analyses and developing proposed rules for this program.

As required by House Bill 2001 and House Bill 2186, DEQ is assisting the Oregon Department of Transportation and the Oregon Department of Land Conservation and Development to evaluate tools and scenarios for Metro and other transportation planning agencies to reduce vehicle miles travelled and associated greenhouse gas emissions. DEQ will form a study group in early 2010 to develop a report to the legislative interim committees on requirements to improve truck efficiency and reduce truck idling.

Update on federal climate change activities

EPA proposed Title V and New Source Review rules for major sources of greenhouse gas. Under the proposed rules, sources that emit at least 25,000 tons per year of greenhouse would be required to obtain a Title V operating permit from state and local permitting authorities and install best available control technology.

Senators Boxer and Kerry introduced the Clean Energy Jobs and American Power Act September 30, which is a companion bill to the American Clean Energy and Security Act recently adopted by the US House of Representatives. The bills establish a national cap and trade program to reduce greenhouse gas emissions but the Senate bill targets a 20 percent reduction in greenhouse gas emissions from 2005 to 2020, as compared to a 17 percent target in the House bill. The Senate bill does not preempt use of existing Clean Air Act authorities for capped sources as the House bill does. Both bills prohibit state cap and trade programs from 2012 to 2017, although the Senate bill has exceptions if the federal program is delayed. Unlike the House bill, the Senate bill promotes expansion of nuclear energy and has provisions to improve the integrity of offsets that are used in lieu of reductions from capped sources.

Portland-area air quality

The Portland Air Toxics Solutions advisory committee met in September, and DEQ is developing additional technical analyses and planning additional meetings to give the committee more time to develop its recommendations. DEQ is also considering a few additional members

for the committee to bring more viewpoints and expertise to the table for this collaborative process. The committee's next meeting will be in November or December.

DEQ held several meetings with Northwest Portland residents and ESCO company officials to discuss renewal of ESCO's Title V permit as well as air toxics and monitoring issues in the neighborhood. DEQ has agreed to hire an independent consultant to review possible control options to reduce odor, toxics and dust from the ESCO facility. DEQ will conduct additional air toxics monitoring in Northwest Portland, and ESCO will contribute funding to air quality monitoring at the Chapman school.

On October 7, DEQ and EPA provided information about air toxics monitoring at Harriet Tubman Leadership Academy in Portland. The monitoring at the academy is part of EPA's national initiative to determine whether outdoor air pollution from industry, motor vehicles and other sources poses health concerns to schoolchildren. EPA is also monitoring for air toxics at Toledo Elementary School in Toledo, Oregon.

Vehicle Inspection Program breaks records

On September 29 and 30, DEQ's Vehicle Inspection Program broke records for the most cars tested in a day. The program typically tests about 2,300 vehicles per day. On September 29, DEQ's inspectors tested 4,414 vehicles and on September 30 the program completed an unprecedented 5,165 tests. The high volumes were due to news reports that gave customers the impression that they could avoid an increase in DMV registration fees if they completed their emissions test before October 1. The DMV fee increase was actually connected to the registration expiration date, not the test date. The previous record of 4,193 vehicles tested in a day occurred following closures due to the 2008 snowstorm.

Ozone standard

In 2008, the federal ozone, or smog, standard was lowered from 0.085 parts per million to 0.075 ppm. On September 16, EPA announced that it will reconsider the 2008 standard again and may lower it to 0.070 ppm. This new change would put the Eugene, Medford, Portland and Salem areas at risk for not meeting the standard, and highlight a need for DEQ's work to improve air quality across Oregon.

Field burning

Senate Bill 528 authorized DEQ and the Oregon Department of Agriculture to form a joint advisory committee to develop rules for field burning phase-down. This committee will begin work in November, and the focus of DEQ's rulemaking will be the criteria for emergency burning, defined as up to 2,000 acres per year in case of disease outbreak or insect infestation. ODA's rulemaking will focus the continued limited operation of the field burning program. These rules must be in place by July 2010, in advance of the summer burn season, to provide a process for evaluating requests to emergency burn.

North Ridge Estates

North Ridge Estates is a residential development of approximately 25 homes north of Klamath Falls. Specific parcels of land in the development have asbestos contamination from a former military barracks. The barracks were constructed in the early 1940s by the United States Department of Defense to treat Marines suffering from tropical diseases contracted during WWII. EPA has removed asbestos sources from occupied residential properties and adjoining unoccupied properties but has not identified funding for continuing cleanup operations.. EPA is developing a feasibility study report and proposed plan for site remediation and plans to release that plan for public comment in December 2009.

In August 2009, Klamath County proposed vacating two roads within the development because the county believes the roads were damaged by asbestos removal activities. The Klamath County Board of Commissioners has scheduled a public meeting for this issue on October 27.

Lehman Hot Springs

Lehman Hot Springs is a small resort in Umatilla County and has been operating wastewater lagoons and a collection system without a permit since 2002. Various enforcement and court actions have occurred, requiring actions of Lehman Development Corp. and its owner Patrick Lucas in order to bring the site into compliance with Oregon environmental laws.

On May 26, the Umatilla County Court issued a temporary restraining order against Lehman Hot Springs to lower the lagoon levels, plug the sewer collection line and stop all discharges to the creek. The temporary order applies until the end of the hearing, currently scheduled for October 16. The judge in the case ruled Mr. Lucas is personally responsible for actions at Lehman Hot Springs. DEQ approved irrigation of the wastewater to draw down the lagoons and reduce the risk of a major breach of the wastewater into the creek. Irrigation started in August, and enough wastewater has been irrigated that the freeboard requirement was finally met. There is still a documented seep discharging wastewater to the creek.

On September 29, the Umatilla County Deputy District Attorney presented additional violations that have occurred since March 31 to the grand jury. These violations may be added to the criminal trial currently scheduled for the end of October, or may be addressed in a separate trial. The additional indictment includes 34 violations, 16 of which are felonies.

Alkali Lake

Alkali Lake is a former chemical waste disposal site in Lake County, and one of the original environmental cleanup sites in Oregon. DEQ has invested $2.3 million in clean-up costs since beginning the project in 1976. In a 2007 Record of Decision, DEQ concluded that continued monitoring and maintenance is protective under the law and is the most appropriate approach for management of the site. Bayer Crop Sciences, Inc. is the current owner of the site, and agreed to

a proposed consent judgment in which it would pay a portion of the accumulated costs in exchange for conditional release from liability. DEQ provided public notice and opportunity to comment on the proposed settlement, and 21 sets of comments were received. All comments objected to the proposal. DEQ is now considering the comments and will hold public hearings before making a decision.

Oregon's integrated water resources strategy

As you will recall, Phil Ward, Director of the Water Resources Department, met with us in Newport to discuss House Bill 3369. That legislation directs the Water Resources Department and Water Resources Commission to coordinate with several other state agencies, including DEQ and EQC, to develop an integrated state water resources strategy. After that meeting, Neil Mullane and I had the opportunity to attend the September 10 meeting of the Water Resources Commission where an update on the implementation of the legislation was presented. I was impressed with the commitment and enthusiasm of everyone working on this important project. Each of the commissioners developed draft white papers on different elements of the strategy and they presented them at the meeting. The topics of the draft white papers, which DEQ staff sent to you last month, include water quality, water quantity, social issues, economy and the implications of climate change.

DEQ has been working closely with Water Resources Department and the other agencies involved on an implementation plan for the entire project. With the EQC's approval, we could like to invite the Water Resources Department and commissioners to present an update on the strategy in the spring.

Asphalt fumes in Newport

At the August meeting, we toured near an asphalt plant located adjacent to a school and residential neighborhood in Newport after hearing residents expressed concern over the odors from the plant. Road and Driveway Co. operates the plant, and it has existed at its current location since 1960. The plant does have a wet scrubber to control plant emissions and operates under a General Air Contaminant Discharge Permit. Inspections in recent years have shown the plant to be in compliance, but DEQ does occasionally receive complaints about odors from the facility.

On September 9, staff from the Salem office surveyed the area near the facility in response to a high number of odor complaints. Staff detected odors at two of the five locations sampled and at the facility, but the odors were not stronger than would be expected from a normally-operating asphalt plant. Staff also surveyed businesses and a school near the facility to see if the public had noticed any increased odors in the area. DEQ staff did not specifically mention asphalt odors so that people were not guided on their comments. Some people were not bothered by asphalt odors at all; others reported experiencing adverse health impacts from the odors such as headaches, watery eyes and exacerbation of asthma conditions.

DEQ will continue to coordinate with other agencies such as OSHA and the Oregon Public Health Division to gather the most accurate and up-to-date information available regarding this issue. DEQ plans to hold a public meeting on this issue in Newport this November.

Federal stimulus funds

DEQ received the following funding under the American Recovery Act:

- Approximately $44 million for the Clean Water State Revolving Fund loan program
- $447,200 to conduct water planning projects
- $1.7 million in state clean diesel funding for grants, and
- Up to $2.7 million to protect human health and the environment by cleaning up petroleum leaks from underground storage tank sites.

States were required to submit their first reports to the White House Office of Management and Budget October 10. This is purported to be the largest and most transparent reporting process for any federal awards. Between October 11 and 29, state and federal agencies will be reviewing the reported information. On October 30, the Office of Management and Budget will make the reports available publicly.

The first reporting period covers February 17, 2009 through September 30, 2009. DEQ reported 29 full-time equivalent employees during this time, and this number includes staff hours at DEQ as well as vendors and contractors working on the act-funded projects. This number may seem low and that is because of the long lead-time for EPA to set up the appropriate programs and for DEQ to apply for and award the funds. We expect higher employee numbers in the next reporting period, since most projects will be underway by then. DEQ will report to the Office of Management and Budget every three months for the life of the act's work, which is expected to take up to two years.

The H&N view

Compliance the only real answer in solving Klamath smoke problem

It's not a battle against big, bad government; it's a health issue

Klamath County took it pretty easy on people with wood-burning stoves last year. This year, though, an excess of wood smoke could cost violators some real money.

Klamath County is likely to undergo economic sanctions from federal and state agencies because of the heavy discharge of wood smoke each winter. The sanctions could include a loss of federal funds, or tougher restrictions on industry coming to the Klamath Falls urban area, even though industry isn't causing the problem.

Just over a year ago, the federal Environmental Protection Agency estimated that about 75 percent of the smoke hovering over Klamath Falls rooftops each winter comes from wood-burning stoves used to heat homes. It wasn't coming from industry, but industry is easier to penalize and, of course, the penalties prod local officials to take action against homeowners.

But this isn't a battle against big, bad government. It's a health matter.

Smoke is dangerous, especially for people with any kind of breathing problems. And it's preventable.

Klamath Falls has been struggling with smoke problems for many years and actually appeared to have licked them, but then the restrictions were tightened to apply to smaller particles. Smaller smoke particles are more dangerous because they work themselves farther into the lungs.

So a problem returned that Klamath County officials thought they had gotten past.

Last year, the county didn't issue any fines. It did issue 109 exemptions.

This year, says the county, there will be fines for violators — though there will still be exemptions available. People who use wood stoves as their sole source of heat, or have low incomes, can apply for exemptions to the county health department (403 Pine St.; telephone 883-5118 or 883-1122.)

The fine is $720 for the first offense, which comes after one warning notice. The second offense will cost $1,000.

The fine and the cost of replacement heat could be hardships. Talk to the health department if you think you deserve an exemption. Remember, too, those aren't the only hardships involved. Others in the community have to deal with health problems that smoke can cause and the whole community suffers when federal sanctions are imposed. Compliance is the real answer.

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Editorial board

Pat Bushey wrote today's editorial.

The members of the Herald and News editorial board are Publisher Heidi Wright; Editor Steve Miller, Assistant Editor Marcia McGonigle and Opinion Editor Pat Bushey.

Congress, California

U S. Senate, California

Hon. Barbara Boxer, 112 Hart Senate Office Building Washington, D.C. 20510, phone, (202) 224-3553. San Francisco, 1700 Montgomery St., Suite 240 San Francisco, CA 94111, phone (415) 403-0100, fax, (415) 956-6701. Sacramento, 501 I St., Suite 7-600, Sacramento, CA 95814, phone, (916) 448-2787; fax, (916) 448-2563.

Hon. Dianne Feinstein, United States Senate, 331 Hart Senate Office Building, Washington, D.C. 20510; San Francisco, One Post Street, Suite 2450, San Francisco, CA, 94104, phone, (415) 393-0707; fax (415) 393-0710.

2nd District (Siskiyou County)

Hon. Wally Herger, U.S. House of Representatives, 2433 Rayburn House Office Bldg., Washington, D.C. 20515; phone, (202) 225-3076. Chico: 55 Independence Circle, Suite 104 , Chico, CA, 95973; phone (530) 893-8363. Redding, 410 Hemsted Drive, Suite 115, Redding, CA, 96002; phone (530) 223-5898.

California, 4th District (Modoc County)

Hon. Tom McClintock, U.S. House of Representatives, 508 Cannon House Office Building, Washington, D.C. 20515; Phone: (202) 225-2511; Fax: (202) 225-5444. District Office, 4230 Douglas Blvd. Suite 200, Granite Bay, CA 95746; phone: (916) 786-5560, Fax: (916) 786-6364.

Deschutes County Board of County Commissioners
Tammy Baney, Chair

October 23, 2009

Chair Blosser, Members of the Committee;

My name is Tammy Baney, I am the Chair of the Deschutes County Board of Commissioners. Thank you for the opportunity to speak with you today about protecting the groundwater in south Deschutes and northern Klamath Counties. The following is a very brief summary of nearly 30 years of work.

Concerns about groundwater in south Deschutes County date back to 1982. Groundwater quality in the La Pine area of southern Deschutes County is at risk of nitrate contamination from onsite sewage treatment system discharge to groundwater. This area has a high water table, reaching less than 2 feet in many areas. Nitrate concentrations detected in groundwater indicate that degradation of groundwater quality is in process in the densely developed areas. Most onsite systems in the region are conventional systems located in highly porous and permeable (rapidly draining) soils with no intervening layer protecting the underlying shallow aquifer.

The US Environmental Protection Agency funded Deschutes County Environmental Health Division, Oregon Department of Environmental Quality and the US Geological Survey to work cooperatively to address the issue of groundwater contamination from onsite systems in south Deschutes County.

Based on the summary and conclusions of the USGS report Deschutes County, in partnership with DEQ adopted the "local rule." The new code would have required property owners to take groundwater protection actions to maintain and enhance the quality of the region's drinking water supply and rivers, including:

- the use of advanced onsite systems, connection to sewer or other approach that protects groundwater quality
- the use of groundwater protection measures on all properties by November 2022

The Local Rule was repealed by the voters in March 2009. On July 22, 2009 Deschutes County, DLCD, members of the La Pine Community got together with DEQ to discuss next steps. Deschutes County has requested that DEQ take the lead on ground water protection in South Deschutes County as we feel that we have done what we can on a local level. This is supported by the community as well.

Since July 22, 2009 we have had limited response from DEQ in determining what the next steps will be. The community of South Deschutes County is geared up to participate, as is Deschutes County. Most importantly, DEQ stated in January 2008 that

the definition of "public health hazard" had been met; time is of the essence in getting to a solution.

We share the same citizens of Oregon and I ask that EQC do the following…

- Ask DEQ to give Deschutes County residents an answer on what they will be doing to protect the groundwater in south Deschutes County by December 30, 2009
- Provide Deschutes County with a work plan outlining DEQ's next steps regarding the south Deschutes County groundwater protection issue
- Provide benchmarks and outcomes that we can share with our constituents to track progress
- Ask for an update from DEQ at all of your meetings to ensure movement on this issue
- Please be mindful that we are also concerned about losing our opportunity to secure any stimulus funds to assist the whatever solution is deemed appropriate by DEQ
- Ask DEQ to engage both Deschutes and Klamath Counties in protecting the groundwater as we share the same aquifer

The longer it takes for us to secure a direction in partnership with DEQ, the more vulnerable the aquifer becomes. Deschutes County is committed to working with DEQ in getting to a solution.

Thank you for this opportunity to meet with you today; I appreciate your interest in this critical issue facing Deschutes and northern Klamath Counties.

In Partnership,

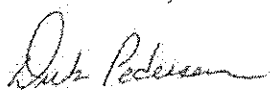
Tammy Baney, Chair
Deschutes County Board of Commissioners

State of Oregon
Department of Environmental Quality Memorandum

Date: September 29, 2009

To: Environmental Quality Commission

From: Dick Pedersen, Director



Subject: Agenda Item M, Action Item: Contested Case No. WQ/OS-ER-06-225 regarding Sherman Dennis Mills.
October 22-23, 2009, EQC Meeting.

Introduction and DEQ Recommendation

The Oregon Department of Environmental Quality implements environmental protection laws. Most people voluntarily comply with the laws; however, DEQ may assess civil penalties and orders to compel compliance or create deterrence. When persons or businesses do not agree with DEQ's enforcement action, they have the right to an appeal and a contested case hearing before an administrative law judge.

On May 18, 2007, DEQ issued Sherman Dennis Mills a notice of violation, department order and civil penalty assessment alleging four violations and assessing civil penalty for violations. On July 5, 2007, Mr. Mills appealed the notice and order, and a contested case hearing was held on April 22, 2008. Administrative Law Judge Alison Greene Webster issued a second amended proposed order on September 23, 2008, and on November 20, 2008, Mr. Mills petitioned the EQC for review of that order.[1]

In his exceptions and brief, Mr. Mills requests that the commission adopt alternate findings of fact and alternate conclusions of law, and reverse Judge Webster's conclusion that Mr. Mills is liable for the violations. In its answering brief, DEQ requests that the commission uphold the second amended proposed and final order.

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1 The second amended proposed and final order upheld DEQ's $3,548 civil penalty and included an order to either (1) submit a completed repair permit application, obtain the permit, complete construction, and obtain a Certificate of Satisfactory Completion, or (2) decommission the system. As Mr. Mills has complied with this order, it is DEQ's position that the order is now moot and that its terms are not relevant to this matter.

DEQ recommends that the EQC issue a final order adopting Judge Webster's second amended proposed and final order.

Background and Findings of Fact

In the second amended proposed and final order[2], Judge Webster found that Mr. Mills is the owner of real property located at 3286 NW 4th Avenue in Malheur County, Oregon. There are two mobile homes on the property, which Mr. Mills rents to tenants. There has been a septic system[3] in use on the property since approximately 1977.

In March 2005, Mr. Mills hired Rick McPhail to perform work on the system.[4] In early March 2005, Bud Smith, a neighbor, saw someone using a hose to pump sewage onto the ground at the rear of the property, near the abutting property owned by John Pearce. He heard the buzz of the pump and smelled a foul odor.[5]

Also in early March 2005, Mr. Pearce saw a backhoe, an open trench, an uncovered septic tank, a pumping hose inserted into the tank, piles of drain rock and broken pieces of PVC pipe on Mr. Mills' property.[6] On March 25, 2005, Mr. Pearce called the Malheur County Environmental Health office to complain that Mr. Mills was pumping sewage from the septic tank and onto the ground.[7] Brian Wickert of the Malheur County Environmental Health office investigated the property in response to Pearce's complaint. Mr. Wickert saw fresh digging along the length of the system's drainfield and spoke with a tenant of Mr. Mills, who stated that Mr. Mills had installed a new leach line.[8]

On March 29, 2005, Mr. Wickert met Mr. Mills at the property and Mr. Mills stated that Mr. McPhail had dug up the entire drainfield. On the next day, Mr. Wickert spoke with Mr. Pearce and Mr. Smith and learned that Mr. Mills had a new septic line dug and an infiltration system installed. Mr. Wickert determined that Mr. Mills had done repair work on the system without a permit and asked Mr. Mills to apply for a repair permit.[9]

In early September 2005, Mr. Wickert responded to a complaint that Mr.

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[2] The amendments to the original proposed and final order are procedural in nature and include no substantive amendments to the order's findings or conclusions.
[3] The terms "septic system" and "onsite system" are to be used interchangeably in this staff report.
[4] Second amended proposed and final order, page 2, finding of fact number 3.
[5] Second amended proposed and final order, page 2, finding of fact number 4.
[6] Second amended proposed and final order, page 2, finding of fact number 5.
[7] Second amended proposed and final order, pages 2-3, finding of fact number 5.
[8] Second amended proposed and final order, page 3, finding of fact number 6.
[9] Second amended proposed and final order, page 3, finding of fact number 7.

Mills' tenants were using a washing machine that was not connected to the septic system. He observed a hose on the washer that terminated in the back yard and was not connected to the septic system and concluded that the sewage (gray water) from the washer was discharging onto the ground surface of the back yard.[10] [11]

On June 27, 2006, Bob Baggett of DEQ sent Mr. Mills a warning letter for the unpermitted installation and/or repair work to the system. The letter requested that Mr. Mills obtain a permit within 45 days and make the necessary changes so that the system could be issued a Certificate of Satisfactory Completion.[12] On August 18, 2006, Mr. Baggett sent Mr. Mills a pre-enforcement notice because Mr. Mills had not obtained the permit or repaired the system.[13]

On August 29, 2006, Mr. Wickert observed that a new and relatively unused infiltrator had been installed by Mr. McPhail.[14] Mr. Mills told Mr. Wickert that he did not get a permit for this work because the property was outside the city and he did not realize that the county required a permit for such work.[15] Mr. Wickert determined that the infiltration system did not meet the applicable standards because of sizing and depth problems. The system was too deep for the water table and too close to a well on the neighboring property.[16]

Mr. Mills did not obtain the required permit or Certificate of Satisfactory Completion prior to the April 22, 2008, contested case hearing.[17]

Conclusions of the Administrative Law Judge

On September 23, 2008, Administrative Law Judge Webster issued a second amended proposed order. Judge Webster concluded that:

1. On or prior to March 25, 2005, Mr. Mills or his agent discharged partially treated or untreated sewage onto the ground surface in violation of OAR 340-071-0130(3).

2. On or prior to March 25, 2005, Mr. Mills caused or allowed the construction, alteration or repair of an onsite sewage disposal system without

[10] Second amended proposed and final order, page 3, finding of fact number 9.
[11] "Gray water" means household sewage other than "black wastes," such as bath water, kitchen waste water, and laundry wastes. (OAR 340-071-0100(75))
[12] Second amended proposed and final order, pages 3-4, finding of fact number 11.
[13] Second amended proposed and final order, page 4, finding of fact number 12.
[14] Second amended proposed and final order, page 4, finding of fact number 13.
[15] Second amended proposed and final order, page 4, finding of fact number 14.
[16] Second amended proposed and final order, page 4, finding of fact number 15.
[17] Mr. Mills subsequently decommissioned the existing septic system and is currently in compliance with the applicable regulations and statutes.

first obtaining a permit from DEQ in violation of ORS 454.655 and OAR 340-071-0130(15)(a).

3. On or prior to March 25, 2005, Mr. Mills or his agent connected to or used an onsite system without obtaining a Certificate of Satisfactory Completion in violation of OAR 340-071-0175(6).

4. On or about September 9, 2005, Mr. Mills failed to connect existing plumbing fixtures from which wastewater or sewage was or may be discharged to a sewage, septic or other disposal system approved by DEQ, in violation of ORS 468B.080 and OAR 340-071-0120(2)(b).

5. The proposed civil penalty of $3,548 is appropriate.[18]

Issues on Appeal

1. Discharge of sewage to the ground surface

Mr. Mills' Argument:
In both section 1, paragraph 2, and section 2, paragraph 3, of his exceptions and brief, Mr. Mills states that Mr. Pearce, a witness for DEQ, testified that sewage was pumped onto the ground surface by Mr. Mills' renter on March 25, 2005, without his approval or knowledge.

DEQ's Argument:
This argument, and the facts that it asserts, is contradicted by Mr. Pearce's testimony that he called the Malheur County Environmental Health office to complain that Mr. Mills, and not Mr. Mills' renter, was pumping sewage out of the septic tank and onto the ground. Additionally, Judge Webster found Mr. Pearce's testimony credible and included this portion of his testimony as a finding of fact in the order.[19]

2. Repair/Installation of a Septic System Without the Required Permit

Mr. Mills' Argument:
In section 1, paragraph 4, of his exceptions and brief Mr. Mills states that on July 20, 2006, he paid $125 to Malheur County Environmental Health for a repair permit.

DEQ's Argument:
This is new or additional evidence that was not introduced at the hearing and not considered by the judge. The commission's rules require that a request to present additional evidence must be submitted by motion and be accompanied by a statement specifying the reason for the failure to present the evidence to the judge. (OAR 340-011-0575(5)) Mr. Mills did not submit such a motion or

[18] Judge Webster upheld DEQ's order in the order section rather than in the conclusions of law section of the second amended proposed and final order.
[19] Second amended proposed and final order, page 2, finding of fact number 5.

statement, so the commission may not consider the evidence. (OAR 137-003-0655(5)) Additionally, Judge Webster found that, as of the date of the hearing, Mr. Mills had yet to submit a completed repair application and obtain the required permit and it is irrelevant whether Mr. Mills paid $125 for a repair permit that he never actually obtained.

3. Discharge of Wastewater from the Washing Machine

Mr. Mills' Argument:
In section 1, paragraph 5, of his exceptions and brief, Mr. Mills states that he neither authorized any renter to run the washing machine nor had any knowledge of this action, and implies that he should not be liable for this violation.

DEQ's Argument:
Pursuant to OAR 340-071-0120(2)(b), the property owner is responsible for connecting plumbing fixtures from which wastewater is or may be discharged to an approved sewerage facility or onsite system. Judge Webster considered Mr. Mills' argument, and concluded that Mr. Mills is "nevertheless responsible for the acts or omissions of his tenants under the environmental laws." (Second amended proposed and final order, page 8)

4. DEQ's Order

Mr. Mills' Argument:
In section 1, paragraph 5, of his exceptions and brief, Mr. Mills argues that DEQ's order was improper. In this section, he discusses standard septic systems near his property and implies that he should be allowed to install the same or a similar septic system on his property, rather than the system that DEQ, through its contract agent of Malheur County, deemed appropriate after inspecting his property.

DEQ's Argument:
The details of the neighboring septic systems are new or additional evidence not introduced at the hearing and not considered by the judge. The commission's rules require that a request to present additional evidence must be submitted by motion and be accompanied by a statement specifying the reason for the failure to present the evidence to the judge. (OAR 340-011-0575(5)) Mr. Mills did not submit such a motion or statement, so the commission may not consider the evidence. (OAR 137-003-0655(5))

In addition, Mr. Wickert testified that the existing system did not meet applicable state environmental standards and must be either repaired through the permit process or decommissioned because of sizing and depth problems.

The well was installed too deep for the water table and was too close to a well on the neighboring property.

If Mr. Mills wished to seek a variance from applicable rules or standards for the installation of septic systems in Oregon he could have followed the variance processes laid out in OAR 340-071-0415 to -0445. Mr. Mills has not sought a variance.

EQC Authority

The commission has the authority to hear this appeal under OAR 340-011-0575.

DEQ's contested case hearings must be conducted by an administrative law judge.[20] The proposed order was issued under current statutes and rules governing the administrative law judge panel.[21]

Under ORS 183.600 to 183.690, the commission's authority to change or reverse an administrative law judge's proposed order is limited.

The most important limitations are as follows:

1. The EQC may not modify the form of the administrative law judge's second amended proposed and final order in any substantial manner without identifying and explaining the modifications.[22]
2. The EQC may not modify a recommended finding of historical fact unless it finds that the recommended finding is not supported by a preponderance of the evidence.[23] Accordingly, the EQC may not modify any historical fact unless it has reviewed the entire record or at least all portions of the record that are relevant to the finding.
3. The EQC may not consider any new or additional evidence, but may only remand the matter to the administrative law judge to take the evidence.[24]

The rules implementing these statutes also have more specific provisions addressing how commissioners must declare and address any ex parte communications and potential or actual conflicts of interest.[25]

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[20] ORS 183.635.
[21] ORS 183.600 to 183.690 and OAR 137-003-0501 to 137-003-0700.
[22] ORS 183.650(2).
[23] ORS 183.650(3). A historical fact is a determination that an event did or did not occur or that a circumstance or status did or did not exist either before or at the time of the hearing.
[24] OAR 137-003-0655(5).
[25] OAR 137-003-0655(7), referring to ORS Chapter 244; OAR 137-003-0660.

In addition, the EQC has established by rule a number of other procedural provisions, including:

(1) The EQC will not consider matters not raised before the administrative law judge unless it is necessary to prevent a manifest injustice. [26]
(2) The EQC will not remand a matter to the administrative law judge to consider new or additional facts unless the proponent of the new evidence has properly filed a written motion explaining why evidence was not presented to the hearing officer.[27]

Alternatives

The EQC may:

1. As requested by DEQ, issue a final order adopting Judge Webster's second amended proposed and final order.
2. Issue a final order determining that the findings of fact were not based on a preponderance of the evidence, explain why and amend Judge Webster's second amended proposed and final order accordingly.

Attachments

A. OAR Chapter 340, Division 12, applicable during the dates of the alleged violations, and effective until June 1, 2005[28]
B. Letter from Stephanie Clark to Mr. Mills, dated January 13, 2009
C. DEQ's answering brief, dated January 12, 2009
D. Letter from Stephanie Clark to Bryan Smith, dated December 5, 2008
E. Letter from Bryan Smith to Stephanie Clark, dated December 2, 2008
F. Letter from Stephanie Clark to Mr. Mills, dated December 2, 2008
G. Letter from Stephanie Clark to Mr. Mills, dated November 25, 2008
H. Mr. Mills' memorandum of appeal with exceptions and brief, dated November 19, 2008
I. Letter from Stephanie Clark to Mr. Mills, dated October 24, 2008
J. Petition for commission review of the second proposed and final order, dated October 21, 2008
K. Second amended proposed and final order, dated September 23, 2008 (The amended proposed and final order was mailed to the incorrect address, thus making service impossible)
L. Amended proposed and final order, dated September 10, 2008 (The proposed and final order was mailed to an attorney no longer representing Mr. Mills, thus making service impossible)
M. Proposed and final order, dated May 23, 2008

[26] OAR 340-011-0132(3)(a).
[27] *Id.* at (4).
[28] This is the version of Division 12 that was applicable and used to assess the appropriate civil penalty at the time of the alleged violations.

N. Notice of hearing and contested case rights, dated January 4, 2008
O. Mr. Mills' answer and request for hearing, received July 5, 2007
P. Notice of violation, department order and assessment of civil penalty, dated May 18, 2007
Q. Exhibits from April 22, 2008 contested case hearing
   1. Complaint form, Malheur County Environmental Health, dated March 25, 2005
   2. Photos of excavation on Mr. Mills' property, dated March, 2005
   3. Memo re: complaint, Malheur County Environmental Health, undated
   4. Letter to Mr. Mills from Brian Wickert, dated August, 2005
   5. Photos of washing machine and hose on Mr. Mills' property, dated September, 2005
   6. Email to Bob Baggett from Brian Wickert, dated August 30, 2006
   7. Photos from Brian Wickert's inspection of the property, undated
   [29]9. Bud Smith affidavit, dated May 8, 2006
   10. John Pearce affidavit, dated May 8, 2006
   [30]12. Warning letter to Mr. Mills from Bob Baggett, dated June 27, 2006
   13. Pre-enforcement notice to Mr. Mills from Bob Baggett, dated August 18, 2006
   14. Letter to Mr. Mills from Bob Baggett, dated November 30, 2007
   15. Economic benefit analysis, dated March 16, 2007
R. Audio recording of the April 22, 2008 contested case hearing (two CDs)

Available Upon Request

1. OAR Chapter 340, Divisions 11 and 71; ORS Chapter 468A

Approved:

Leah E. Koss, Office of Compliance and Enforcement Acting Manager

Report Prepared by: Bryan Smith
Environmental Law Specialist
Phone: (503) 229-5395

[29] DEQ offered exhibit 8: "James Stotter affidavit, dated May 8, 2006." However, this exhibit was possibly not accepted by the judge as there is no exhibit 8 listed in appendix A of the second amended proposed and final order.
[30] DEQ offered exhibit 11: "Letter from John Pearce to Brian Wickert, dated May 8, 2006." However, this exhibit was possibly not accepted by the judge as there is no exhibit 11 listed in appendix A of the second amended proposed and final order.

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DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 12

ENFORCEMENT PROCEDURE AND CIVIL PENALTIES

340-012-0026

Policy

(1) The goal of enforcement is to:

(a) Obtain and maintain compliance with the Department's statutes, rules, permits and orders;

(b) Protect the public health and the environment;

(c) Deter future violators and violations; and

(d) Ensure an appropriate and consistent statewide enforcement program.

(2) The Department shall endeavor by conference, conciliation and persuasion to solicit compliance.

(3) The Department shall address all documented violations in order of seriousness at the most appropriate level of enforcement necessary to achieve the goals set forth in section (1) of this rule.

(4) Violators who do not comply with an initial enforcement action shall be subject to increasing levels of enforcement until compliance is achieved.

Stat. Auth.: ORS 459.995, ORS 466, ORS 467, ORS 468.020, ORS 468.996, ORS 468A & ORS 468B
Stats. Implemented: ORS 183.090, ORS 454.635, ORS 454.645, ORS 459.376, ORS 459.995, ORS 465.900, ORS 466.210, ORS 466.880 - ORS 466.895, ORS 468.090 - ORS 468.140, ORS 468A.990, ORS 468.992, ORS 468B.025, ORS 468B.220 & ORS 468B.450
Hist.: DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 21-1992, f. & cert. ef. 8-11-92

340-012-0028

Scope of Applicability

Amendments to OAR 340-012-0028 to 340-012-0090 shall only apply to formal enforcement actions issued by the Department on or after the effective date of such amendments and not to any contested cases pending or formal enforcement actions issued prior to the effective date of such amendments. Any contested cases pending or formal enforcement actions issued prior to the effective date of any amendments shall be subject to OAR 340-012-0028 to 340-012-0090 as prior to amendment. The list of violations classified in these rules is intended to be used only for the purposes of setting penalties for violations of law and for other rules set forth in OAR Chapter 340.

Stat. Auth.: ORS 454, ORS 459.995, ORS 466, ORS 467, ORS 468.020 & ORS 468.996
Stats. Implemented: ORS 183.090, ORS 454.635, ORS 454.645, ORS 459.376, ORS 459.995, ORS 465.900, ORS 466.210, ORS 466.880 - ORS 466.895, ORS 468.090 - ORS 468.140, ORS 468A.990, ORS 468.992, ORS 468B.025, ORS 468B.220 & ORS 468B.450
Hist.: DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 21-1992, f. & cert. ef. 8-11-92; Renumbered from 340-012-0080

340-012-0030

Definitions

Unless otherwise required by context, as used in this Division:

(1) "Class One Equivalent" or "Equivalent", which is used only for the purposes of determining the value of the "P" factor in the civil penalty formula, means two Class Two violations, one Class Two and two Class Three violations, or three Class Three violations.

(2) "Commission" means the Environmental Quality Commission.

(3) "Compliance" means meeting the requirements of the Commission's and Department's statutes, rules, permits or orders.

(4) "Director" means the Director of the Department or the Director's authorized deputies or officers.

(5) "Department" means the Department of Environmental Quality.

(6) "Documented Violation" means any violation which the Department or other government agency records after observation, investigation or data collection.

(7) "Flagrant" means any documented violation where the Respondent had actual knowledge of the law and had consciously set out to commit the violation.

(8) "Formal Enforcement Action" means an action signed by the Director or a Regional Administrator or authorized representatives or deputies which is issued to a Respondent for a documented violation. Formal enforcement actions may require the Respondent to take action within a specified time frame, and/or state the consequences for the violation or continued noncompliance. "Formal enforcement action" includes Notices of Permit Violation, Civil Penalty Assessments, Mutual Agreement and Orders, and other Orders that may be appealed through the contested-case process; but does not include Notices

of Noncompliance issued pursuant to OAR 340-012-0041(1).

(9) "Intentional" means ~~conduct~~ by a person with a conscious objective to cause ~~the result of~~ the conduct.

(10) "Magnitude of the Violation" means the extent and effects of a violator's deviation from the Commission's and Department's statutes, rules, standards, permits or orders. In determining magnitude the Department shall consider all available applicable information, including such factors as: Concentration, volume, percentage, duration, toxicity, and the extent of the effects of the violation. Deviations shall be categorized as major, moderate or minor as set forth in OAR 340-012-0045(1)(a)(B).

(11) "Negligence" or "Negligent" means failure to take reasonable care to avoid a foreseeable risk of committing an act or omission constituting a violation.

(12) "Order" means:

(a) Any action satisfying the definition given in ORS Chapter 183; or

(b) Any other action so designated in ORS Chapters 454, 459, 465, 466, 467, 468, 468A, or 468B.

(c) "Penalty Demand Notice" means a written notice issued by a representative of the Department to a party demanding payment of a stipulated penalty pursuant to the terms of an agreement entered into between the party and the Department.

(13) "Person" includes, but is not limited to, individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, states and their agencies, and the Federal Government and its agencies.

(14) "Prior Significant Action" means any violation established either with or without admission of a violation by payment of a civil penalty, or by a final order of the Commission or the Department, or by judgment of a court.

(15) "Reckless" or "Recklessly" means conduct by a person who is aware of and consciously disregards a substantial and unjustifiable risk that the result will occur or that the circumstance exists. The risk must be of such a nature and degree that disregard thereof constitutes a gross deviation from the standard of care a reasonable person would observe in that situation.

(16) "Residential Open Burning" means the open burning of any domestic wastes generated by a single family dwelling and conducted by an occupant of the dwelling on the dwelling premises. This does not include the open burning of materials prohibited by OAR 340-023-0042(2).

(17) "Respondent" means the person to whom a formal enforcement action is issued.

(18) "Risk of Harm" means the individual or cumulative possibility of harm to public health or the environment caused by a violation or violations. Risk of harm shall be categorized as major, moderate or minor.

(19) "Systematic" means any documented violation which occurs on a regular basis.

(20) "Violation" means a transgression of any statute, rule, order, license, permit, or any part thereof and

includes both acts and omissions. Violations shall be categorized as Class One (or I), Class Two (or II) or Class Three (or III), with Class One designating the most serious class of violation.

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 459.376, ORS 459.995, ORS 465.900, ORS 468.090 – ORS 468.140, ORS 466.880 – ORS 466.895, ORS 468.996 – ORS 468.997, ORS 468A.990 – ORS 468A.992 & ORS 468B.220
Hist.: DEQ 78, f. 9-6-74, ef. 9-25-74; DEQ 22-1984, f. & ef. 11-8-84; DEQ 22-1988, f. & cert. ef. 9-14-88; DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 8-30-90; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 4-1994, f. & cert. ef. 3-14-94; DEQ 19-1998, f. & cert. ef. 10-12-98

340-012-0035

Consolidation of Proceedings

Notwithstanding that each and every violation is a separate and distinct offense, and in cases of continuing violations, that each day's continuance is a separate and distinct violation, proceedings for the assessment of multiple civil penalties for multiple violations may be consolidated into a single proceeding.

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 468.997
Hist.: DEQ 78, f. 9-6-74, ef. 9-25-74; DEQ 21-1992, f. & cert. ef. 8-11-92

340-012-0040

Notice of Permit Violations and Exceptions

(1) Prior to assessment of a civil penalty for a violation of the terms or conditions of a National Pollutant Discharge Elimination System Permit, Water Pollution Control Facilities Permit, or Solid Waste Disposal Permit, the Department shall provide a Notice of Permit Violation to the permittee. The Notice of Permit Violation shall be in writing, specifying the violation and stating that a civil penalty will be imposed for the permit violation unless the permittee submits one of the following to the Department within five working days of receipt of the Notice of Permit Violation:

(a) A written response from the permittee acceptable to the Department certifying that the permitted facility is complying with all terms of the permit from which the violation is cited. The certification shall include a sufficient description of the information on which the permittee is certifying compliance to enable the Department to determine that compliance has been achieved; or

(b) A written proposal, acceptable to the Department, to bring the facility into compliance with the permit. An acceptable proposal under this rule shall include at least the following:

(A) A detailed plan and time schedule for achieving compliance in the shortest practicable time;

(B) A description of the interim steps that will be taken to reduce the impact of the permit violation until the permitted facility is in compliance with the permit;

(C) A statement that the permittee has reviewed all other conditions and limitations of the permit and no other violations of the permit were discovered.

(c) In the event that any compliance schedule to be approved by the Department pursuant to subsection (1)(b) of this rule provides for a compliance period of greater than six months, the Department shall incorporate the compliance schedule into an Order described in OAR 340-012-0041(4)(b)(C) which shall provide for stipulated penalties in the event of any noncompliance therewith. The stipulated penalties shall not apply to circumstances beyond the reasonable control of the permittee. The stipulated penalties shall be set at amounts consistent with those established under OAR 340-012-0048;

(d) The certification allowed in subsection (1)(a) of this rule shall be signed by a Responsible Official based on information and belief after making reasonable inquiry. For purposes of this rule "Responsible Official" of the permitted facility means one of the following:

(A) For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or the manager of one of more manufacturing, production, or operating facilities if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

(B) For a partnership or sole proprietorship, a general partner or the proprietor, respectively;

(C) For a municipality, State, Federal, or other public agency, either a principal executive officer or appropriate elected official.

(e) For the purposes of this section, when a regional authority issues an NPV, different acceptability criteria may apply for subsections (a) and (b) of this section.

(2) No advance notice prior to assessment of a civil penalty shall be required under section (1) of this rule and the Department may issue a Notice of Civil Penalty Assessment if:

(a) The violation is intentional;

(b) The water or air violation would not normally occur for five consecutive days; or

(c) The permittee has received a Notice of Permit Violation, or other formal enforcement action with respect to any violation of the permit within 36 months immediately preceding the documented violation;

(d) The permittee is subject to the federal operating permit program under ORS 468A.300 to 468A.320 (Title V of the Clean Air Act of 1990) and violates any rule or standard adopted or permit or order issued under ORS Chapter 468A and applicable to the permittee;

(e) The permittee is a solid waste permit holder subject to federal solid waste management requirements contained in 40 CFR, Part 258 as of the effective date of these rules ("Subtitle D"), and violates any rule or standard adopted or permit or order issued under ORS Chapter 459 and applicable to the permittee;

(f) The permittee has an air contaminant discharge permit and violates any State Implementation Plan requirement contained in the permit;

(g) The requirement to provide such notice would disqualify a state program from federal approval or delegation;

(h) For purposes of this section, "permit" includes permit renewals and modifications and no such renewal or modification shall result in the requirement that the Department provide the permittee with an additional advance warning if the permittee has received a Notice of Permit Violation, or other formal enforcement action with respect to the permit within 36 months.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the agency.]

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 459.376, ORS 468.090 - ORS 468.140, ORS 468A.990 & ORS 468B.025
Hist.: DEQ 78, f. 9-6-74, ef. 9-25-74; DEQ 25-1979, f. & ef. 7-5-79; DEQ 22-1984, f. & ef. 11-8-84; DEQ 16-1985, f. & ef. 12-3-85; DEQ 22-1988, f. & cert. ef. 9-14-88; DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 4-1994, f. & cert. ef. 3-14-94; DEQ 19-1998, f. & cert. ef. 10-12-98

340-012-0041

Enforcement Actions

(1) Notice of Noncompliance (NON):

(a) Informs a person of a violation, and the consequences of the violation or continued non-compliance. The notice may state the actions required to resolve the violation and may specify a time by which compliance is to be achieved and that the need for formal enforcement action will be evaluated;

(b) Shall be issued under the direction of a Manager or authorized representative;

(c) Shall be issued for all classes of documented violations, unless the violation is a continuing violation for which the person has received a prior NON and the continuing violation is documented pursuant to a Department-approved investigation plan or Order, and the person is in compliance with the Department-approved investigation plan or Order.

(2) Notice of Permit Violation (NPV):

(a) Is issued pursuant to OAR 340-012-0040;

(b) Shall be issued by a Regional Administrator or authorized representative;

(c) Shall be issued for the first occurrence of a documented Class One violation which is not excepted under OAR 340-012-0040(2), or the repeated or continuing occurrence of documented Class Two or Three violations where a NON has failed to achieve compliance or satisfactory progress toward compliance. A permittee shall not receive more than three NONs for Class Two violations of the same permit within a 36 month period without being issued an NPV.

(3) Notice of Civil Penalty Assessment (CPA):

(a) Is issued pursuant to ORS 468.130, and OAR 340-012-0042 and 340-012-0045;

(b) Shall be issued by the Director;

(c) May be issued for the occurrence of any Class of documented violation that is not limited by the NPV requirement of OAR 340-012-0040(2).

(4) Order:

(a) Is issued pursuant to ORS Chapters 183, 454, 459, 465, 466, 467, 468, 468A, or 468B;

(b) May be in the form of a Commission or Department Order, or any written order that has been consented to in writing by the parties adversely affected thereby including but not limited to a Mutual Agreement and Order (MAO):

(A) Commission Orders shall be issued by the Commission, or the Director on behalf of the Commission;

(B) Department Orders shall be issued by the Director;

(C) All other Orders:

(i) May be negotiated;

(ii) Shall be signed by the Director and the authorized representative of each other party.

(c) May be issued for any Class of violation.

(5) The enforcement actions described in sections (1) through (4) of this rule in no way limit the Department or Commission from seeking legal or equitable remedies as provided by ORS Chapters 454, 459, 465, 466, 467, 468, 468A, and 468B.

Stat. Auth.: ORS 454.625, ORS 459.376, ORS 465.400 - ORS 465.410, ORS 466.625, ORS 467.030, ORS 468.020, ORS 468A.025, ORS 468A.045, & ORS 468B.035
Stats. Implemented: ORS 454.635, ORS 454.645, ORS 459.376, ORS 459.995, ORS 465.900, ORS 466.210, ORS 466.880 - ORS 466.895, ORS 468.090 - ORS 468.140, ORS 468A.990, ORS 468.992, ORS 468B.025, ORS 468B.220 & ORS 468B.450
Hist.: DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 4-1994, f. & cert. ef. 3-14-94; DEQ 19-1998, f. & cert. ef. 10-12-98

340-012-0042

Civil Penalty Schedule Matrices

In addition to any liability, duty, or other penalty provided by law, the Director may assess a civil penalty for any violation pertaining to the Commission's or Department's statutes, rules, permits or orders by service of a written notice of assessment of civil penalty upon the Respondent. Except for civil penalties assessed under OAR 340-012-0048 and 340-012-0049, the amount of any civil penalty shall be determined through the use of the following matrices in conjunction with the formula contained in OAR 340-012-0045:

(1)(a) $10,000 Matrix:

(A) Class I:

(i) Major -- $6000;

(ii) Moderate -- $3000;

(iii) Minor -- $1000.

(B) Class II:

(i) Major -- $2000;

(ii) Moderate -- $1000;

(iii) Minor -- $500.

(C) Class III:

(i) Major -- $500;

(ii) Moderate -- $250;

(iii) Minor -- $100.

(b) No civil penalty issued by the Director pursuant to this matrix shall be less than $50 dollars or more than $10,000 dollars for each day of each violation. This matrix shall apply to the following:

(A) Any violation related to air quality statutes, rules, permits or orders, except for the selected open burning violations listed in section (3) below;

(B) Any violation related to ORS 164.785 and water quality statutes, rules, permits or orders, violations by a person having or needing a Water Pollution Control Facility Permit, violations of ORS Chapter 454 and on-site sewage disposal rules by a person performing sewage disposal services;

(C) Any violation related to underground storage tanks statutes, rules, permits or orders, except for failure to pay a fee due and owing under ORS 466.785 and 466.795;

(D) Any violation related to hazardous waste management statutes, rules, permits or orders, except for violations of ORS 466.992 related to damage to wildlife;

(E) Any violation related to oil and hazardous material spill and release statutes, rules, or orders, except for negligent or intentional oil spills;

(F) Any violation related to polychlorinated biphenyls management and disposal statutes;

(G) Any violation of ORS Chapter 465 or environmental cleanup rules or orders;

(H) Any violation of ORS Chapter 467 or any violation related to noise control rules or orders;

(I) Any violation of ORS Chapter 459 or any violation related to solid waste statutes, rules, permits, or orders;

(J) Any violation of ORS Chapter 459A, except as provided in section (4) of this rule and except any violation by a city, county or metropolitan service district of failing to provide the opportunity to recycle as required by law; and

(2) In addition to any other penalty provided by law, any person causing an oil spill through an intentional or negligent act shall incur a civil penalty of not less than $100 dollars or more than $20,000 dollars. The amount of the penalty shall be determined by doubling the values contained in the matrix in section (1) of this rule in conjunction with the formula contained in OAR 340-012-0045.

(3)(a) $2,500 Matrix:

(A) Class I:

(i) Major -- $2500;

(ii) Moderate -- $1000;

(iii) Minor -- $500.

(B) Class II:

(i) Major -- $750;

(ii) Moderate -- $500;

(iii) Minor -- $200.

(C) Class III:

(i) Major -- $250;

(ii) Moderate -- $100;

(iii) Minor -- $50.

(b) No civil penalty issued by the Director pursuant to this matrix shall be less than $50. The total civil penalty may exceed $2,500 for each day of each violation, but shall not exceed $10,000 for each day of each violation. This matrix shall apply to the following:

(A) Any violation related to on-site sewage statutes, rules, permits, or orders, other than violations by a person performing sewage disposal services or by a person having or needing a Water Pollution Control Facility permit;

(B) Any violation of the Department's Division 23 open burning rules, excluding all industrial open burning violations, and violations of OAR 340-023-0042(2) where the volume of the prohibited materials burned is greater than or equal to twenty-five cubic yards. In cases of the open burning of tires, this matrix shall apply only if the number of tires burned is less than fifteen. The matrix set forth in section (1) of this rule shall be applied to the open burning violations excluded from this section.

(4)(a) $1,000 Matrix:

Page 10 of 52

(A) Class I:

(i) Major -- $1000;

(ii) Moderate -- $750;

(iii) Minor -- $500.

(B) Class II:

(i) Major -- $750;

(ii) Moderate -- $500;

(iii) Minor -- $250.

(C) Class III:

(i) Major -- $250;

(ii) Moderate -- $150;

(iii) Minor -- $50.

(b) No civil penalty issued by the Director pursuant to this matrix shall be less than $50 or more than $1,000 for each day of each violation.

(c) This matrix shall apply to any violation of laws, rules or orders relating to rigid plastic containers, except for violation of the labeling requirements under OAR 459A.675 through 459A.685 and for rigid pesticide containers under OAR 340-109-0020 which shall be subject to the matrix set forth in section (1) of this rule.

(5)(a) $500 Matrix:

(A) Class I:

(i) Major -- $400;

(ii) Moderate -- $300;

(iii) Minor -- $200.

(B) Class II:

(i) Major -- $300;

(ii) Moderate -- $200;

(iii) Minor -- $100.

(C) Class III:

(i) Major – $200;

(ii) Moderate – $100;

(iii) Minor – $50.

(b) No civil penalty issued by the Director pursuant to this matrix shall be less than $50 dollars or more than $500 dollars for each day of each violation. This matrix shall apply to the following types of violations:

(A) Any violation of laws, rules, orders or permits relating to woodstoves, except violations relating to the sale of new woodstoves;

(B) Any violation by a city, county or metropolitan service district of failing to provide the opportunity to recycle as required by law; and

(C) Any violation of ORS 468B.480 and 468B.485 and rules adopted thereunder relating to the financial assurance requirements for ships transporting hazardous materials and oil.

Stat. Auth.: ORS 468.020 & ORS 468.090 - ORS 468.140
Stats. Implemented: ORS 459.995, ORS 459A.655, ORS 459A.660, ORS 459A.685 & ORS 468.035
Hist.: DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 33-1990, f. & cert. ef. 8-15-90; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 4-1994, f. & cert. ef. 3-14-94; DEQ 9-1996, f. & cert. ef. 7-10-96; DEQ 19-1998, f. & cert. ef. 10-12-98; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-012-0045

Civil Penalty Determination Procedure

(1) When determining the amount of civil penalty to be assessed for any violation, other than violations of ORS 468.996, which are determined according to the procedure set forth below in OAR 340-012-0049(8), the Director shall apply the following procedures:

(a) Determine the class and the magnitude of each violation:

(A) The class of a violation is determined by consulting OAR 340-012-0050 to 340-012-0083;

(B) The magnitude of the violation is determined by first consulting the selected magnitude categories in OAR 340-012-0090. In the absence of a selected magnitude, the magnitude shall be moderate unless:

(i) If the Department finds that the violation had a significant adverse impact on the environment, or posed a significant threat to public health, a determination of major magnitude shall be made. In making a determination of major magnitude, the Department shall consider all available applicable information including such factors as: The degree of deviation from the Commission's and Department's statutes, rules, standards, permits or orders, concentration, volume, percentage, duration, toxicity, and the extent of the effects of the violation. In making this finding, the Department may consider any single factor to be conclusive for the purpose of making a major magnitude determination;

(ii) If the Department finds that the violation had no potential for or actual adverse impact on the environment, nor posed any threat to public health, or other environmental receptors, a determination of minor magnitude shall be made. In making a determination of minor magnitude, the Department shall consider all available applicable information including such factors as: The degree of deviation from the Commission's and Department's statutes, rules, standards, permits or orders, concentration, volume, percentage, duration, toxicity, and the extent of the effects of the violation. In making this finding, the Department may consider any single factor to be conclusive for the purpose of making a minor magnitude determination.

(b) Choose the appropriate base penalty (BP) established by the matrices of OAR 340-012-0042 after determining the class and magnitude of each violation;

(c) Starting with the base penalty, determine the amount of penalty through application of the formula: BP + [(.1 x BP) x (P + H + O + R + C)] + EB, where:

(A) "P" is whether the Respondent has any prior significant actions relating to statutes, rules, orders and permits pertaining to environmental quality or pollution control. A violation is deemed to have become a Prior Significant Action on the date of the issuance of the first Formal Enforcement Action in which it is cited. For the purposes of this determination, violations that were the subject of any prior significant actions that were issued before the effective date of the Division 12 rules as adopted by the Commission in March 1989, shall be classified in accordance with the classifications set forth in the March 1989 rules to ensure equitable consideration of all prior significant actions. The values for "P" and the finding which supports each are as follows:

(i) 0 if no prior significant actions or there is insufficient information on which to base a finding;

(ii) 1 if the prior significant action is one Class Two or two Class Threes;

(iii) 2 if the prior significant action(s) is one Class One or equivalent;

(iv) 3 if the prior significant actions are two Class One or equivalents;

(v) 4 if the prior significant actions are three Class Ones or equivalents;

(vi) 5 if the prior significant actions are four Class Ones or equivalents;

(vii) 6 if the prior significant actions are five Class Ones or equivalents;

(viii) 7 if the prior significant actions are six Class Ones or equivalents;

(ix) 8 if the prior significant actions are seven Class Ones or equivalents;

(x) 9 if the prior violations significant actions are eight Class Ones or equivalents;

(xi) 10 if the prior significant actions are nine Class Ones or equivalents, or if any of the prior significant actions were issued for any violation of ORS 468.996;

(xii) In determining the appropriate value for prior significant actions as listed above, the Department shall reduce the appropriate factor by:

(I) A value of 2 if the date of issuance of all the prior significant actions are greater than three years old; or

(II) A value of 4 if the date of issuance of all the prior significant actions are greater than five years old.

(III) In making the above reductions, no finding shall be less than zero.

(xiii) Any prior significant action which is greater than ten years old shall not be included in the above determination;

(xiv) A permittee, who would have received a Notice of Permit Violation, but instead received a civil penalty or Department Order because of the application of OAR 340-012-0040(2)(d), (e), (f), or (g) shall not have the violation(s) cited in the former action counted as a prior significant action, if the permittee fully complied with the provisions of any compliance order contained in the former action.

(B) "H" is Respondent's history in correcting prior significant actions or taking reasonable efforts to minimize the effects of the violation. In no case shall the combination of the "P" factor and the "H" factor be a value less than zero. In such cases where the sum of the "P" and "H" values is a negative numeral the finding and determination for the combination of these two factors shall be zero. The values for "H" and the finding which supports each are as follows:

(i) -2 if Respondent took all feasible steps to correct the majority of all prior significant actions;

(ii) 0 if there is no prior history or if there is insufficient information on which to base a finding.

(C) "O" is whether the violation was repeated or continuous. The values for "O" and the finding which supports each are as follows:

(i) 0 if the violation existed for one day or less and did not recur on the same day, or if there is insufficient information on which to base a finding;

(ii) 2 if the violation existed for more than one day or if the violation recurred on the same day.

(D) "R" is whether the violation resulted from an unavoidable accident, or a negligent, intentional or flagrant act of the Respondent. The values for "R" and the finding which supports each are as follows:

(i) 0 if an unavoidable accident, or if there is insufficient information to make a finding;

(ii) 2 if negligent;

(iii) 6 if intentional; or

(iv) 10 if flagrant.

(E) "C" is the Respondent's cooperativeness and efforts to correct the violation. The values for "C" and the finding which supports each are as follows:

(i) -2 if Respondent was cooperative and took reasonable efforts to correct a violation, took reasonable affirmative efforts to minimize the effects of the violation, or took extraordinary efforts to ensure the violation would not be repeated;

(ii) 0 if there is insufficient information to make a finding, or if the violation or the effects of the violation could not be corrected;

(iii) 2 if Respondent was uncooperative and did not take reasonable efforts to correct the violation or minimize the effects of the violation.

(F) "EB" is the approximated dollar sum of the economic benefit that the Respondent gained through noncompliance. The Department or Commission may assess "EB" whether or not it applies the civil penalty formula above to determine the gravity and magnitude-based portion of the civil penalty, provided that the sum penalty does not exceed the maximum allowed for the violation by rule or statute. "EB" is to be determined as follows:

(i) Add to the formula the approximate dollar sum of the economic benefit gained through noncompliance, as calculated by determining both avoided costs and the benefits obtained through any delayed costs, where applicable;

(ii) The Department need not calculate nor address the economic benefit component of the civil penalty when the benefit obtained is de minimis;

(iii) In determining the economic benefit component of a civil penalty, the Department may use the U.S. Environmental Protection Agency's BEN computer model, as adjusted annually to reflect changes in marginal tax rates, inflation rate and discount rate. With respect to significant or substantial change in the model, the Department shall use the version of the model that the Department finds will most accurately calculate the economic benefit gained by Respondent's noncompliance. Upon request of the Respondent, the Department will provide Respondent the name of the version of the model used and respond to any reasonable request for information about the content or operation of the model. The model's standard values for income tax rates, inflation rate and discount rate shall be presumed to apply to all Respondents unless a specific Respondent can demonstrate that the standard value does not reflect that Respondent's actual circumstance. Upon request of the Respondent, the Department will use the model in determining the economic benefit component of a civil penalty;

(iv) As stated above, under no circumstances shall the imposition of the economic benefit component of the penalty result in a penalty exceeding the statutory maximum allowed for the violation by rule or statute. When a violation has extended over more than one day, however, for determining the maximum penalty allowed, the Director may treat the violation as extending over at least as many days as necessary to recover the economic benefit of noncompliance. When the purpose of treating a violation as extending over more than one day is to recover the economic benefit, the Department has the discretion not to impose the gravity and magnitude-based portion of the penalty for more than one day.

(2) In addition to the factors listed in section (1) of this rule, the Director may consider any other relevant rule of the Commission and shall state the effect the consideration had on the penalty. On review, the Commission shall consider the factors contained in section (1) of this rule and any other relevant rule of the Commission.

(3) In determining a civil penalty, the Director may reduce any penalty by any amount the Director deems appropriate when the person has voluntarily disclosed the violation to the Department. In deciding whether a violation has been voluntarily disclosed, the Director may take into account any conditions the Director deems appropriate, including whether the violation was:

(a) Discovered through an environmental auditing program or a systematic compliance program;

(b) Voluntarily discovered;

(c) Promptly disclosed;

(d) Discovered and disclosed independently of the government or a third party;

(e) Corrected and remedied;

(f) Prevented from recurrence;

(g) Not repeated;

(h) Not the cause of significant harm to human health or the environment; and

(i) Disclosed and corrected in a cooperative manner.

(4) The Department or Commission may reduce any penalty based on the Respondent's inability to pay the full penalty amount. If the Respondent seeks to reduce the penalty, the Respondent has the responsibility of providing to the Department or Commission documentary evidence concerning Respondent's inability to pay the full penalty amount.

(a) When the Respondent is currently unable to pay the full amount, the first option should be to place the Respondent on a payment schedule with interest on the unpaid balance for any delayed payments. The Department or Commission may reduce the penalty only after determining that the Respondent is unable to meet a long-term payment schedule;

(b) In determining the Respondent's ability to pay a civil penalty, the Department may use the U.S. Environmental Protection Agency's ABEL computer model to determine a Respondent's ability to pay the full civil penalty amount. With respect to significant or substantial change in the model, the Department shall use the version of the model that the Department finds will most accurately calculate the Respondent's ability to pay a civil penalty. Upon request of the Respondent, the Department will provide Respondent the name of the version of the model used and respond to any reasonable request for information about the content or operation of the model;

(c) In appropriate circumstances, the Department or Commission may impose a penalty that may result in a Respondent going out of business. Such circumstances may include situations where the violation is intentional or flagrant or situations where the Respondent's financial condition poses a serious concern regarding the ability or incentive to remain in compliance.

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 454.635, ORS 454.645, ORS 459.376, ORS 459.995, ORS 465.900, ORS 466.210, ORS 466.880 - ORS 466.895, ORS 468.090 - ORS 468.140, ORS 468.992, ORS 468A.990, ORS 468B.025, ORS 468B.220 & ORS 468B.450
Hist.: DEQ 78, f. 9-6-74, ef. 9-25-74; DEQ 22-1984, f. & ef. 11-8-84; DEQ 22-1988, f. & cert. ef. 9-14-88; DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 4-1994, f. & cert. ef. 3-14-94; DEQ 19-1998, f. & cert. ef. 10-12-98; DEQ 1-2003, f. & cert. ef. 1-31-03

340-012-0046

Written Notice of Assessment of Civil Penalty; When Penalty Payable

(1) A civil penalty shall be due and payable ten days after the order assessing the civil penalty becomes final and the civil penalty is thereby imposed by operation of law or on appeal. A person against whom a civil penalty is assessed shall be served with a notice in the form and manner provided in ORS 183.415 and OAR Chapter 340, Division 11.

(2) The written notice of assessment of civil penalty shall comply with ORS 468.135(1) and 183.090, relating to notice and contested case hearing applications, and shall state the amount of the penalty or penalties assessed.

(3) The rules prescribing procedure in contested case proceedings contained in OAR Chapter 340, Division 11 shall apply thereafter.

Stat. Auth.: ORS 459.995, ORS 468.020 & ORS 468.996
Stats. Implemented: ORS 183.090
Hist.: DEQ 78, f. 9-6-74, ef. 9-25-74; DEQ 22-1988, f. & cert. ef. 9-14-88; Renumbered from 340-012-0070; DEQ 21-1992, f. & cert. ef. 8-11-92

340-012-0047

Compromise or Settlement of Civil Penalty by Director

(1) Any time after service of the written notice of assessment of civil penalty, the Director may compromise or settle any unpaid civil penalty at any amount that the Director deems appropriate. Any compromise or settlement executed by the Director shall be final.

(2) In determining whether a penalty should be compromised or settled, the Director may take into account the following:

(a) New information obtained through further investigation or provided by Respondent which relates to the penalty determination factors contained in OAR 340-012-0045;

(b) The effect of compromise or settlement on deterrence;

(c) Whether Respondent has or is willing to employ extraordinary means to correct the violation or maintain compliance;

(d) Whether Respondent has had any previous penalties which have been compromised or settled;

(e) Whether the compromise or settlement would be consistent with the Department's goal of protecting the public health and environment;

(f) The relative strength or weakness of the Department's case.

Stat. Auth.: ORS 459.995, ORS 466, ORS 467, ORS 468.020 & ORS 468.996
Stats. Implemented: ORS 183.090 & ORS 183.415
Hist.: DEQ 78, f. 9-6-74, ef. 9-25-74; DEQ 22-1984, f. & ef. 11-8-84; DEQ 22-1988, f. & cert. ef. 9-14-88; Renumbered from 340-12-075; DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 21-1992, f. & cert. ef. 8-11-92

340-012-0048

Stipulated Penalties

Nothing in OAR Chapter 340, Division 12 shall affect the ability of the Commission or Director to include stipulated penalties in a Mutual Agreement and Order, Consent Order, Consent Decree or any other agreement issued under ORS Chapters 183, 454, 459, 465, 466, 467, 468, 468A, or 468B.

Stat. Auth.: ORS 454.625, ORS 459.995, ORS 468.020 & ORS 468.996
Stats. Implemented: ORS 183.090 & ORS 183.415
Hist.: DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 19-1998, f. & cert. ef. 10-12-98

340-012-0049

Additional Civil Penalties

In addition to any other penalty provided by law, the following violations are subject to the civil penalties specified below:

(1) Any person who willfully or negligently causes an oil spill shall incur a civil penalty commensurate with the amount of damage incurred. The amount of the penalty shall be determined by the Director with the advice of the Director of the Department of Fish and Wildlife. In determining the amount of the penalty, the Director may consider the gravity of the violation, the previous record of the violator and such other considerations the Director deems appropriate.

(2) Any person planting contrary to the restriction of subsection (1) of ORS 468.465 pertaining to the open field burning of cereal grain acreage shall be assessed by the Department a civil penalty of $25 for each acre planted contrary to the restrictions.

(3) Whenever an underground storage tank fee is due and owing under ORS 466.785 or 466.795, the Director may issue a civil penalty not less than $25 nor more than $100 for each day the fee is due and owing.

(4) Any owner or operator of a confined animal feeding operation who has not applied for or does not have a permit required by ORS 468B.050 shall be assessed a civil penalty of $500.

(5) Any person who fails to pay an automobile emission fee when required by law or rule shall be assessed a civil penalty of $50.

(6) Any person who has care, custody or control of a hazardous waste or a substance which would be a hazardous waste except for the fact that it is not discarded, useless or unwanted shall incur a civil penalty according to the schedule set forth in this section for the destruction, due to contamination of food or water supply by such waste or substance, of any of the wildlife referred to in this section that are property of the state:

(a) Each game mammal other than mountain sheep, mountain goat, elk or silver gray squirrel, $400;

(b) Each mountain sheep or mountain goat, $3,500;

(c) Each elk, $750;

(d) Each silver-gray squirrel, $10;

(e) Each game bird other than wild turkey, $10;

(f) Each wild turkey, $50;

(g) Each game fish other than salmon or steelhead trout, $5;

(h) Each salmon or steelhead trout, $125;

(i) Each fur-bearing mammal other than bobcat or fisher, $50;

(j) Each bobcat or fisher, $350;

(k) Each specimen of any wildlife species whose survival is specified by the wildlife laws or the laws of the United States as threatened or endangered, $500;

(l) Each specimen of any wildlife species otherwise protected by the wildlife laws or the laws of the United States, but not otherwise referred to in this section, $25.

(7) Any person who intentionally or recklessly violates any provisions of ORS 164.785, 459.205 - 459.426, 459.705 - 459.790, Chapters 465, 466, 467, or 468 or any rule or standard or order of the commission adopted or issued pursuant to ORS 459.205 - 459.426, 459.705 - 459.790, Chapters 465, 466, 467, 468, 468A, or 468B, which results in or creates the imminent likelihood for an extreme hazard to the public health or which causes extensive damage to the environment shall incur a penalty up to $100,000. When determining the civil penalty sum to be assessed under this section, the Director shall apply the following procedures:

(a) Select one of the following base penalties after determining the cause of the violation:

(A) $50,000 if the violation was caused recklessly;

(B) $75,000 if the violation was caused intentionally;

(C) $100,000 if the violation was caused flagrantly.

(b) Then determine the civil penalty through application of the formula: BP + [(.1 x BP) (P + H + O + C)] + EB, in accordance with OAR340-012-0045(1)(c).

Stat. Auth.: ORS 459.995, ORS 466, ORS 467, ORS 468.020 & ORS 468.996
Stats. Implemented: ORS 466.210, ORS 466.880 - ORS 466.895, ORS 468.996, ORS 468A.990, ORS 468A.992, ORS 468B.220 & ORS 468B.450
Hist.: DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 9-2000, f. & cert. ef. 7-21-00; DEQ 1-2003, f. & cert. ef. 1-31-03

340-012-0050

Air Quality Classification of Violations

Violations pertaining to air quality shall be classified as follows:

(1) Class One:

(a) Violation of a requirement or condition of a Commission or Department Order, or variance;

(b) Constructing or operating a source required to have a permit other than a Basic ACDP without first obtaining the appropriate permit;

(c) Modifying a source with an Air Permit without first notifying and receiving approval from the Department;

(d) Failure to install control equipment or meet performance standards as required by New Source Performance Standards under OAR 340 division 238 or National Emission Standards for Hazardous Air Pollutant Standards under OAR 340 division 244;

(e) Violation of a compliance schedule in a permit;

(f) Exceeding a hazardous air pollutant emission limitation;

(g) Exceeding an opacity or criteria pollutant emission limitation in a permit, rule or order by a factor of greater than or equal to two times the limitation;

(h) Exceeding the yearly emission limitations of a permit, rule or order;

(i) Failure to perform testing, or monitoring, required by a permit, rule or order that results in failure to show compliance with an emission limitation or a performance standard;

(j) Systematic failure to keep records required by a permit, rule or order;

(k) Failure to submit semi-annual Compliance Certification or Oregon Title V Annual Operating Report;

(l) Failure to file a timely application for an Oregon Title V Operating Permit pursuant to OAR 340 division 218;

(m) Submitting a report, semi-annual Compliance Certification or Oregon Title V Annual Operating Report, or any part thereof, that does not accurately reflect the monitoring, record keeping or other documentation held or performed by the permittee;

(n) Causing emissions that are a hazard to public safety;

(o) Failure to comply with Emergency Action Plans or allowing excessive emissions during emergency episodes;

(p) Violation of a work practice requirement for asbestos abatement projects which causes a potential for public exposure to asbestos or release of asbestos into the environment;

(q) Storage or accumulation of friable asbestos material or asbestos-containing waste material from an asbestos abatement project which causes a potential for public exposure to asbestos or release of asbestos into the environment;

(r) Visible emissions of asbestos during an asbestos abatement project or during collection, processing, packaging, transportation, or disposal of asbestos-containing waste material;

(s) Conduct of an asbestos abatement project by a person not licensed as an asbestos abatement contractor;

(t) Violation of a disposal requirement for asbestos-containing waste material which causes a potential for public exposure to asbestos or release of asbestos into the environment;

(u) Failing to hire a licensed contractor to conduct an asbestos abatement project which results in the potential for public exposure to asbestos or release of asbestos into the environment;

(v) Advertising to sell, offering to sell or selling a non-certified woodstove;

(w) Open burning of materials which are prohibited from being open burned anywhere in the State by OAR 340-264-0060(3);

(x) Failure to install vapor recovery piping in accordance with standards set forth in OAR chapter 340, division 150;

(y) Installing vapor recovery piping without first obtaining a service provider license in accordance with requirements set forth in OAR chapter 340, division 160;

(z) Submitting falsified actual or calculated emission fee data;

(aa) Failure to provide access to premises or records when required by law, rule, permit or order;

(bb) Any violation related to air quality which causes a major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

(a) Unless otherwise classified, exceeding an emission limitation, other than an annual emission limitation, or exceeding an opacity limitation by more than five percent opacity in permits, rules or order;

(b) Violating standards in permits or rules for fugitive emissions, particulate deposition, or odors;

(c) Failure to submit a complete Air Contaminant Discharge Permit application 60 days prior to permit expiration or prior to modifying a source;

(d) Failure to maintain on site records when required by a permit to be maintained on site;

(e) Exceedances of operating limitations that limit the potential to emit that do not result in emissions above the Oregon Title V Operating Permit permitting thresholds pursuant to OAR 340 division 218;

(f) Failure to perform testing or monitoring required by a permit, rule or order unless otherwise classified.

(g) Illegal open burning of agricultural, commercial, construction, demolition, and/or industrial waste

except for open burning in violation of OAR 340-264-0060(3);

(h) Failing to comply with notification and reporting requirements in a permit;

(i) Failure to comply with asbestos abatement licensing, certification, or accreditation requirements;

(j) Failure to provide notification of an asbestos abatement project;

(k) Violation of a work practice requirement for asbestos abatement projects that does not cause a potential for public exposure to asbestos and does not release asbestos into the environment;

(l) Violation of a disposal requirement for asbestos-containing waste material that does not cause a potential for public exposure to asbestos and does not release asbestos into the environment;

(m) Failure to perform a final air clearance test or submit an asbestos abatement project air clearance report for an asbestos abatement project.

(n) Failure to display permanent labels on a certified woodstove;

(o) Alteration of a permanent label for a certified woodstove;

(p) Failure to use Department-approved vapor control equipment when transferring fuel;

(q) Operating a vapor recovery system without first obtaining a piping test performed by a licensed service provider as required by OAR chapter 340, division 160;

(r) Failure to obtain Department approval prior to installing a Stage II vapor recovery system not already registered with the Department as specified in Department rules;

(s) Installing, servicing, repairing, disposing of or otherwise treating automobile air conditioners without recovering and recycling chlorofluorocarbons using approved recovery and recycling equipment;

(t) Selling, or offering to sell, or giving as a sales inducement any aerosol spray product which contains as a propellant any compound prohibited under ORS 468A.655;

(u) Selling any chlorofluorocarbon or halon containing product prohibited under ORS 468A.635;

(v) Failure to pay an emission fee;

(w) Submitting inaccurate emission fee data;

(x) Violation of OAR 340-242-0620 by a person who has performed motor vehicle refinishing on 10 or more on-road motor vehicles in the previous 12 months;

(y) Constructing or operating a source required to have a Basic ACDP;

(z) Any violation of the Employee Commute Option rules contained in OAR 340-242-0010 to 0290;

(aa) Any violation related to air quality which is not otherwise classified in these rules.

(3) Class Three:

(a) Failure to perform testing, or monitoring required by a permit, rule or order where missing data can be reconstructed to show compliance with standards, emission limitations or underlying requirements;

(b) Illegal residential open burning;

(c) Improper notification of an asbestos abatement project;

(d) Failure to submit a completed renewal application for an asbestos abatement license in a timely manner;

(e) Failure to display a temporary label on a certified woodstove;

(f) Exceeding opacity limitation in permits or rules by five percent opacity or less.

(g) Violation of OAR 340-242-0620 by a person who has performed motor vehicle refinishing on fewer than 10 on-road motor vehicles in the previous 12 months.

[Publications: The publication(s) referenced in this rule is available from the agency.]

Stat. Auth.: ORS 468.020, ORS 468A.025 & ORS 468A.045
Stats. Implemented: ORS 468.020 & ORS 468A.025
Hist.: DEQ 78, f. 9-6-74, ef. 9-25-74; DEQ 5-1980, f. & ef. 1-28-80; DEQ 22-1984, f. & ef. 11-8-84; DEQ 22-1988, f. & cert. ef. 9-14-88; DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 31-1990, f. & cert. ef. 8-15-90; DEQ 2-1992, f. & cert. ef. 1-30-92; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 19-1993, f. & cert. ef. 11-4-93; DEQ 20-1993(Temp), f. & cert. ef. 11-4-93; DEQ 4-1994, f. & cert. ef. 3-14-94; DEQ 13-1994, f. & cert. ef. 5-19-94; DEQ 21-1994, f. & cert. ef. 10-14-94; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 19-1998, f. & cert. ef. 10-12-98; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-012-0052

Noise Control Classification of Violations

Violations pertaining to noise control shall be classified as follows:

(1) Class One:

(a) Violation of a requirement or condition of a Commission or Department order or variance;

(b) Violations that exceed noise standards by ten decibels or more;

(c) Exceeding the ambient degradation rule by five decibels or more; or

(d) Failure to submit a compliance schedule required by OAR 340-035-0035(2);

(e) Operating a motor sports vehicle without a properly installed or well-maintained muffler or exceeding the noise standards set forth in OAR 340-035-0040(2);

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(f) Operating a new permanent motor sports facility without submitting and receiving approval of projected noise impact boundaries;

(g) Failure to provide access to premises or records when required by law, rule, or order;

(h) Violation of motor racing curfews set forth in OAR 340-035-0040(6);

(i) Any violation related to noise control which causes a major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

(a) Violations that exceed noise standards by three decibels or more;

(b) Advertising or offering to sell or selling an uncertified racing vehicle without displaying the required notice or obtaining a notarized affidavit of sale;

(c) Any violation related to noise control which is not otherwise classified in these rules.

(3) Violations that exceed noise standards by one or two decibels are Class III violations.

Stat. Auth.: ORS 467.030 & ORS 468.020
Stats. Implemented: ORS 467.050 & ORS 467.990
Hist.: DEQ 101, f. & ef. 10-1-75; DEQ 22-1984, f. & ef. 11-8-84; DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 19-1998, f. & cert. ef. 10-12-98

340-012-0055

Water Quality Classification of Violations

Violations pertaining to water quality shall be classified as follows:

(1) Class One:

(a) Violation of a requirement or condition of a Commission or Department Order;

(b) Causing pollution of waters of the State;

(c) Reducing the water quality of waters of the State below water quality standards;

(d) Any discharge of waste that enters waters of the state, either without a waste discharge permit or from a discharge point not authorized by a waste discharge permit;

(e) Failure to comply with statute, rule, or permit requirements regarding notification of a spill or upset condition which results in a non-permitted discharge to public waters;

(f) Violation of a permit compliance schedule;

(g) Any violation of any pretreatment standard or requirement by a user of a municipal treatment works

which either impairs or damages the treatment works, or causes a major harm or poses a major risk of harm to public health or the environment;

(h) Operation of a disposal system without first obtaining a Water Pollution Control Facility Permit;

(i) Failure to provide access to premises or records when required by law, rule, permit or order;

(j) Failure of any ship carrying oil to have financial assurance as required in ORS 468B.300 - 468B.335 or rules adopted thereunder;

(k) Any violation related to water quality which causes a major harm or poses a major risk of harm to public health or the environment.

(l) Unauthorized changes, modifications, or alterations to a facility operating under a WPCF or NPDES permit.

(m) Intentionally submitting false information;

(n) Operating or supervising a wastewater treatment system without proper certification.

(2) Class Two:

(a) Failure to submit a report or plan as required by rule, permit, or license, except for a report required by permit compliance schedule;

(b) Any violation of OAR Chapter 340, Division 49 regulations pertaining to certification of wastewater system operator personnel unless otherwise classified;

(c) Placing wastes such that the wastes are likely to enter public waters by any means;

(d) Failure by any ship carrying oil to keep documentation of financial assurance on board or on file with the Department as required by ORS 468B.300 - 468B.335 or rules adopted thereunder;

(e) Failing to connect all plumbing fixtures to, or failing to discharge wastewater or sewage into, a Department-approved system unless otherwise classified in OAR 340-012-0055 or 340-012-0060;

(f) Any violation of a management, monitoring, or operational plan established pursuant to a waste discharge permit, that is not otherwise classified in these rules.

(g) Any violation related to water quality which is not otherwise classified in these rules.

(3) Class Three:

(a) Failure to submit a discharge monitoring report on time;

(b) Failure to submit a complete discharge monitoring report;

(c) Exceeding a waste discharge permit biochemical oxygen demand (BOD), carbonaceous biochemical oxygen demand (CBOD), or total suspended solids (TSS) limitation by a concentration of 20 percent or less, or exceeding a mass loading limitation by ten percent or less;

(d) Violation of a removal efficiency requirement by a factor of less than or equal to 0.2 times the number value of the difference between 100 and the applicable removal efficiency requirement (e.g., if the requirement is 65 percent removal, 0.2 (100-65) = 0.2(35) = 7 percent; then 7 percent would be the maximum percentage that would qualify under this rule for a permit with a 65 percent removal efficiency requirement);

(e) Violation of a pH requirement by less than 0.5 pH.

Stat. Auth.: ORS 468.020 & ORS 468B.015
Stats. Implemented: ORS 468.090 - ORS 468.140, ORS 468B.025, ORS 468B.220 & ORS 468B.305
Hist.: DEQ 78, f. 9-6-74, ef. 9-25-74; DEQ 22-1984, f. & ef. 11-8-84; DEQ 17-1986, f. & ef. 9-18-86; DEQ 22-1988, f. & cert. ef. 9-14-88; DEQ 4-1989, f. & cert ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 19-1998, f. & cert. ef. 10-12-98

340-012-0060

On-Site Sewage Disposal Classification of Violations

Violations pertaining to On-Site Sewage Disposal shall be classified as follows:

(1) Class One:

(a) Violation of a requirement or condition of a Commission or Department order;

(b) Performing, advertising or representing one's self as being in the business of performing sewage disposal services without first obtaining and maintaining a current sewage disposal service license from the Department;

(c) Installing or causing to be installed an on-site sewage disposal system or any part thereof, or repairing any part thereof, without first obtaining a permit;

(d) Disposing of septic tank, holding tank, chemical toilet, privy or other treatment facility contents in a manner or location not authorized by the Department;

(e) Operating or using an on-site sewage disposal system that is failing by discharging sewage or effluent;

(f) Failure to provide access to premises or records when required by law, rule, permit or order;

(g) Any violations related to on-site sewage disposal which cause major harm or pose a major risk of harm to public health, welfare, safety or the environment.

(2) Class Two:

(a) Installing or causing to be installed an on-site sewage disposal system, or any part thereof, or the repairing of any part thereof, which fails to meet the requirements for satisfactory completion within 30 days after written notification or posting of a Correction Notice at the site;

(b) Operating or using a nonwater-carried waste disposal facility without first obtaining a letter of authorization from the Agent;

(c) Operating or using a newly constructed, altered or repaired on-site sewage disposal system, or part thereof, without first obtaining a Certificate of Satisfactory Completion;

(d) Providing any sewage disposal service in violation of any statute, rule, license, or permit, provided that the violation is not otherwise classified in these rules;

(e) Failing to obtain an authorization notice from the Agent prior to affecting change to a dwelling or commercial facility that results in the potential increase in the projected peak sewage flow from the dwelling or commercial facility in excess of the sewage disposal system's peak design flow;

(f) Installing or causing to be installed a nonwater-carried waste disposal facility without first obtaining written approval from the Agent;

(g) Failing to connect all plumbing fixtures to, or failing to discharge wastewater or sewage into, a Department approved on-site system;

(h) Any violation related to on-site sewage disposal which is not otherwise classified in these rules.

(3) Violations where the sewage disposal system design flow is not exceeded, placing an existing system into service, or changing the dwelling or type of commercial facility, without first obtaining an authorization notice are Class Three violations.

Stat. Auth.: ORS 454.050, ORS 454.625 & ORS 468.020
Stats. Implemented: ORS 454.635, ORS 454.645 & ORS 468.090 - ORS 468.140
Hist.: DEQ 78, f. 9-6-74, ef. 9-25-74; DEQ 4-1981, f. & ef. 2-6-81; DEQ 22-1984, f. & ef. 11-8-84; DEQ 22-1988, f. & cert. ef. 9-14-88; DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 19-1998, f. & cert. ef. 10-12-98

340-012-0065

Solid Waste Management Classification of Violations

Violations pertaining to the management, recovery and disposal of solid waste shall be classified as follows:

(1) Class One:

(a) Violation of a requirement or condition of a Commission or Department Order;

(b) Establishing, expanding, maintaining or operating a disposal site without first obtaining a registration or permit;

(c) Accepting solid waste for disposal in a permitted solid waste unit or facility that has been expanded in area or capacity without first submitting plans to the Department and obtaining Department approval;

(d) Disposing of or authorizing the disposal of a solid waste at a location not permitted by the Department to receive that solid waste;

(e) Violation of the freeboard limit which results in the actual overflow of a sewage sludge or leachate lagoon;

(f) Violation of the landfill methane gas concentration standards;

(g) Violation of any federal or state drinking water standard in an aquifer beyond the solid waste boundary of the landfill, or an alternative boundary specified by the Department;

(h) Violation of a permit-specific groundwater concentration limit, as defined in OAR 340-040-0030(3) at the permit-specific groundwater concentration compliance point, as defined in OAR 340-040-0030(2)(e);

(i) Failure to perform the groundwater monitoring action requirements specified in OAR 340-040-0030(5), when a significant increase (for pH, increase or decrease) in the value of a groundwater monitoring parameter is detected;

(j) Impairment of the beneficial use(s) of an aquifer beyond the solid waste boundary or an alternative boundary specified by the Department;

(k) Deviation from the Department approved facility plans which results in an safety hazard, public health hazard or damage to the environment;

(l) Failure to properly construct and maintain groundwater, surface water, gas or leachate collection, treatment, disposal and monitoring facilities in accordance with the facility permit, the facility environmental monitoring plan, or Department rules;

(m) Failure to collect, analyze and report ground-water, surface water or leachate quality data in accordance with the facility permit, the facility environmental monitoring plan, or Department rules;

(n) Violation of a compliance schedule contained in a solid waste disposal or closure permit;

(o) Failure to provide access to premises or records when required by law, rule, permit or order;

(p) Knowingly disposing, or accepting for disposal, materials prohibited from disposal at a solid waste disposal site by statute, rule, permit or order;

(q) Accepting, handling, treating or disposing of clean-up materials contaminated by hazardous substances by a landfill in violation of the facility permit and plans as approved by the Department or the provisions of OAR 340-093-0170(3);

(r) Accepting for disposal infectious waste not treated in accordance with laws and Department rules;

(s) Accepting for treatment, storage or disposal wastes defined as hazardous under ORS 466.005, et seq., or wastes from another state which are hazardous under the laws of that state without specific approval from the Department;

(t) Mixing for disposal or disposing of principal recyclable material that has been properly prepared and source separated for recycling;

(u) Receiving special waste in violation of or without a Department approved Special Waste Management Plan;

(v) Failure to follow a Department approved Construction Quality Assurance (CQA) plan when

constructing a waste cell;

(w) Failure to comply with a Department approved Remedial Investigation Workplan developed in accordance with OAR 340-040-0040;

(x) Failure to establish and maintain financial assurance as required by statute, rule, permit or order;

(y) Open burning in violation of OAR 340-264-0060(3);

(z) Failure to abide by the terms of a permit automatically terminated due to a failure to submit a timely application for renewal as set forth in OAR 340-093-0115(1)(c);

(aa) Any violation related to the management, recovery and disposal of solid waste which causes major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

(a) Violation of a condition or term of a Letter of Authorization;

(b) Failure of a permitted landfill, solid waste incinerator or a municipal solid waste compost facility operator or a metropolitan service district to report amount of solid waste disposed in accordance with the laws and rules of the Department;

(c) Failure to accurately report weight and type of material recovered or processed from the solid waste stream in accordance with the laws and rules of the Department;

(d) Failure of a disposal site to obtain certification for recycling programs in accordance with the laws and rules of the Department prior to accepting solid waste for disposal;

(e) Acceptance of solid waste by a permitted disposal site from a person that does not have an approved solid waste reduction program in accordance with the laws and rules of the Department;

(f) Failure to comply with any solid waste permit requirement pertaining to permanent household hazardous waste collection facility operations;

(g) Failure to comply with landfill cover requirements, including but not limited to daily, intermediate, and final covers, and limitation of working face size;

(h) Unless otherwise classified failure to comply with any plan approved by the Department;

(i) Failure to submit a permit renewal application 180 days prior to the expiration date of the existing permit;

(j) Failure to establish and maintain a facility operating record for a municipal solid waste landfill;

(k) Any violation related to solid waste, solid waste reduction, or any violation of a solid waste permit not otherwise classified in these rules.

(3) Class Three:

(a) Failure to post required signs;

(b) Failure to control litter;

(c) Unless otherwise classified failure to notify the Department of any name or address change of the owner or operator of the facility within ten days of the change.

Stat. Auth.: ORS 459.045 & ORS 468.020
Stats. Implemented: ORS 459.205, ORS 459.376, ORS 459.995 & ORS 468.090 - ORS 468.140
Hist.: DEQ 78, f. 9-6-74, ef. 9-25-74; DEQ 1-1982, f. & ef. 1-28-82; DEQ 22-1984, f. & ef. 11-8-84; DEQ 22-1988, f. & cert. ef. 9-14-88; DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 4-1994, f. & cert. ef. 3-14-94; DEQ 26-1994, f. & cert. ef. 11-2-94; DEQ 9-1996, f. & cert. ef. 7-10-96; DEQ 19-1998, f. & cert. ef. 10-12-98; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-012-0066

Solid Waste Tire Management Classification of Violations

Violations pertaining to the storage, transportation and management of waste tires or tire-derived products shall be classified as follows:

(1) Class One:

(a) Violation of a requirement or condition of a Commission or Department Order;

(b) Establishing, expanding, or operating a waste tire storage site without first obtaining a permit;

(c) Systematic failure to maintain written records of waste tire generation and disposal as required;

(d) Disposing of waste tires or tire-derived products at an unauthorized site;

(e) Violation of the compliance schedule or fire safety requirements of a waste tire storage site permit;

(f) Hauling waste tires or advertising or representing one's self as being in the business of a waste tire carrier without first obtaining a waste tire carrier permit as required by laws and rules of the Department;

(g) Hiring or otherwise using an unpermitted waste tire carrier to transport waste tires;

(h) Failure to establish and maintain financial assurance as required by statute, rule, permit or order;

(i) Failure to provide access to premises or records when required by law, rule, permit or order;

(j) Any violation related to the storage, transportation or management of waste tires or tire-derived products which causes major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

(a) Violation of a waste tire storage site or waste tire carrier permit other than a specified Class One or

Class Three violation;

(b) Failure to submit a permit renewal application prior to the expiration date of the existing permit within the time required by statute, rule, or permit;

(c) Hauling waste tires in a vehicle not identified in a waste tire carrier permit or failing to display required decals as described in a permitee's waste tire carrier permit;

(d) Violation of a condition or term of a Letter Authorization;

(e) Any violation related to the storage, transportation or management of waste tires or tire-derived products which is not otherwise classified in these rules.

(3) Class Three:

(a) Failure to submit required annual reports in a timely manner;

(b) Failure to keep required records on use of vehicles;

(c) Failure to post required signs;

(d) Failure to submit a permit renewal application in a timely manner;

(e) Failure to submit permit fees in a timely manner;

(f) Failure to maintain written records of waste tire disposal and generation.

Stat. Auth.: ORS 459.785 & ORS 468.020
Stats. Implemented: ORS 459.705 - ORS 459.790, ORS 459.992 & ORS 468.090 - ORS 468.140
Hist.: DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 19-1998, f. & cert. ef. 10-12-98

340-012-0067

Underground Storage Tank and Heating Oil Tank Classification of Violations

Violations pertaining to underground storage tank (UST) systems and heating oil tanks are classified as follows:

(1) Class One:

(a) Violating a requirement or condition of a commission or department order;

(b) Failure to report a release or suspected release from an UST system or a heating oil tank;

(c) Failure to perform an investigation or confirmation of a suspected release;

(d) Failure to establish or maintain the required financial responsibility mechanism;

(e) Failure to initiate and complete the investigation or cleanup of a release from an UST system or a heating oil tank;

(f) Failure to submit reports from the investigation or cleanup of a release from an UST system or heating oil tank;

(g) Failure to provide or allow access to premises or records;

(h) Failure to apply for and be issued the appropriate general permit registration certificate before decommissioning, installing or operating an UST, not otherwise classified;

(i) Failure to install spill and overfill protection equipment that will prevent a release or to be able to demonstrate to the department that the equipment is properly functioning;

(j) Failure to install, operate or maintain a method or combination of methods for release detection for an UST system such that the method can detect a release from any portion of the UST system;

(k) Failure to install or use equipment that is properly designed and constructed to protect any portion of the UST or piping from corrosion;

(l) Failure to operate and maintain corrosion protection such that it continuously provides protection to the UST system;

(m) Failure to permanently decommission an UST system;

(n) Failure to obtain approval from the department before installing or operating vapor or groundwater monitoring wells as part of a release detection method;

(o) Installing, repairing, replacing or modifying an UST system in violation of any rule adopted by the department, not otherwise classified;

(p) Systematic failure to conduct testing, monitoring or to keep records;

(q) Failure to initiate and complete free product removal in accordance with OAR 340-122-0235;

(r) Providing installation, modification, repair, replacement, decommissioning or testing services on an UST system or providing soil matrix cleanup services at an UST facility without an UST service or soil matrix cleanup service provider license;

(s) Using fraud or deceit to obtain an UST service provider, soil matrix cleanup service provider, heating oil tank service provider or supervisor license or demonstrating negligence or incompetence in performing UST or other tank services;

(t) Failure to assess the excavation zone of a decommissioned or abandoned UST when directed to do so by the department; and

(u) Any other violations related to UST systems or heating oil tanks that cause or pose significant harm to public health or the environment.

(2) Class Two:

(a) Failure to conduct release detection monitoring and testing activities for USTs or piping, not otherwise classified;

(b) Failure to conduct corrosion protection monitoring and testing activities for USTs or piping, not otherwise classified;

(c) Failure to conform to performance standards and requirements and third party evaluation and approval for UST system release detection methods or equipment or corrosion protection equipment, not otherwise classified;

(d) Continuing to use a method or methods of release detection after period allowed by rule has expired;

(e) Failure to use or maintain spill or overfill prevention equipment, not otherwise classified;

(f) Failure to meet all requirements for a financial responsibility mechanism, not otherwise classified;

(g) Failure to have a trained UST system operator for an UST facility after March 1, 2004;

(h) Failure to apply for a modified general permit registration certificate;

(i) Failure to have an operation certificate for all compartments or chambers of a multichambered or multicompartment UST when at least one compartment or chamber has an operation certificate;

(j) Installing, repairing, replacing or modifying an UST or UST equipment or conducting a soil matrix cleanup without providing the required notifications;

(k) Failure to decommission an UST in compliance with the statutes and rules adopted by the department, including, but not limited to, performance standards, procedures, notification, general permit registration and site assessment requirements;

(l) Providing installation, modification, decommissioning or testing services on an UST system or providing soil matrix cleanup services at an UST facility that does not have the appropriate general permit registration certificate;

(m) Failure by a distributor to obtain the identification number for each UST and operation certificate number before depositing a regulated substance into an UST;

(n) Failure by a distributor to maintain a record of all USTs into which it deposited a regulated substance;

(o) Allowing the installation, modification, decommissioning or testing of an UST system or soil matrix cleanup at an UST facility by any person not licensed by the department;

(p) Failure to provide information as required by OAR 340-150-0135(6) or as requested by the department;

(q) Failure to submit checklists or reports for UST installation, modification or suspected release confirmation activities;

(r) Failure to comply with integrity assessment inspection schedules or requirements for internally lined

USTs;

(s) Allowing the performance of heating oil tank services or supervision at a heating oil tank by any person not licensed by the department;

(t) Providing heating oil tank services at a heating oil tank without a heating oil tank service provider or supervisor license;

(u) Failure to submit a corrective action plan (CAP) in accordance with the schedule or format established by the department pursuant to OAR 340-122-0250;

(v) Failure by an owner or permittee to pass the appropriate national examination before performing installation, decommissioning or testing services on an UST system;

(w) Supervising the installation, modification, repair, replacement, decommissioning, testing or soil matrix cleanup of an UST system without a supervisor license;

(x) Failure by an owner or permittee to provide the identification number for each UST or operation certificate number to persons depositing a regulated substance into an UST; and

(y) Any other violation related to UST systems or heating oil tanks not otherwise classified.

(3) Class Three:

(a) Failure by a person who sells an UST to notify the new owner or permittee of the department's general permit registration requirements;

(b) Failure to maintain release detection records for USTs or piping if the failure does not constitute a significant operational compliance violation;

(c) Failure to maintain required manufacturer's information or third party evaluation documents for approved methods or equipment;

(d) Failure to maintain training records for an UST system operator; and

(e) Failure to keep records of UST system repair, modification or replacement work.

Stat. Auth.: ORS 466.746, ORS 466.994 & ORS 468.020
Stats. Implemented: ORS 466.706 - ORS 466.835 & ORS 466.994
Hist.: DEQ 2-1988, f. 1-27-88, cert. ef. 2-1-88; DEQ 22-1988, f. & cert. ef. 9-14-88; DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 15-1991, f. & cert. ef. 8-14-91; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 4-1994, f. & cert. ef. 3-14-94; DEQ 19-1998, f. & cert. ef. 10-12-98; DEQ 6-2003, f. & cert. ef. 2-14-03

340-012-0068

Hazardous Waste Management and Disposal Classification of Violations

Violations pertaining to the management and disposal of hazardous waste, including universal wastes, shall be classified as follows:

(1) Class One:

(a) Violation of a requirement or condition of a Department or Commission order;

(b) Failure to make a complete and accurate hazardous waste determination of a residue as required by OAR 340-102-0011;

(c) Failure to have a waste analysis plan as required by 40 CFR 265.13;

(d) Operation of a hazardous waste treatment, storage or disposal facility (TSD) without first obtaining a permit or without having interim status pursuant to OAR 340-105-0010(2)(a);

(e) Accumulation of hazardous waste on site for longer than twice the applicable generator allowable on-site accumulation period;

(f) Transporting or offering for transport hazardous waste for off-site shipment without first preparing a manifest;

(g) Accepting for transport hazardous waste which is not accompanied by a manifest;

(h) Systematic failure of a hazardous waste generator to comply with the manifest system requirements;

(i) Failure to submit a manifest discrepancy report or exception report;

(j) Failure to prevent the unknown entry or prevent the possibility of the unauthorized entry of person or livestock into the waste management area of a TSD facility;

(k) Failure to manage ignitable, reactive, or incompatible hazardous wastes as required under 40 CFR Part 264 and 265.17(b)(1), (2), (3), (4) and (5);

(l) Illegal disposal of hazardous waste;

(m) Disposal of hazardous waste in violation of the land disposal restrictions;

(n) Failure to contain waste pesticide or date containers of waste pesticide as required by OAR 340-109-0010(2);

(o) Treating or diluting universal wastes in violation of 40 CFR 273.11, 273.31 or OAR 340-113-0030 (5);

(p) Use of empty non-rigid or decontaminated rigid pesticide containers for storage of food, fiber or water intended for human or animal consumption;

(q) Mixing, solidifying, or otherwise diluting hazardous waste to circumvent land disposal restrictions;

(r) Incorrectly certifying a hazardous waste for disposal/treatment in violation of the land disposal restrictions;

(s) Failure to submit a Land Disposal notification, demonstration or certification with a shipment of hazardous waste;

(t) Shipping universal waste to a site other than an off-site collection site, destination facility or foreign destination in violation of 40 CFR 273.18 or 273.38;

(u) Failure to comply with the hazardous waste tank integrity assessments and certification requirements;

(v) Failure of an owner/operator of a TSD facility to have a closure and/or post closure plan and/or cost estimates;

(w) Failure of an owner/operator of a TSD facility to retain an independent registered professional engineer to oversee closure activities and certify conformity with an approved closure plan;

(x) Failure of an owner/operator of a TSD facility to establish or maintain financial assurance for closure and/or post closure care;

(y) Systematic failure of an owner/operator of a TSD facility or a generator of hazardous waste to conduct inspections;

(z) Failure of an owner/operator of a TSD facility or generator to promptly correct any hazardous condition discovered during an inspection;

(aa) Failing to prepare a Contingency Plan;

(bb) Failure to follow an emergency procedure contained in a Contingency Plan or other emergency response plan when failure could result in serious harm;

(cc) Storage of hazardous waste in a container which is leaking or presenting a threat of release;

(dd) Storing more than 100 containers of hazardous waste without complying with the secondary containment requirements at 40 CFR 264.175;

(ee) Systematic failure to follow hazardous waste container labeling requirements or lack of knowledge of container contents;

(ff) Failure to label a hazardous waste container where such failure could cause an inappropriate response to a spill or leak and substantial harm to public health or the environment;

(gg) Failure to date a hazardous waste container with a required accumulation date or failure to document length of time hazardous waste was accumulated;

(hh) Failure to comply with the export requirements for hazardous wastes;

(ii) Violation of any TSD facility permit, provided that the violation is equivalent to any Class I violation set forth in these rules;

(jj) Systematic failure to comply with hazardous waste generator annual reporting requirements, Treatment, Storage, Disposal and Recycling facility annual reporting requirements and annual registration information;

(kk) Failure to properly install groundwater monitoring wells such that detection of hazardous waste or

hazardous constituents that migrate from the waste management area cannot be immediately be detected;

(ll) Failure to install any groundwater monitoring wells;

(mm) Failure to develop and follow a groundwater sampling and analysis plan using proper techniques and procedures;

(nn) Generating and treating, storing, disposing of, transporting, and/or offering for transportation, hazardous waste without first obtaining an EPA Identification Number;

(oo) Systematic failure of a large-quantity hazardous waste generator or TSD facility to properly control volatile organic hazardous waste emissions;

(pp) Failure to provide access to premises or records when required by law, rule, permit or order;

(qq) Any violation related to the generation, management and disposal of hazardous waste which causes major harm or poses a major risk of harm to public health or the environment;

(rr) In addition to the above, the following Class One violations apply to entities regulated under OAR 340-124:

(A) Placing hazardous waste generated at a dry cleaning facility at any location other than an appropriately labeled hazardous waste storage container.

(B) Discharging dry cleaning wastewater to a sanitary sewer, storm sewer, septic system, boiler or into the waters of the state.

(C) Failure to have a secondary containment system under and around the dry cleaning machine as required by OAR 340-124-0040(3)(a) and under and around stored solvent as required by OAR 340-124-0040(3)(c).

(D) Failure by persons generating hazardous waste at a dry cleaning facility in amounts of 220 pounds a month or less or who never store onsite more than 2,200 pounds of hazardous waste to dispose of hazardous waste within one year of the date the waste was placed in the hazardous waste container.

(E) Failure by persons generating hazardous waste at a dry cleaning facility in amounts of 220 pounds a month or less or who never store onsite more than 2,200 pounds of hazardous waste to label a hazardous waste storage container with the date the waste was first placed in the container.

(F) Failure to store hazardous waste in closed containers.

(G) Failure to treat hazardous waste dry cleaning wastewater in equipment meeting the criteria in OAR 340-124-0040(2)(c) or (2)(d).

(H) Failure of a dry cleaning business owner or dry cleaning operator to submit an annual report to the Department.

(I) Failure of a dry store operator to submit an annual report to the Department.

(F) Failure to report a release of more than one pound of dry cleaning solvent in a 24 hour period released outside of a containment system.

(K) Failure to repair the cause of a release of dry cleaning solvent within a containment system.

(2) Class two:

(a) Failure to keep a copy of the documentation used to determine whether a residue is a hazardous waste;

(b) Failure to label a tank or container of hazardous wastes with the words "Hazardous Waste," "Pesticide Waste," "Universal Waste" or with other words as required that identify the contents;

(c) Failure to comply with hazardous waste generator annual reporting requirements, Treatment, Storage, Disposal and Recycling facility annual reporting requirements and annual registration information, unless otherwise classified;

(d) Failing to keep a container of hazardous waste closed except when necessary to add or remove waste;

(e) Failing to inspect areas where containers of hazardous waste are stored, at least weekly;

(f) Failure of a hazardous waste generator to maintain aisle space adequate to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination;

(g) Accumulating hazardous waste on-site, without fully complying with the Personnel Training requirements;

(h) Failure to manage universal waste in a manner that prevents releases into the environment;

(i) Failure to comply with the empty pesticide container management requirements unless otherwise classified;

(j) Any violation pertaining to the generation, management and disposal of hazardous waste which is not otherwise classified in these rules is a Class Two violation.

(k) In addition to the above, the following Class Two violations apply to entities as regulated under OAR 340-124.

(A) Failure to remove dry cleaning solvent remaining in the dry cleaning machine and solvent containing residue in accordance with OAR 340-124-0040(1)(h) and 340-124-0055.

(B) Failure to disconnect utilities from a dry cleaning machine at a dry store in accord with OAR 340-124-0055.

(C) Failure to comply with the containment requirements in OAR 340-124-0040(3)(b), (3)(d), (3)(e), (3)(f) and (3)(g).

(D) Failure to prominently post the Oregon Emergency Response System telephone number so the number is immediately available to all employees of the dry cleaning facility.

(E) Failure of a person delivering perchloroethylene solvent to a dry cleaning facility to use closed direct-coupled delivery according to OAR 340-124-0040(6) when delivering perchloroethylene dry cleaning solvent.

(F) Failure of a dry cleaning operator at a dry cleaning facility to have closed direct-coupled delivery for perchloroethylene according to OAR 340-124-0040(6).

(G) Failure to label hazardous waste storage container with the words "hazardous waste".

(H) Failure to immediately cleanup a release of dry cleaning solvent within a containment system.

(I) Any violation pertaining to the generation, management and disposal of hazardous waste from a dry cleaning facility which is not otherwise classified in these rules is a Class Two violation.

(3) Class three:

(a) Accumulation of hazardous waste on site by a large-quantity generator for less than ten days over the allowable on-site accumulation period;

(b) Accumulation of hazardous waste on site by a small-quantity generator for less than twenty days over the allowable on-site accumulation period;

(c) Failure of a large-quantity generator of hazardous waste to retain signed copies of manifests for at least three years when less than 5% of the reviewed manifests are missing and the facility is able to obtain copies during the inspection;

(d) Failure of a small-quantity generator of hazardous waste to retain signed copies of manifests for at least three years when only 3 of the reviewed manifests are missing and the facility is able to obtain copies and submit them to the Department within 10 days of the inspection;

(e) Failure to label only one container or tank which is less than 60 gallons in volume and in which hazardous waste was accumulated on site, with the required words "Hazardous Waste," "Pesticide Waste," "Universal Waste" or with other words as required that identify the contents;

(f) Failure of a large-quantity generator to retain copies of land disposal restriction notifications, demonstrations, or certifications when less than 5% of the reviewed land disposal restriction notices are missing and the facility is able to obtain copies during the inspection;

(g) Failure of a small-quantity generator to retain copies of land disposal restriction notifications, demonstrations, or certifications when 3 or fewer of the reviewed land disposal restriction notices missing and the facility is able to obtain copies and submit them to the Department within 10 days of the inspection;

(h) Failure to keep a container of hazardous waste located in a "satellite accumulation area" closed except when necessary to add or remove waste, when only one container is open;

(i) Failure to properly label a container of pesticide-containing material for use or reuse as required by OAR 340-109-0010(1)

(j) In addition to the above, the following Class Three violations apply to entities as regulated under

OAR 340-124:

(A) Failure to notify the Department of change or closure at a dry cleaning business or dry store according to 340-124-0050.

[Publications: Publications referenced in this rule are available from the agency.]

Stat. Auth.: ORS 459.995, ORS 466.070-ORS 466.080, 466.625 & ORS 468.020
Stats. Implemented: ORS 466.635-466.680, 466.880-466.992 & 468.090-468.140
Hist.: DEQ 1-1982, f. & ef. 1-28-82; DEQ 22-1984, f. & ef. 11-8-84; DEQ 9-1986, f. & ef. 5-1-86; DEQ 17-1986, f. & ef. 9-18-86; DEQ 22-1988, f. & cert. ef. 9-14-88; DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 19-1998, f. & cert. ef. 10-12-98; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 13-2002, f. & cert. ef. 10-9-02

340-012-0071

PCB Classification of Violations

Violations pertaining to the management and disposal of polychlorinated biphenyls (PCB) shall be classified as follows:

(1) Class One:

(a) Violation of a requirement or condition of a Commission or Department Order;

(b) Treating or disposing of PCBs anywhere other than at a permitted PCB disposal facility;

(c) Establishing, constructing or operating a PCB disposal facility without first obtaining a permit;

(d) Failure to provide access to premises or records when required to by law, rule, permit or order;

(e) Any violation related to the management and disposal of PCBs which causes a major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

(a) Violating a condition of a PCB disposal facility permit;

(b) Any violation related to the management and disposal of PCBs which is not otherwise classified in these rules.

Stat. Auth.: ORS 459.995, ORS 466.625, ORS 467.030, ORS 468.020 & ORS 468.996
Stats. Implemented: ORS 466.255, ORS 466.265 - ORS 466.270, ORS 466.530 & ORS 466.880 - ORS 466.992
Hist.: DEQ 22-1988, f. & cert. ef. 9-14-88; DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 19-1998, f. & cert. ef. 10-12-98; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01

340-012-0072

Used Oil Management Classification of Violations

Violations pertaining to the management of used oil shall be classified as follows:

(1) Class One:

(a) Violation of a requirement or condition of a Department or Commission Order;

(b) Using used oil as a dust suppressant or pesticide, or otherwise spreading used oil directly in the environment;

(c) Collecting, processing, storing, disposing of, and/or transporting, used oil without first obtaining an EPA Identification number;

(d) Burning used oil with less than 5,000 Btu/pound for the purpose of "energy recovery" in violation of OAR 340-111-0110(3)(b);

(e) Offering for sale used oil as specification used oil-fuel when the used oil does not meet used oil-fuel specifications;

(f) Offering to sell off-specification used oil fuel to facility not meeting the definition of an industrial boiler or furnace, or failing to obtain proper certification under 40 CFR 179.75;

(g) Burning off-specification used oil in a device not specifically exempted under 40 CFR 279.60(a) that does not meet the definition of an industrial boiler or furnace;

(h) Storing or managing used oil in a surface impoundment;

(i) Storing used oil in containers which are leaking or present a threat of release;

(j) Failure by a used oil transporter or processor to determine whether the halogen content of used oil exceeds that permissible for used oil;

(k) Failure to develop and follow a written waste analysis plan when required by law;

(l) Failure by a used-oil processor or transporter to manage used-oil residues as required under 40 CFR 279(10)(e);

(m) Any violation related to the management of used oil which causes major harm or poses a major risk of harm to public health or the environment;

(n) Failure to provide access to premises or records when required to do so by law, rule, permit or order.

(2) Class Two:

(a) Failure to close or cover used oil tanks or containers as required by OAR 340-111-0032(2);

(b) Failing to submit annual used oil handling reports;

(c) Failure by a used-oil transfer facility, processors, or off-specification used-oil burners to store used oil within secondary containment;

(d) Failure to label each container or tank in which used oil was accumulated on site with the words "used oil";

(e) Failure of a used-oil processor to keep a written operating record at the facility in violation of 40 CFR 279.57;

(f) Failure by a used-oil processor to prepare and maintain a preparedness and prevention plan;

(g) Failure by a used-oil processor to close out used-oil tanks or containers when required by 40 CFR 279.54(h);

(h) Any violation related to the management of used oil which is not otherwise classified in these rules is a Class two violation.

(3) Class three: Failure to label one container or tank in which used oil was accumulated on site, when there are five or more present, with the required words "used oil."

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the agency.]

Stat. Auth.: ORS 459.995, ORS 468.020, ORS 468.869, ORS 468.870 & ORS 468.996
Stats. Implemented: ORS 459A.580 - ORS 459A.585, ORS 459A.590 & ORS 468.090 - ORS 468.140
Hist.: DEQ 33-1990, f. & cert. ef. 8-15-90; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 19-1998, f. & cert. ef. 10-12-98

340-012-0073

Environmental Cleanup Classification of Violations

Violations of ORS 465.200 through 465.420 and related rules or orders pertaining to environmental cleanup shall be classified as follows:

(1) Class One:

(a) Violation of a requirement or condition of a Commission or Department order;

(b) Failure to provide access to premises or records when required to do so by law, rule, permit or order;

(c) Any violation related to environmental investigation or cleanup which causes a major harm or poses a major risk of harm to public health or the environment.

(2) Class Two:

(a) Failure to provide information under ORS 465.250;

(b) Any violation related to environmental investigation or cleanup which is not otherwise classified in these rules.

Stat. Auth.: ORS 465.280, ORS 465.400 - ORS 465.410, ORS 465.435 & ORS 468.020
Stats. Implemented: ORS 465.210 & ORS 468.090 - ORS 468.140
Hist.: DEQ 22-1988, f. & cert. ef. 9-14-88; DEQ 4-1989, f. & cert. ef. 3-14-89; DEQ 15-1990, f. & cert. ef. 3-30-90; DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 19-1998, f. & cert. ef. 10-12-98

340-012-0081

Oil and Hazardous Material Spill and Release Classification of Violations

Violations pertaining to spills or releases of oil or hazardous materials will be classified as follows:

(1) Class One:

(a) Violation of a requirement or condition of a Commission or Department Order;

(b) Failure to provide access to premises or records when required by law, rule, permit or order;

(c) Failure by any person having ownership or control over oil or hazardous materials to immediately clean up spills or releases or threatened spills or releases;

(d) Failure to immediately notify the Oregon Emergency Response System (OERS) of the type, quantity and location of a spill of oil or hazardous material, and corrective and cleanup actions taken and proposed to be taken if the amount of oil or hazardous material released exceeds the reportable quantity or will exceed the reportable quantity within 24 hours;

(e) Failure to immediately stop any spill that has entered or may enter waters of the state;

(f) Any spill or release of oil or hazardous materials which enters waters of the state;

(g) Failure to identify the existence, source, nature and extent of a hazardous materials spill or release, or threatened spill or release;

(h) Failure to activate alarms, warn people in the immediate area, contain the oil or hazardous material or notify appropriate local emergency personnel;

(i) Failure to immediately implement a required plan;

(j) Failure to immediately correct the cause of the spill or release;

(k) Use of chemicals to disperse, coagulate or otherwise treat a spill or release of oil or hazardous material spills without prior Department approval;

(l) Failure to obtain Department approval before conducting any major aspect of the spill response contrary to a Department approved plan for the site or spiller;

(m) Intentional dilution of wastes during a spill response;

(n) Knowingly submitting false information to the Department;

(o) Failure to take immediate preventative, repair, corrective or containment action in the event of a

threatened spill or release;

(p) Improper characterization of drug lab waste during disposal or recycling; or

(q) Disposal of spilled oils and oil contaminated materials resulting from control, treatment and cleanup in a manner not approved by the Department.

(2) Class Two:

(a) Failure to submit a complete and detailed written report to the Department of a spill of oil or hazardous material for which the person is responsible describing all aspects of the spill and steps taken to prevent a recurrence if required by the Department to make a report;

(b) Failure to use the required sampling procedures and analytical testing protocols for oil and hazardous materials spills or releases;

(c) Failure of a responsible party to coordinate with the Department during the emergency response to a spill after being notified of the Department's jurisdiction;

(d) Failure to immediately report spills or releases within containment areas when reportable quantities are exceeded and exemptions are not met under OAR 340-142-0040; or

(e) Any violation related to the spill or release of oil or hazardous materials which is not otherwise classified in these rules is a Class Two violation.

(3) Class Three:

(a) Failure to provide maintenance and inspections records of the storage and transfer facilities to the Department upon request; or

(b) Failure of vessel owners or operators to make maintenance and inspection records, and oil transfer procedures available to the Department upon request.

Stat. Auth.: ORS 466.625 & ORS 468.020
Stats. Implemented: ORS 466.635 - ORS 466.680, ORS 466.992, & ORS 468.090 - ORS 468.140
Hist.: DEQ 1-2003, f. & cert. ef. 1-31-03; DEQ 7-2003, f. & cert. ef. 4-21-03

340-012-0082

Contingency Planning Classification of Violations

Violations pertaining to contingency planning shall be classified as follows:

(1) Class One:

(a) Violation of a requirement or condition of a Commission or Department Order;

(b) Failure to immediately implement the required oil spill prevention and emergency response contingency plan;

(c) Failure to immediately implement the site's applicable contingency plan;

(d) Operation of an onshore or offshore facility without an approved or conditionally approved oil spill prevention and emergency response contingency plan;

(e) Entry into the waters of the state by a covered vessel without an approved or conditionally approved oil spill prevention and emergency response contingency plan or purchased coverage under an umbrella oil spill prevention and emergency response contingency plan;

(f) Entry into the waters of the state by any covered vessel after the Department has denied such entry;

(g) Failure to maintain equipment, personnel and training at levels described in an approved or conditionally approved oil spill prevention and emergency response contingency plan;

(h) Knowingly submitting false information to the Department;

(i) Failure to establish and maintain financial assurance as required by statute, rule or order; or

(j) Failure by the owner or operator of an oil terminal facility, or covered vessel, to take all appropriate measures to prevent spills or overfilling during transfer of petroleum or hazardous material products.

(2) Class Two:

(a) Failure to pay the annual fee for all offshore and onshore facilities required to develop oil spill prevention and emergency response plans;

(b) Failure to pay the per trip fee for all regulated vessels or barges within thirty (30) days of conclusion of each trip;

(c) Failure by any onshore or offshore facility or covered vessel to submit an oil spill prevention and emergency response contingency plan to the Department at least 90 calendar days before beginning operations in Oregon;

(d) Failure, in the event of a spill, to have prepared and have available on-site a simplified field document summarizing key notification and action elements of a required vessel or facility contingency plan;

(e) Failure by a plan holder to submit and implement required changes to a required vessel or facility contingency plan that has received conditional approval status from the Department within thirty (30) calendar days of conditional approval;

(f) Failure of a covered vessel or facility contingency plan holder to submit the required vessel or facility contingency plan for re-approval at least ninety (90) days before the expiration date of the required vessel or facility contingency plan;

(g) Failure to obtain Department approval of the management or disposal of spilled oil or hazardous materials, or materials contaminated with oil or hazardous material, that are generated during spill response; or

(h) Any violation related to required contingency plans that is not otherwise classified in these rules is a

Class Two violation.

(3) Class Three:

(a) Failure to provide maintenance and inspections records of the storage and transfer facilities to the Department upon request;

(b) Failure of a vessel owner or operator to make maintenance and inspection records and oil transfer procedures available to the Department upon request;

(c) Failure to have at least one copy of the required vessel or facility contingency plan in a central location accessible at any time by the incident commander or spill response manager;

(d) Failure to have the covered vessel field document available to all appropriate personnel in a conspicuous and accessible location;

(e) Failure to notify the Department within 24 hours of any significant changes that could affect implementation of a required vessel or facility contingency plan; or

(f) Failure to distribute amended page(s) of the plan changes to the Department within thirty (30) calendar days of the amendment.

Stat. Auth.: ORS 468B.350
Stats. Implemented: ORS 468B.345
Hist.: DEQ 1-2003, f. & cert. ef. 1-31-03

340-012-0083

Ballast Water Management Classification of Violations

Violations pertaining to ballast water management shall be classified as follows.

(1) Class One:

(a) Violation of a Commission or Department Order;

(b) Failure to provide access to premises or records when required by law, rule, permit or order;

(c) Unauthorized discharging of ballast water; or

(d) Knowingly submitting false information.

(2) Class Two:

(a) Failure to report ballast water management information to the Department at least 24 hours before entering the waters of this State;

(b) Failure to file an amended ballast water management report after a change in the vessel's ballast water management plan; or

(c) Any violation of these rules related to ballast water management, or ballast water reports and reporting, that is not otherwise classified in these rules is a Class Two violation.

Stat. Auth.: ORS 783.600 to ORS 783.992
Stats. Implemented: ORS 783.620
Hist.: DEQ 1-2003, f. & cert. ef. 1-31-03

340-012-0090

Selected Magnitude Categories

(1) Magnitudes for select violations pertaining to Air Quality may be determined as follows:

(a) Opacity limitation violations:

(A) Major - Opacity measurements or readings of more than 40 percent opacity over the applicable limitation;

(B) Moderate - Opacity measurements or readings between greater than 10 percent and 40 percent or less opacity over the applicable limitation;

(C) Minor - Opacity measurements or readings of ten percent or less opacity over the applicable limitation.

(b) Steaming rates, performance standards, and fuel usage limitations:

(A) Major - Greater than 1.3 times any applicable limitation;

(B) Moderate - From 1.1 up to and including 1.3 times any applicable limitation;

(C) Minor - Less than 1.1 times any applicable limitation.

(c) Air contaminant emission limitation violations for selected air pollutants:

(A) Magnitude determination shall be made based upon the following table: [Table not included. See ED. NOTE.]

(B) Major:

(i) Exceeding the annual amount as established by permit, rule or order by more than the above amount;

(ii) Exceeding the monthly amount as established by permit, rule or order by more than ten percent of the above amount;

(iii) Exceeding the daily amount as established by permit, rule or order by more than 0.5 percent of the above amount;

(iv) Exceeding the hourly amount as established by permit, rule or order by more than 0.1 percent of the above amount.

(C) Moderate:

(i) Exceeding the annual amount as established by permit, rule or order by an amount from 50 up to and including 100 percent of the above amount;

(ii) Exceeding the monthly amount as established by permit, rule or order by an amount from five up to and including ten percent of the above amount;

(iii) Exceeding the daily amount as established by permit, rule or order by an amount from 0.25 up to and including 0.50 percent of the above amount;

(iv) Exceeding the hourly amount as established by permit, rule or order by an amount from 0.05 up to and including 0.10 percent of the above amount.

(D) Minor:

(i) Exceeding the annual amount as established by permit, rule or order by an amount less than 50 percent of the above amount;

(ii) Exceeding the monthly amount as established by permit, rule or order by an amount less than five percent of the above amount;

(iii) Exceeding the daily amount as established by permit, rule or order by an amount less than 0.25 percent of the above amount;

(iv) Exceeding the hourly amount as established by permit, rule or order by an amount less than 0.05 percent of the above amount.

(d) Asbestos violations:

(A) Major – More than 260 lineal feet or more than 160 square feet or more than 35 cubic feet of asbestos-containing material;

(B) Moderate - From 40 lineal feet up to and including 260 lineal feet or from 80 square feet up to and including 160 square feet or from 17 cubic feet up to and including 35 cubic feet of asbestos-containing material;

(C) Minor - Less than 40 lineal feet or 80 square feet or less than 17 cubic feet of asbestos-containing material;

(D) The magnitude of the asbestos violation may be increased by one level if the material was comprised of more than five percent asbestos.

(e) Open burning violations:

(A) Major - Initiating or allowing the initiation of open burning of material constituting more than five cubic yards in volume;

(B) Moderate - Initiating or allowing the initiation of open burning of material constituting from one up to and including five cubic yards in volume, or if the Department lacks sufficient information on which

to base a determination;

(C) Minor - Initiating or allowing the initiation of open burning of material constituting less than one cubic yard in volume;

(D) For the purposes of determining the magnitude of a violation only, five tires shall be deemed the equivalent in volume to one cubic yard.

(2) Magnitudes for select violations pertaining to Water Quality may be determined as follows:

(a) Violating wastewater discharge limitations:

(A) Major:

(i) Discharging more than 30% outside any applicable range for flow rate, concentration limitation, or mass limitation, except for toxics, pH, and bacteria; or

(ii) Discharging more than 10% over any applicable concentration limitation or mass load limitations for toxics; or

(iii) Discharging wastewater having a pH of more than 1.5 above or below any applicable pH range; or

(iv) Discharging more than 1,000 bacteria per 100 milliliters (bact./100 mls) over the effluent limitation; or

(v) Discharging wastes having more than 10% below any applicable removal rate.

(B) Moderate:

(i) Discharging from 10% to 30% outside any applicable range for flow rate, concentration limitation, or mass limitation, except for toxics, pH, and bacteria; or

(ii) Discharging from 5% to 10% over any applicable concentration limitation or mass load limitations for toxics; or

(iii) Discharging wastewater having a pH from 0.5 to 1.5 above or below any applicable pH range; or

(iv) Discharging from 500 to 1,000 bact./100 mls over the effluent limitation; or

(v) Discharging wastewater having from 5% to 10% below any applicable removal rate.

(C) Minor:

(i) Discharging less than 10% outside any applicable range for flow rate, concentration limitation or mass limitation, except for toxics, pH, and bacteria; or

(ii) Discharging less than 5% over any applicable concentration limitation or mass load limitations for toxics; or

(iii) Discharging wastewater having a pH of less than 0.5 above or below any applicable pH range; or

(iv) Discharging less than 500 bact./100 mls over the effluent limitation; or

(v) Discharging wastewater having less than 5% below any applicable removal rate.

(b) Causing violation of numeric water-quality standards:

(A) Major:

(i) Reducing or increasing any criteria by 25% or more of the standard except for toxics, pH, and turbidity;

(ii) Increasing toxics by any amount over the acute standard or by 100% or more of the chronic standard;

(iii) Reducing or increasing pH by 1.0 pH unit or more from the standard;

(iv) Increasing turbidity by 50 nephelometric turbidity units (NTU) or more of the standard.

(B) Moderate:

(i) Reducing or increasing any criteria by more than 10% but less than 25% of the standard, except for toxics, pH, and turbidity;

(ii) Increasing toxics by more than 10% but less than 100% of the chronic standard;

(iii) Reducing or increasing pH by more than 0.5 pH unit but less than 1.0 pH unit from the standard;

(iv) Increasing turbidity by more than 20 but less than 50 NTU over the standard.

(C) Minor:

(i) Reducing or increasing any criteria by 10% or less of the standard, except for toxics, pH, and turbidity;

(ii) Increasing toxics by 10% or less of the chronic standard;

(iii) Reducing or increasing pH by 0.5 pH unit or less from the standard;

(iv) Increasing a turbidity standard by 20 NTU or less over the standard.

(D) The magnitude of the violation may be increased one level if the reduction or increase:

(i) Occurred in a stream which is water-quality limited for that criterium; or

(ii) For oxygen or turbidity in a stream where salmonids are rearing or spawning; or

(iii) For bacteria in shell-fish growing waters or during period June 1 through September 30.

(3) Magnitudes for select violations pertaining to Hazardous Waste may be determined as follows:

(a) Failure to make a hazardous waste determination:

(A) Major - Failure to make the determination on five or more waste streams;

(B) Moderate - Failure to make the determination on three or four waste streams;

(C) Minor - Failure to make the determination on one or two waste streams;

(D) The magnitude of the violation may be increased by one level, if more than 1,000 gallons of hazardous waste is involved in the violation;

(E) The magnitude of the violation may be decreased by one level, if less than 250 gallons of hazardous waste is involved in the violation.

(b) Hazardous Waste disposal violations:

(A) Major - Disposal of more than 150 gallons of hazardous waste, or the disposal of more than three gallons of acutely hazardous waste, or the disposal of any amount of hazardous waste or acutely hazardous waste that has a substantial impact on the local environment into which it was placed;

(B) Moderate - Disposal of 50 to 150 gallons of hazardous waste, or the disposal of one to three gallons of acutely hazardous waste;

(C) Minor - Disposal of less than 50 gallons of hazardous waste, or the disposal of less than one gallon of acutely hazardous waste when the violation had no potential for or had no more than de minimis actual adverse impact on the environment, nor posed any threat to public health, or other environmental receptors.

(c) Hazardous waste management violations:

(A) Major - Failure to comply with hazardous waste management requirements when more than 1,000 gallons of hazardous waste, or more than 20 gallons of acutely hazardous waste, are involved in the violation;

(B) Moderate - Failure to comply with hazardous waste management requirements when 250 to 1,000 gallons of hazardous waste, or when 5 to 20 gallons of acutely hazardous waste, are involved in the violation;

(C) Minor - Failure to comply with hazardous waste management requirements when less than 250 gallons of hazardous waste, or 10 gallons of acutely hazardous waste are involved in the violation.

(4) Magnitudes for select violations pertaining to Solid Waste may be determined as follows:

(a) Operating a solid waste disposal facility without a permit:

(A) Major - If the volume of material disposed of exceeds 400 cubic yards;

(B) Moderate - If the volume of material disposed of is between 40 and 400 cubic yards;

(C) Minor - If the volume of materials disposed of is less than 40 cubic yards;

(D) The magnitude of the violation may be raised by one magnitude if the material disposed of was either in the floodplain of waters of the state or within 100 feet of waters of the state.

(b) Failing to accurately report the amount of solid waste received.

(A) Major - If the amount of solid waste is underreported by more than 15% of the amount received;

(B) Moderate - If the amount of solid waste is underreported by from 5% to 15% of the amount received;

(C) Minor - If the amount of solid waste is underreported by less than 5% of the amount received.

(5) Magnitudes for select violations pertaining to spills of oil or hazardous materials may be adjusted when a violation listed in subsection (a) or (b) has been determined. Further, any overdue notification violation under subsection (b) is raised in significance as indicated in subsection (c) if the amount of the material involved equals or exceeds the reportable quantity (RQ) set by OAR 340-142.

(a) Failure to clean up spills involving the following quantities spilled to land and not threatening waters of the State:

(A) Major - Greater than 10 times the RQ.

(B) Moderate - From the RQ to 10 times the RQ.

(C) Minor - Less than the RQ.

(b) Overdue notification violations.

(A) Major - Notifying more than one week after the spill or release.

(B) Moderate - Notifying from 48 hours to one week after the spill or release.

(C) Minor - Notifying between 24 and 48 hours after the spill or release.

(c) Overdue notification violations are raised in relation to RQ:

(A) A spill or release of greater than 10 times the RQ increases minor or moderate magnitude violations in section (5)(b) to major magnitude violations.

(B) A spill or release equal to twice the RQ, or to 10 times the RQ, increases a minor magnitude violation in section (5)(b) to a moderate magnitude violation.

[ED. NOTE: Tables & Publications referenced are available from the agency.]

Stat. Auth.: ORS 468.065 & ORS 468A.045
Stats. Implemented: ORS 468.090 - ORS 468.140 & ORS 468A.060
Hist.: DEQ 21-1992, f. & cert. ef. 8-11-92; DEQ 4-1994, f. & cert. ef. 3-14-94; DEQ 19-1998, f. & cert. ef. 10-12-98; DEQ 1-2003, f. & cert. ef. 1-31-03

The official copy of an Oregon Administrative Rule is contained in the Administrative Order filed at the Archives Division.

Division 22 Rules for Air Quality 340 012

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Oregon

ENVIRONMENTAL
QUALITY
COMMISSION

January 13, 2009

Sherman Dennis Mills
264 NW 9th Street
Ontario OR 97914

Re: Reply Brief in the Matter of Sherman Dennis Mills
OAH Case No. 700293
DEQ Case No. WQ/OS-ER-06-225

Dear Mr. Mills:

On January 12, 2009, the Environmental Quality Commission received the Department of Environmental Quality's answering brief in the matter referenced above.

The answering brief was received in a timely manner, and you have 20 days from the date of filing to file a reply brief. Your reply brief is due by Sunday, February 1, 2009, and must be mailed to the Oregon Environmental Quality Commission, c/o Stephanie Clark, 811 SW Sixth Avenue, Portland, OR 97204. A reply brief is not required, and has no impact on whether the appeal moves forward.

Once all briefs have been filed, this item will be set for Commission consideration at a regularly scheduled Commission meeting, and I will notify all parties of the date and location. If you have any questions about this process, please call me at (503) 229-5301.

Please note that a duplicate of this letter has been sent to you at 1252 SW 4th Avenue, Ontario, OR 97914. Please indicate your preferred address for all future communications on this matter.

Sincerely,

Stephanie Clark
Assistant to the Commission

Cc: Bryan Smith, Department of Environmental Quality

811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

IN THE MATTER OF: SHERMAN DENNIS MILLS,	)	DEPARTMENT'S ANSWERING BRIEF No. WQ/OS-ER-06-225
Respondent,	)	MALHEUR COUNTY

The Department of Environmental Quality (Department) submits this Answering Brief to the Environmental Quality Commission (Commission) for its consideration in the matter of Sherman Dennis Mills, Case No. WQ/OS-ER-06-225.

I. CASE HISTORY

1. On May 18, 2007, the Department assessed Respondent a civil penalty of $3,548 for (1) discharging sewage onto the ground surface and (2) causing or allowing the repair of an onsite system without first obtaining the required permit.

2. On July 6, 2007, Respondent appealed and on April 22, 2008, a contested case hearing was held.

3. On September 23, 2008, the Administrative Law Judge issued a Second Amended Proposed and Final Order (Proposed Order). The ALJ concluded that: (1) Respondent or his agent discharged sewage onto the ground surface, (2) Respondent caused or allowed the repair of an onsite system without first obtaining the required permit from the Department, (3) Respondent or his agent connected to or used an onsite system without obtaining a Certificate of Satisfactory Completion, (4) Respondent failed to connect existing plumbing fixtures from which wastewater was or may be discharged to an onsite system approved by the Department, (5) the proposed civil penalty of $3,548 is appropriate and (6) the proposed Order to require Respondent to either (a) submit a completed repair permit application, obtain a repair permit, complete construction of system repairs, request an inspection, and obtain a Certificate of Satisfactory Completion, or (b) decommission the onsite system and provide documentation of such to the Department, is appropriate.

4. On October 22, 2008, Respondent appealed the Proposed Order.

5. On or about November 4, 2008, Respondent complied with the Department's Order by decommissioning the onsite system and providing documentation of such to the Department.

6. On November 20, 2008, Respondent submitted his Exceptions and Brief.

II. ARGUMENTS

A. ***Respondent or his Agent Discharged Sewage onto the Ground Surface on March 25, 2005:*** In both Section 1, Paragraph 2, and Section 2, Paragraph 3, of his Exceptions, Respondent states that John Pearce, a witness for the Department, testified that sewage was pumped onto the ground surface by Respondent's tenant on March 25, 2005.

However, Respondent's statement is contradicted by the ALJ's Findings of Fact (FOF) that on March 25, 2005, John Pearce called the Malheur County Environmental Health office to complain that Respondent was pumping sewage out of the septic tank and onto the ground. (FOF 5) [1]

B. ***Respondent did not Obtain the Required Permit Before Causing the Repair or Installation of the Onsite System:*** In Section 1, Paragraph 4, Respondent states that on July 20, 2006, he paid $125.00 for a repair permit. First, this is new or additional evidence that was not introduced at the hearing and not considered by the ALJ. The Commission's rules require that a request to present additional evidence must be submitted by motion and be accompanied by a statement specifying the reason for the failure to present the evidence to the ALJ. (OAR 340-011-0575(5)) Respondent did not submit a motion or a statement specifying the reason for his failure to present this evidence to the ALJ. Therefore, the Commission may not consider the evidence. (OAR 137-003-0655(5)) Second, this alleged fact is immaterial to whether he had a valid permit fourteen months earlier on the date the permit was required. Third, the ALJ properly found that,

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[1] Bud Smith, a witness living across the street from the property, testified that he saw someone who he believed to be a renter using a hose to pump sewage from the onsite system in *early* March, 2005 (FOF 3), but not on March 25, 2005, which was the date of the violation.

as of the date of the hearing, Respondent had yet to submit a completed repair application and obtain the required permit. (FOFs 10 and 17, and page 9 of Proposed Order)

C. ***Respondent is Liable for the Discharge of Wastewater from the Washing Machine on the Property:*** In Section 1, Paragraph 5, Respondent states that he neither authorized any renter to run the washing machine nor had any knowledge of this action, and appears to be implying that he should not be liable for this violation. Pursuant to OAR 340-071-0120(2)(b), the property owner is responsible for connecting plumbing fixtures from which wastewater is or may be discharged to an approved sewerage facility or onsite system. The ALJ directly addressed Respondent's assertion that "he cannot control the conduct of his renters," by properly concluding that Respondent is "nevertheless responsible for the acts or omissions of his tenants under the environmental laws" and is thus liable for this violation. (Page 8 of Proposed Order)

D. ***The Department's Order to Either Repair or Decommission the Onsite System was Proper:*** In Section 3, Paragraph 1, Respondent appears to be arguing that the Department's Order was improper. Respondent discusses "standard" onsite systems in the vicinity of his property and seems to imply that he should be allowed to install the same or a similar onsite system on his property, rather than the system that the Department and its county agent (Brian Wickert, then Environmental Health Director for Malheur County) deemed appropriate after inspecting Respondent's property.

First, the details of the neighboring onsite systems are new or additional evidence that was not introduced at the hearing and was not considered by the ALJ. The Commission's rules require that a request to present additional evidence must be submitted by motion and be accompanied by a statement specifying the reason for the failure to present the evidence to the ALJ. (OAR 340-011-0575(5)) Respondent did not submit a motion or a statement specifying the reason for his failure to present this evidence to the ALJ. Therefore, the Commission may not consider the evidence. (OAR 137-003-0655(5))

Second, it is common knowledge that there is no standard onsite system. Whether

a particular onsite system will perform in a given application depends on soil characteristics, depth and uses of local groundwater, estimated wastewater flow and other factors. The Permit system is designed to ensure that the system will meet engineering standards for each particular application. The ALJ found that Mr. Wickert determined that the existing system did not meet applicable state environmental standards because of sizing and depth problems, as it was installed too deep for the water table and was too close to a well on the neighboring property. (FOF 15) The ALJ also found that Robert Baggett, a Natural Resource Specialist with the Department, sent a letter to Respondent explaining that, in order to obtain a permit for the repair work, Respondent needed to submit a detailed set of plans for a sand filter system, or, in lieu of the repair work, Respondent could elect to decommission the system. (FOF 16) Finally, the ALJ found that Respondent did not respond to Mr. Baggett's letter, did not submit a detailed plan for repairs, and did not notify the Department of any plan to decommission the system. (FOF 17) For these reasons the Department's Order was properly upheld.

E. ***Respondent's Request for Permission to Install a "Standard" Onsite System Falls Outside the Scope of this Matter:*** Respondent requests that the Commission approve his use of a "standard" onsite system. This request is outside the scope of this hearing on the Proposed Order. If Respondent wishes to seek a variance from permit requirements he would need to follow the variance processes laid out in OAR 340-071-0415 to -0445. After a public hearing on the matter, the variance officer would make a decision based on a site evaluation; plans and specifications for the proposed system; whether strict compliance with the rule or standard is inappropriate; special physical conditions that render strict compliance unreasonable, burdensome, or impractical; and any other relevant factors.

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III. CONCLUSION

Respondent has complied with the Department's Order, rendering moot any arguments concerning the Order. Regarding Respondent's request for a reduction of the civil penalty, Respondent fails to specify what Findings of Fact or Conclusions of Law are inaccurate or should be modified in order to achieve such a reduction. In the absence of any reasons for a penalty reduction, none should be made. For the reasons stated above, the Department asks the Commission to issue a Final Order upholding the Proposed Order.

1/12/09
Date

Bryan Smith
Bryan Smith, Environmental Law Specialist

CERTIFICATE OF SERVICE

I hereby certify that I served the Hearing Memorandum within on the 12th day of January, 2009 by PERSONAL SERVICE upon

The Oregon Environmental Quality Commission
c/o Stephanie Clark, Assistant to the Commission
811 SW Sixth Avenue
Portland, OR 97204

and upon

Sherman Dennis Mills
1252 SW 4th Ave,
Ontario, OR 97914

by mailing a true copy of the above by placing it in a sealed envelope, with postage prepaid at the U.S. Post Office in Portland, Oregon, on January 12, 2009.

Amy Smallwood 1-12-09

Oregon

ENVIRONMENTAL
QUALITY
COMMISSION

RECEIVED
DEC 08 2008
DEPARTMENT OF ENVIRONMENTAL QUALITY

BY CERTIFIED MAIL

December 5, 2008

Oregon Department of Environmental Quality
Attention: Bryan Smith
811 SW 6th Avenue
Portland OR 97204

Re: Extension for Answering Brief in the Matter of Sherman Dennis Mills
OAH Case No. 700293
DEQ Case No. WQ/OS-ER-06-225

Dear Mr. Smith:

The Environmental Quality Commission (Commission) received your request for an extension of the December 20, 2008, deadline to file an answering brief in response to the exceptions and brief filed by Mr. Mills on November 20, 2008, in the above-referenced matter. Your extension has been approved for a new deadline to file an answering brief of January 12, 2009.

An answering brief is not required, and has no impact on whether an appeal moves forward. If an answering brief is filed, Mr. Mills will have 20 days from the date of filing to file a reply brief. A reply brief is not required, and has no impact on whether the appeal moves forward.

Once all briefs have been filed, this item will be set for Commission consideration at a regularly scheduled Commission meeting, and I will notify all parties of the date and location. If you have any questions about this process, please call me at (503) 229-5301.

Sincerely,

Stephanie Clark
Assistant to the Commission

ok NTR

Cc: Sherman Dennis Mills, 264 NW 9th Street, Ontario OR 97914

811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696

Attachment E
October 22-23, 2009 EQC meeting

File

Oregon
Theodore R. Kulongoski, Governor

Department of Environmental Quality
Headquarters
811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696
FAX (503) 229-6124
TTY (503) 229-6993

December 2, 2008

Oregon Environmental Quality Commission
Attention: Stephanie Clark, Assistant to the Commission
811 SW 6th Avenue
Portland, OR 97204

Re: Notice of Violation, Department Order and Assessment of Civil Penalty
Sherman Dennis Mills
No. WQ/OS-ER-06-225
Malheur County

Dear Ms. Clark:

I am writing to request an extension of the December 20, 2008, deadline for the Department to file an Answering Brief in response to Petitioner Sherman Dennis Mills' Exceptions and Brief. Although Petitioner's Exceptions and Brief were filed on November 20, 2008, I only received a copy of the Exceptions and Brief today (December 2, 2008), and, additionally, I will be on a previously scheduled vacation from December 12 through December 20, 2008.

I believe that an extension of the deadline until January 12, 2009, would allow the Department sufficient time to respond to Petitioner's Exceptions and Brief. Thank you in advance for considering this request, and if you have any questions, please contact me at (503) 229-5395.

Sincerely,

Bryan Smith

Bryan Smith

cc: Sherman Dennis Mills, 1252 SW Fourth Avenue, Ontario, OR 97914

Oregon

ENVIRONMENTAL
QUALITY
COMMISSION

December 2, 2008

Sherman Dennis Mills
264 NW 9th Street
Ontario OR 97914

Re: Sherman Dennis Mills
OAH Case No. 700293
DEQ Case No. WQ/OS-ER-06-225

Dear Mr. Mills:

Please disregard the letter dated November 25, 2008, in regard to the above-referenced matter. There was incorrect information in that letter, which has been corrected in this letter.

The Environmental Quality Commission (Commission) received your letter of exceptions in the above-referenced matter on November 20, 2008. Your exceptions were filed in a timely manner.

The Proposed Order outlined appeal procedures, including filing of exceptions and briefs. The hearing decision and Oregon Administrative Rules (OAR 340-011-0575) state that a representative of the Department of Environmental Quality may file an answering brief within 30 days from the filing of your exceptions, or December 20, 2008. The Commission may extend any of the time limits contained in OAR 340-011-0575(5) if an extension request is made in writing and is filed with the Commission before the expiration of the time limit.

An answering brief is not required, and has no impact on whether an appeal moves forward. If an answering brief is filed, you will have 20 days from the date of filing to file a reply brief. A reply brief is not required, and has no impact on whether the appeal moves forward.

Once all briefs have been filed, this item will be set for Commission consideration at a regularly scheduled Commission meeting, and I will notify you of the date and location by certified mail. If you have any questions about this process, please call me at (503) 229-5301.

Sincerely,

Stephanie Clark
Assistant to the Commission

Cc: Bryan Smith, Oregon Department of Environmental Quality

811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696

Oregon

ENVIRONMENTAL
QUALITY
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November 25, 2008

Sherman Dennis Mills
264 NW 9th Street
Ontario OR 97914

Re: Sherman Dennis Mills
OAH Case No. 700293
DEQ Case No. WQ/OS-ER-06-225

Dear Mr. Mills:

The Environmental Quality Commission (Commission) received your letter of appeal in the above-referenced matter on November 20, 2008. Your appeal was filed in a timely manner.

The Proposed Order outlined appeal procedures, including filing of exceptions and briefs. The hearing decision and Oregon Administrative Rules (OAR 340-011-0575) state that a representative of the Department of Environmental Quality may file an answering brief within 30 days from the filing of your appeal, or December 20, 2008. The Commission may extend any of the time limits contained in OAR 340-011-0575(5) if an extension request is made in writing and is filed with the Commission before the expiration of the time limit.

An answering brief is not required, and has no impact on whether an appeal moves forward. If an answering brief is filed, you will have 20 days from the date of filing to file a reply brief. A reply brief is not required, and has no impact on whether the appeal moves forward.

Once all briefs have been filed, this item will be set for Commission consideration at a regularly scheduled Commission meeting, and I will notify you of the date and location by certified mail. If you have any questions about this process, please call me at (503) 229-5301.

Sincerely,

Stephanie Clark
Assistant to the Commission

Cc: Bryan Smith, Oregon Department of Environmental Quality

811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696

S. DENNIS MILLS
264 NW 9th Street
Ontario, Oregon 97914
208-230-7697

Appellant: pro se

BEFORE THE OFFICE OF ADMINISTRATIVE HEARINGS
STATE OF OREGON

IN THE MATTER OF....	Case No. OAH 700293 Agency WQ/OS-ER-225
Sherman Dennis Mills	MEMORANDUM OF APPEAL

I am appealing the decision made in a hearing held on April 22, 2008, in a case between myself and the Department of Environmental Quality (Hereinafter DEQ). This case concerns a septic system at my property located at 3286 NW 4th Avenue, Ontario Oregon 97914. Please consider the following arguments:

1. During the hearing, Mr. Baggett, DEQ, implied that I was trying to save $300.00 by not properly pumping out the septic tank on my rental property. Bryan Smith, DEQ in Portland asked that Bryan Wickert, Environmental Health in Malheur County verify whether or not I had properly emptied the septic tank. Mr. Wickert did not investigate. On February 24, 2005, Septic service of Payette did pump the septic system for $275.00.

2. Mr. Baggett also claimed that I had pumped sewage onto the ground on March 25, 2005. However testimony by Mr. Pierce confirmed that this was done by the renter at that time without my approval or knowledge.

3. On or about March 25, 2005, after the system had been pumped out as stated in #1, there was overflow from the clean-out. I contacted the contractor who had installed the septic system originally. I did so because I felt that he was knowledgeable of the septic location, the system and the drain field. This contractor, Mr. McFeel repaired the system to correct the overflow.

4. Bryan Wickert, did not contact me nor did he issue a stop work order until after the repair was completed. On July 20, 2006, I paid $125.00 (Check #33647) to Malheur Environmental Health for the repair permit. My check was accepted and cashed. I am enclosing a copy of the permit. There was no complaint about the repairs at the time of payment.

5. Regarding Issue#4 September 9, 2005. The complaint of draining sewage pertains to a renter of mine draining a washing machine onto the ground. As to the testimony given on May

18, 2007, I did not authorize any renter to run a washing machine outside my rental nor did I have any knowledge of this action. The rental was not equipped with a washing machine or dryer or hook-ups for such machines. In conclusion, although I own the rental property, I did not have knowledge or control of what others (the renters) do. I did not ever authorize anybody to dump sewage on the ground. As soon as this was brought to my attention, I contacted a licensed sewage disposal firm to fix the problem.

In reference to the Findings of Fact:

1. This statement is correct.

2. This statement is correct.

3. The testimony by Mr. Pierce in the May, 2008, hearing concurred that it was a renter that pumped the sewage onto the ground. I did not have knowledge or control over this matter and I took steps to remedy the situation as soon as it was brought to my attention.

4. The following eleven findings are inaccurate or sensationalized. The fact is, I had a plug in the septic system and drain-line. I had it repaired within six hours. At a later date, Mr Wickert requested that I show him the repair work, which I did; he did not take pictures and had me fill up the hole. That cost me $500. in un-necessary expense. Mr Wickert implied in his letter that the drain field had not been used. The reason for that was that the mobile home had not been occupied for six months and the system had drained into the original drain field.

The reasons behind this appeal:

1. I believe that I have been subjected to an arbitrary double standard as evidenced by the following: Mr. Baggett said that the water table is too high for a standard septic system. He stated that the water quality was in jeopardy with a standard septic system. However, there is a standard septic system installed within 300 feet of my well. This system was approved and installed in (approximately) June 2008. My next door neighbor, Mr Pearce, also installed a standard septic system within 300 feet of my well prior to his complaint about my septic system. In 2008, in speaking to an installer, he implied that he had installed a standard septic system within a quarter of a mile of my property. This was also within the same water table depth as my property.

   Mr. Baggett insists that I put in a sand filter system that costs approximately $16,000.00 versus the standard septic system my neighbors have installed for $3,000.00.

   Mr. Baggett expresses concern for the water quality of my neighbors. If he cared for the water quality, would he not also insist that they install a sand filter system?

My contractor said that I could also have a standard septic system by removing a tree and fence.

2. Mr. Baggett forced me to destroy my septic system after it was inspected by Bud's Septic System Service who reported my system to be in excellent condition.

3. Mr. Baggett in his initial complaint said that I pumped raw sewage onto the ground to save money rather than to have the system pumped. This is not true. The system was pumped by Bud's Septic System Service approximately one week prior to the accusation. Mr. Smith requested that the Malheur Environmental Health Department verify this. They did not.

I request a reduction in the fine due the points made in this appeal; especially due to the failure of the DEQ to verify the service performed by Bud's Septic System Service. I also request permission to put in a standard septic system as all my neighbors have done. If I am not allowed to put in a standard septic system, I would expect the DEQ to also red tag everyone else in the area.

In conclusion, Mr. Baggett has destroyed my retirement income, devalued my property and has brought my family and me undue duress. I would appreciate your consideration of the information in this appeal. Thank you.

Respectfully submitted,

DATED this 19th day of November, 2008.

S. Dennis Mills

Oregon

ENVIRONMENTAL
QUALITY
COMMISSION

VIA CERTIFIED MAIL

October 24, 2008

Sherman Dennis Mills
264 NW 9th Street
Ontario OR 97914

Re: Sherman Dennis Mills
OAH Case No. 700293
DEQ Case No. WQ/OS-ER-06-225

Dear Mr. Mills:

The Environmental Quality Commission (Commission) received your petition for review in the above-referenced matter on October 22, 2008. Your petition was filed in a timely manner.

The Proposed Order outlined appeal procedures, including filing of exceptions and briefs. The hearing decision and Oregon Administrative Rules (OAR 340-011-0575) state that you must file exceptions and brief within thirty days from the filing of your request for Commission review, or November 21, 2008. Your exceptions must specify the findings and conclusions in the Proposed Order that you object to, and also include proposed alternative findings of fact, conclusions of law, and an alternative order with specific references to the parts of the record upon which you rely. The brief must include the arguments supporting these alternative findings of fact, conclusions of law and order. Failure to take an exception to a finding or conclusion in the brief waives your ability to later raise that exception. Once your exceptions have been received, a representative of the Department may file an answering brief within thirty days. The Commission may extend any of the time limits contained in OAR 340-011-0575(5) if an extension request is made in writing and is filed with the Commission before the expiration of the time limit. I have enclosed a copy of the applicable administrative rules for your information (note that this section of rules was previously numbered 340-011-0132, but has been renumbered to 340-011-0575).

To file exceptions and briefs, please mail these documents to Stephanie Clark, on behalf of the Environmental Quality Commission, at 811 S.W. 6th Avenue, Portland, Oregon 97204. If you fail to timely file the exceptions or brief, the Commission may dismiss your petition for review. At the time of dismissal, the Commission will also enter a final order upholding the proposed order.

811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696

After both parties file exceptions and briefs, this item will be set for Commission consideration at a regularly scheduled Commission meeting, and I will notify you of the date and location. If you have any questions about this process, or need additional time to file exceptions and briefs, please call me at (503) 229-5301.

Sincerely,

Stephanie Clark
Assistant to the Commission

Cc: Bryan Smith, Oregon Department of Environmental Quality

Oregon Administrative Rules 340-011-0575

Review of Proposed Orders in Contested Cases

(1) For purposes of this rule, filing means receipt in the office of the director or other office of the department.

(2) Following the close of the record for a contested case hearing, the administrative law judge will issue a proposed order. The administrative law judge will serve the proposed order on each participant.

(3) Commencement of Review by the Commission: The proposed order will become final unless a participant or a member of the commission files, with the commission, a Petition for Commission Review within 30 days of service of the proposed order. The timely filing of a Petition is a jurisdictional requirement and cannot be waived. Any participant may file a petition whether or not another participant has filed a petition.

(4) Contents of the Petition for Commission Review. A petition must be in writing and need only state the participant's or a commissioner's intent that the commission review the proposed order. Each petition and subsequent brief must be captioned to indicate the participant filing the document and the type of document (for example: Respondents Exceptions and Brief; Department's Answer to Respondent's Exceptions and Brief).

(5) Procedures on Review:

(a) Exceptions and Brief: Within 30 days from the filing of a petition, the participant(s) filing the petition must file written exceptions and brief. The exceptions must specify those findings and conclusions objected to, and also include proposed alternative findings of fact, conclusions of law, and order with specific references to the parts of the record upon which the participant relies. The brief must include the arguments supporting these alternative findings of fact, conclusions of law and order. Failure to take an exception to a finding or conclusion in the brief, waives the participant's ability to later raise that exception.

(b) Answering Brief: Each participant, except for the participant(s) filing that exceptions and brief, will have 30 days from the date of filing of the exceptions and brief under subsection (5)(a), in which to file an answering brief.

(c) Reply Brief: If an answering brief is filed, the participant(s) who filed a petition will have 20 days from the date of filing of the answering brief under subsection (5)(b), in which to file a reply brief.

(d) Briefing on Commission Invoked Review: When one or more members of the commission wish to review the proposed order, and no participant has timely filed a Petition, the chair of the commission will promptly notify the participants of the issue that the commission desires the participants to brief. The participants must limit their briefs to those issues. The chair of the commission will also establish the schedule for filing of briefs. When the commission wishes to review the proposed order and a participant also

requested review, briefing will follow the schedule set forth in subsections (a), (b), and (c) of this section.

(e) Extensions: The commission or director may extend any of the time limits contained in section (5) of this rule. Each extension request must be in writing and filed with the commission before the expiration of the time limit. Any request for an extension may be granted or denied in whole or in part.

(f) Dismissal: The commission may dismiss any petition, upon motion of any participant or on its own motion, if the participant(s) seeking review fails to timely file the exceptions or brief required under subsection (5)(a) of this rule. A motion to dismiss made by a participant must be filed within 45 days after the filing of the Petition. At the time of dismissal, the commission will also enter a final order upholding the proposed order.

(g) Oral Argument: Following the expiration of the time allowed the participants to present exceptions and briefs, the matter will be scheduled for oral argument before the commission.

(6) Additional Evidence: A request to present additional evidence must be submitted by motion and must be accompanied by a statement showing good cause for the failure to present the evidence to the administrative law judge. The motion must accompany the brief filed under subsection (5)(a) or (b) of this rule. If the commission grants the motion or decides on its own motion that additional evidence is necessary, the matter will be remanded to an administrative law judge for further proceedings.

(7) Scope of Review: The commission may substitute its judgment for that of the administrative law judge in making any particular finding of fact, conclusion of law, or order except as limited by OAR 137-003-0655 and 137-003-0665.

(8) Service of documents on other participants: All documents required to be filed with the commission under this rule must also be served upon each participant in the contested case hearing. Service can be completed by personal service, certified mail or regular mail.

Stat. Auth.: ORS 183.341 & 468.020
Stats. Implemented: ORS 183.460, 183,464 & ORS 183.470
Hist.: DEQ 78, f. 9-6-74, ef. 9-25-74; DEQ 115, f. & ef. 7-6-76; DEQ 25-1979, f. & ef. 7-5-79; DEQ 7-1988, f. & cert. ef. 5-6-88; DEQ 1-2000(Temp), f. 2-15-00, cert. ef. 2-15-00 thru 7-31-00; DEQ 9-2000, f. & cert. ef. 7-21-00; Renumbered from 340-011-0132 by DEQ 18-2003, f. & cert. ef. 12-12-03

PREPARED BY
DATE
PAGE NO.

Bryon Smith -

PROJECT ACTION NOTES

PROJECT PLANNING NOTES

Ph 503 229 5395 -

Fax 503 229 5100

Dear Mr Smith

I am Writting a "Petetion for Review" The reason for this is the Fine is excessive Considering I had no control over What "Renters" did and if one of the Trailers was Decommissioned a basic Septic System would fit in the DEQ guidelines. The trailers are empty and the Septic has been filled With Sand

Thank You
Dennis Kelly
208 230 7697

GOLD FIBRE®

BEFORE THE OFFICE OF ADMINISTRATIVE HEARINGS
STATE OF OREGON
for the
THE ENVIRONMENTAL QUALITY COMMISSION

IN THE MATTER OF:	) **SECOND AMENDED PROPOSED AND FINAL ORDER**
SHERMAN DENNIS MILLS	)
	) OAH Case No.: 700293
	) Agency Case No.: WQ/OS-ER-06-225

HISTORY OF THE CASE

On May 18, 2007, the Department of Environmental Quality for the State of Oregon (DEQ or Department) issued a Notice of Violation, Department Order and Assessment of Civil Penalty to Sherman Dennis Mills (Respondent) alleging violations of the DEQ Water Quality Division rules. Respondent timely requested a hearing challenging the violation notice.

On November 8, 2007, the DEQ referred the hearing request to the Office of Administrative Hearings (OAH). Administrative Law Judge (ALJ) Alison Greene Webster was assigned to preside at hearing.

A hearing was held on April 22, 2008, in Ontario, Oregon. Respondent Mills appeared without counsel and testified on his own behalf. The DEQ was represented by case presenter Bryan Smith, who appeared via telephone. The following witnesses testified on behalf of the DEQ: Brian Wickert, former Environmental Health Director for Malheur County; Bud Smith, neighboring landowner; John Pearce, neighboring landowner; and Robert Baggett, DEQ National Resource Specialist. The record closed on April 22, 2008 at the conclusion of the hearing.

ISSUES

1. Whether on, or prior to, March 25, 2005, Respondent or his agent discharged partially treated or untreated sewage onto the ground surface in violation of OAR 340-071-0130(3).

2. Whether on, or prior to, March 25, 2005, Respondent caused or allowed the construction, alteration or repair of an onsite sewage disposal system without first obtaining a permit from the DEQ in violation of ORS 454.655 and OAR 340-071-0130(15)(a).

3. Whether on, or prior to, March 29, 2005, Respondent or his agent connected to or used an onsite sewage disposal system without obtaining a Certificate of Satisfactory Completion in violation of OAR 340-071-0175(6).

4. Whether, on or about September 9, 2005, Respondent failed to connect existing plumbing fixtures from which wastewater or sewage is discharged to a sewage, septic or other

SEP 24 2008

disposal system approved by the DEQ, in violation of ORS 468B.080 and OAR 340-071-0120(2)(b).

5. If one or more violations are established, whether the proposed civil penalty is appropriate.

EVIDENTIARY RULING

Exhibits 1 through 15, offered by the DEQ, were admitted into the record without objection.

FINDINGS OF FACT

1. Respondent Sherman Dennis Mills is the owner of real property located at 3286 NW 4th Avenue in Malheur County, Oregon. There are two mobile homes on the property, which Respondent rents to tenants. There has been a septic tank system in use on the property since approximately 1977. (Test. of Mills.)

2. At some point prior to February 24, 2005, the tenants had problems with the septic system on the property. On February 24, 2005, Respondent had Bud's Septic Tank Service pump out the system. This did not resolve the problem. Therefore, in March 2005, Respondent hired Rick McPhail to perform additional work on the system.[1] Respondent hired McPhail to do the work because he had been with the company that had originally installed the septic system on the property in 1977. (Test. of Mills.)

3. In early March 2005, Bud Smith, who lives across the street from Respondent's property, saw someone (one of the renters, he believed) using a hose to pump sewage from the system. Smith saw that the hose was discharging sewage onto the ground at the rear of the property, close to the abutting property owned by John Pearce. Smith heard the buzz from the pump, and smelled a foul odor, which he attributed to the discharged sewage. He was concerned this discharged sewage would contaminate the neighbor's well and ground water. (Test. of Bud Smith; Ex. 9.)

4. Around that same time, in early March 2005, John Pearce heard the sound of heavy equipment being operated on Respondent's property. He saw a backhoe at work. He also saw an open trench, an uncovered septic tank and a pumping hose inserted into the tank. He noted piles of drain rock and broken pieces of PVC pipe lying near the open trench. Pearce was concerned that Respondent was digging a new drain field without a permit. Pearce was also concerned that sewage was being discharged onto the ground surface and possibly contaminating his drinking water supply. (Test. of Pearce; Ex. 10.)

5. On March 25, 2005, Pearce called the Malheur County Environmental Health office to complain that Respondent was pumping sewage out of the septic tank and onto the ground.

[1] McPhail is not licensed to construct, install or repair onsite wastewater treatment systems in Oregon. (Test. of Baggett.)

Pearce reported that there was "septic running all over the ground" and "it smells awful." (Ex. 1.)

6. That same day, Brian Wickert, the then Environmental Health Director for Malheur County, went to Respondent's property to investigate Pearce's complaint. He saw fresh digging along the entire length and width of the drain field. He took photographs and spoke with one of Respondent's renters. The renter advised that Respondent had installed a new leach line. Wickert gave the renter his contact information and a stop work order. (Test. of Wickert; Exs. 2 and 3.)

7. On March 29, 2005, Wickert met with Respondent at the property. Respondent told Wickert that McPhail had dug up the septic lines to remove roots that were clogging it. Respondent also advised that they had had to dig up the entire drain field. In talking with Respondent's neighbors, Pearce and Smith, the next day, Wickert learned that McPhail had dug a new septic line and installed an infiltrator system on the property. Wickert determined that Respondent had done repair work on the septic system without a permit and in violation of the environmental laws. He asked Respondent to apply for a repair permit and to bring the septic system into compliance with the DEQ's requirements. (Test. of Wickert; Ex. 3.)

8. In August 2005, Wickert followed up with Respondent. He wrote Respondent a letter asking that Respondent apply for a septic repair permit and properly repair the failing system on his property. (Ex. 4.)

9. In early September 2005, Wickert received another environmental health complaint about Respondent's property. The complainant indicated that the tenants were using a washing machine on their front porch that was not connected to the septic system. The complainant asserted that the washer had a hose connected to it that was discharging wastewater to the back of the property. Wickert returned to the property to investigate and take photographs. He saw the washer on the front porch. He saw a hose connected to the washer that terminated in the back yard. He determined that the washer was not connected to the on-site system, but was instead discharging gray water[2] onto the ground surface in the back yard. (Test. of Wickert; Ex. 5.)

10. Although Respondent submitted a permit application for septic repair work in late August or early September 2005, the application was incomplete and he was not issued a permit. (Test. of Baggett.)

11. At some point after his September 2005 visit to Respondent's property, Wickert turned the matter over to the DEQ. On June 27, 2006, Brian Baggett of DEQ's Eastern Region Bend Office wrote Respondent a "Warning Letter" advising Respondent that he was responsible for violations of Oregon environmental law because of the unpermitted installation and/or repair work to the septic system on his property. Baggett requested that, within 45 days, Respondent obtain a repair permit from the Malheur County Environmental Health office and make the

[2] "Gray water" means household sewage other than "black wastes," such as bath water, kitchen waste water, and laundry wastes. OAR 340-071-0100(75).

necessary changes to the property's septic system to obtain a Certificate of Satisfactory Compliance. (Ex. 12.)

12. On August 18, 2006, Baggett sent Respondent a "Pre-Enforcement Notice" in follow up to the June 27, 2006 Warning Letter. The letter advised, in part, as follows:

> I have been informed by Brian Wickert of the County that you have made application for a repair permit but you have not uncovered requested portions of the system so that the County can determine what corrections need to be made to the system. Therefore, you have failed to make the necessary corrections to the system. Because you have not been cooperative with the County and have failed to perform the corrective actions specified in the Warning Letter, I am referring these violations to the Department's Office of Compliance and Enforcement for formal enforcement action, which may include assessment of civil penalties and/or issuance of a Department Order.

(Ex. 13.)

13. On August 29, 2006, Wickert returned to Respondent's property to inspect the system and determine what work needed to be done to bring the system into compliance with the environmental laws. Respondent hired a contractor who dug up portions of the drain field so that Wickert could inspect the system. Wickert found that the infiltrator was installed at approximately 42 to 46 inches to the top of the units, and that the drain field was approximately 60 feet in length. He noted that at approximately 15 feet there was a blue water line lying directly on top of the infiltrator. He saw no odor or discoloration around the units, and found the infiltrator was relatively new and unused. (Test. of Wickert; Ex. 6.)

14. During this inspection, Respondent advised Wickert that the septic system was working "just fine." Respondent also said that he did not get a permit for the work McPhail had performed because the property was outside the city, and he did not realize that the county required a permit for such work. (Test. of Wickert; Ex. 6.)

15. Wickert determined that the infiltration system McPhail installed in 2005 did not meet the applicable state environmental standards because of sizing and depth problems. The system was installed too deep for the water table and was too close to a well on the neighboring property. (Test. of Wickert.)

16. Respondent hired a company to make the repairs to the system to bring it into compliance with DEQ's standards. He submitted a wastewater treatment system repair application, but the DEQ determined that the system proposed by Respondent's installer did not reasonably eliminate the public health hazard. In a November 30, 2007 letter to Respondent, Baggett advised Respondent that, to obtain a permit for the repair work, he would need to submit a detailed set of plans for a sand-filter system. The letter set out the minimum system plan requirements that Respondent needed to submit to obtain a permit for the system. The letter

further advised that, in lieu of the repair work, Respondent could elect to decommission the system. (Ex. 14.)

17. Respondent did not respond to the November 30, 2007 letter. He did not submit a detailed plan for repairs or construction of an onsite system that complied with the DEQ's rules. He also did not notify the DEQ of any plan to decommission the system. (Test. of Baggett.) Respondent did not want to spend the money needed to install a sand filter system proposed by DEQ, and is hoping to find a less expensive, yet acceptable alternative onsite wastewater treatment system. (Test. of Mills.)

CONCLUSIONS OF LAW

1. On or prior to March 25, 2005, Respondent or his agent discharged partially treated or untreated sewage onto the ground surface in violation of OAR 340-071-0130(3).

2. On or prior to March 25, 2005, Respondent caused or allowed the construction, alteration or repair of an onsite sewage disposal system without first obtaining a permit from the DEQ in violation of ORS 454.655 and OAR 340-071-0130(15)(a).

3. On or prior to March 29, 2005, Respondent or his agent connected to or used an onsite sewage disposal system without obtaining a Certificate of Satisfactory Completion in violation of OAR 340-071-0175(6).

4. On or about September 9, 2005, Respondent failed to connect existing plumbing fixtures from which wastewater or sewage was or may be discharged to a sewage, septic or other disposal system approved by DEQ, in violation of ORS 468B.080 and OAR 340-071-0120(2)(b).

5. The proposed civil penalty of $3,548 is appropriate.

OPINION

In its notice, the DEQ charged Respondent with four violations of the statutes and rules pertaining to onsite wastewater treatment systems. Specifically, the DEQ asserted that Respondent or his agent: (1) discharged sewage to the ground surface from the septic tank on the property; (2) caused or allowed the construction, alteration or repair of an onsite sewage disposal system without first obtaining a permit; (3) connected to or used an onsite sewage disposal system without first obtaining a Certificate of Satisfactory Completion; and (4) failed to connect the clothes washing machine to an approved system and instead disposed waste water onto the ground surface in the back yard of the property. The DEQ seeks to impose a civil penalty for the first two violations in the total amount of $3,548.

"The burden of presenting evidence to support a fact or position in a contested case rests on the proponent of the fact or position." ORS 183.450(2). As the proponent, the DEQ has the burden of proving its allegations by a preponderance of the evidence. *See Harris v. SAIF*, 292 Or 683, 690 (1982) (general rule regarding allocation of burden of proof is that the burden is on the proponent of the fact or position.); *Cook v. Employment Div.*, 47 Or App 437 (1980) (in the

absence of legislation adopting a different standard, the standard in administrative hearings is preponderance of the evidence). Proof by a preponderance of evidence means that the fact finder is persuaded that the facts asserted are more likely true than false. *Riley Hill General Contractors v. Tandy Corp.*, 303 Or 390 (1989).

In this case, the Department has the burden to prove the alleged violations. After reviewing the record, I conclude that the Department has met its burden.

1. Discharge of sewage onto the ground surface.

Under OAR 340-071-0130(3), certain discharges of wastewater are prohibited: "A person may not discharge untreated or partially treated wastewater or septic tank effluent directly or indirectly onto the ground surface or into public waters. Such discharge constitutes a public health hazard and is prohibited."

Respondent's neighbor, Smith, saw sewage being discharged onto the ground surface on Respondent's property. He smelled the foul odor. Respondent does not dispute that, during March 2005, sewage may have been discharged onto the ground surface while someone was pumping or repairing the septic system on the property. Respondent contends, however, that he did not cause the discharge, and he questions his liability for the actions of others on his property.

Under OAR 340-071-0120(2) each owner of real property is jointly and severally responsible for the following:

> (a) Treating wastewater generated on that property in conformance with the rules adopted by the commission;
>
> (b) Connecting all plumbing fixtures from which wastewater is or may be discharged to a sewerage facility or onsite system approved by the department or an agent;
>
> (c) Maintaining, repairing, and replacing the onsite system on that property as necessary to ensure proper operation of the system; and
>
> (d) Complying with all requirements for construction, installation, maintenance, replacement, and repair of onsite systems required in this division and OAR chapter 340, division 073.

Given this standard, even though Respondent may not have personally caused the discharge, he is responsible for the violation as the property's owner. A violation of OAR 340-071-0130(3) has been established.

no mention of renters

2. Failing to obtain a permit for the construction, alteration or repair work.

Pursuant to ORS 454.655(1), a permit from the DEQ is required before constructing or installing an onsite sewage disposal system:

> Except as otherwise provided in ORS 454.675,[3] without first obtaining a permit from the Department of Environmental Quality, no person shall construct or install a subsurface sewage disposal system, alternative sewage disposal system or part thereof. However, a person may undertake emergency repairs limited to replacing minor broken components of the system without first obtaining a permit.

ORS 454.655(2) provides that the permit required by subsection (1) "shall be issued only in the name of an owner or contract purchaser in possession of the land." The administrative rule similarly requires that the permit be issued to the owner of the real property the system will serve. OAR 340-0710-160(1).

The permit requirements for onsite sewage disposal systems are set out in OAR 340-071-0130(15)(a):

> A person may not cause or allow construction, alteration, or repair of a system or any part thereof without a WPCF permit[4] issued under OAR 340-071-0162 or a construction-installation, alteration, or repair permit under OAR 340-071-0210, and 340-0710215 except for emergency repairs authorized under OAR 340-071-0215(1) and (2).

In this case, the evidence establishes that McPhail performed more than emergency repairs on the septic system on Respondent's property. McPhail dug up the entire drain field, replaced pipes, installed new infiltrator components and connected those components to the septic system on the property. Respondent did not obtain a permit before this work was done, and is therefore in violation of ORS 454.655(1) and OAR 340-071-0130(15)(a).

3. Failing to obtain a Certificate of Satisfactory Completion.

Pursuant to OAR 340-071-0175(6), "[a] person may not connect to or use any system completed after January 1, 1974, unless a Certificate of Satisfactory Completion has been issued for the installation or deemed issued by operation of law in accordance with this rule."

The system has been in use on Respondent's property since McPhail installed the infiltration components in March 2005. Respondent told Wickert in August 2006 that the system was working "just fine." Following Wickert's inspection of the system, the DEQ determined that the system does not comply with the applicable standards for onsite subsurface sewage disposal systems. Respondent has not been issued a Certificate of Satisfactory Completion. As

[3] ORS 454.675 sets out exemptions for sewage disposal systems constructed prior to 1974 that are not creating a public health hazard or causing water pollution. The exemptions are not applicable here.

[4] "WPCF permit" means a Water Pollution Control Facilities permit that has been issued under OAR chapter 340, divisions 045 or 071. ORS 371-071-0100 (176).

the property owner, Respondent is responsible for the violation of OAR 340-071-0175(6). OAR 340-071-0120(2).

4. Failing to connect the clothes washer to an approved system.

As set out above, the DEQ also asserts that Respondent violated ORS 468B.080 and OAR 340-071-0120(2)(b) because the clothes washing machine on the front porch of one of the mobile homes was not connected to the onsite system, and was instead discharging wastewater onto the ground surface in the back yard.

ORS 468B.080 provides, in pertinent part, that "all plumbing fixtures in buildings or structures, including prior existing plumbing fixtures from which waste water or sewage is or may be discharged, shall be connected to and all waste water or sewage from such fixtures in buildings or structures shall be discharged into a sewerage system, septic tank system or other disposal system approved by the department." OAR 340-071-0120(2)(b) makes the property owner responsible for connecting plumbing fixtures from which wastewater is or may be discharged to an approved sewerage facility or onsite system.

Respondent asserts that he cannot control the conduct of his renters. Although Respondent may not have been the one using the washer on his property, and he did not personally cause the discharge of gray water onto the ground surface, he is nevertheless responsible for the acts or omissions of his tenants under the environmental laws. The violation of ORS 468B.080 and OAR 340-071-0120(2)(b) has been established.

5. Civil Penalty Assessment.

As previously noted, the DEQ seeks to assess a civil penalty against Respondent for two of the four violations: (1) discharging sewage onto the ground surface and (2) failing to obtain a permit. The DEQ is authorized to assess civil penalties for any violations of its rules or statutes. OAR 340-012-0042 (2004 ed.). The amount of civil penalties assessed is determined through use of a matrix and formula contained in OAR 340-012-0045. *See* OAR 340-012-0042 (2004 ed.)

OAR 340-012-0060 (2004 ed.) sets out the classifications for violations pertaining to onsite sewage disposal systems. Pursuant to subsection (1)(c), it is a Class One violation to install or cause to be installed an onsite sewage disposal system or any part thereof, or repairing any part thereof, without first obtaining a permit. Pursuant to subsection (1)(d), it is a Class One violation to dispose of "septic tank, holding tank, chemical toilet, privy or other treatment facility contents in a manner or location not authorized by the Department."

For the violation of OAR 340-071-0130(3), discharging sewage onto the ground surface, The DEQ seeks a penalty of $1,748. For the violation of ORS 454.655 and OAR 340-071-0160(1), failing to obtain a permit, the DEQ seeks a penalty for $1,800. As explained below, these penalties are appropriate.

The DEQ determined the proposed penalties by calculating the base penalty (BP) and considering other factors, such as prior significant actions (P), past history (H), the number of occurrences (O), the cause of the violation (R), Respondent's level of cooperation (C), the economic benefit that Respondent gained by noncompliance with the Department's rules and statutes (EB), and the magnitude of the violation. The formula for determining civil penalties in this case is expressed as "BP + [(0.1 x BP) x (P + H + O + R + C)] + EB.

For violation one, the DEQ assigned a magnitude of moderate pursuant to OAR 340-012-0045. The base penalty (BP) is $1,000 pursuant to OAR 340-012-0042(3)(a)(A)(ii). The DEQ assigned a value of 6 to the R factor, because the conduct was intentional, in that Respondent's agent intentionally pumped contents of the tank onto the ground surface. The DEQ also determined that Respondent gained an economic benefit (EB) of $148 by not complying with the law, *i.e., i.e.,* by not having the tank pumped again by a licensed pumper. (Ex. 15.)

Using the civil penalty formula, the Department calculated Respondent's penalty for violation one as follows:

Penalty = $1,000 [BP] + [(0.1 x $1,000) x (0 + 0 + 0 + 6 + 0)] + $148 [EB]
= $1,000 + ($100 x 6) + $148
= $1,000 + $600 + $148
= $1,748

For violation two, the DEQ again assigned a magnitude of moderate pursuant to OAR 340-012-0045. The base penalty (BP) is $1,000 pursuant to OAR 340-012-0042(3)(a)(A)(ii). The DEQ assigned a value of 6 to the R factor, because the conduct was intentional, in that Respondent made the conscious decision to have McPhail perform work on the system without first obtaining a permit. Respondent was aware of the permit requirement, even if he believed that it was not necessary if the property was located in the county. The DEQ also assigned a value of 2 to the C factor (cooperativeness) because Respondent has yet to submit a complete application and obtain the required permit. Finally, the DEQ determined that the EB factor should be 0 because the delayed cost of obtaining a repair permit was minimal.

The Department calculated Respondent's penalty for violation two as follows:

Penalty = $1,000 [BP] + [(0.1 x $1,000) x (0 + 0 + 0 + 6 + 2)] + $0 [EB]
= $1,000 + ($100 x 8) + 0
= $1,000 + $800 + $0
= $1,800

Based on this record, and in consideration of the DEQ's formula for determining penalties, the proposed total penalty of $3,548 ($1,748 + $1,800) is appropriate.

ORDER

I propose the DEQ issue the following order:

(1) Respondent is subject to a civil penalty in the amount of $1,748 for discharging sewage onto the ground surface in violation of OAR 340-071-0130(3).

(2) Respondent is subject to a civil penalty in the amount of $1,800 for allowing the construction or repair of an onsite sewage disposal system, or part thereof, without obtaining an onsite sewage disposal system repair permit in violation of ORS 454.655(1) and OAR 340-071-0130(15)(a).

(3) Within 20 days of this order becoming final, Respondent is required to

(a) (i) submit a completed repair permit application to the Malheur County Environmental Health Office;

(ii) within 30 days of issuance of the repair permit, complete construction of the system in accordance with the permit;

(iii) within 7 days of completing the repair of the system, request an inspection from the Malheur County Environmental Health Office; and

(iv) obtain a Certificate of Satisfactory Completion; or

(b) decommission the system on the property and provide documentation of such to the DEQ.

Alison Greene Webster
Administrative Law Judge
Office of Administrative Hearings

ISSUANCE AND MAILING DATE: September 23, 2008

APPEAL RIGHTS

If you are not satisfied with this decision, you have the right to have the decision reviewed by the Oregon Environmental Quality Commission. To have the decision reviewed, you must file a "Petition for Review" within 30 days of the date this order is served on you as provided in Oregon Administrative Rule (OAR) 340-011-0132(1) and (2). The Petition for Review must be filed with:

Environmental Quality Commission
c/o Stephanie Hallock, Director, DEQ
811 SW Sixth Avenue
Portland, OR 97204.

Within 30 days of filing the Petition for Review, you must also file exceptions and a brief as is provided in OAR 340-011-0132(3). If the petition, exceptions and brief are filed in a timely manner, the Commission will set the matter for oral argument and notify you of the time and place of the Commission's meeting. The requirements for filing a petition, exceptions and briefs are set out in OAR 340-011-0132.

Unless you timely and appropriately file a Petition for Review as set forth above, this Proposed Order becomes the Final Order of the Environmental Quality Commission 30 days from the date of service on you of this Proposed Order. If you wish to appeal the Final Order, you have 60 days from the date the Proposed Order becomes the Final Order to file a petition for review with the Oregon Court of Appeals. See ORS 183.400 et. seq.

APPENDIX A
LIST OF EXHIBITS CITED

Ex. 1:	Complaint Form, Malheur County Environmental Health, dated 3/25/2005
Ex. 2:	Photos of excavation on Respondent's property, dated 3/2005
Ex. 3:	Memo re Complaint, Malheur County Environmental Health, undated
Ex. 4:	Letter to Mills from Wickert, dated 8/2005
Ex. 5:	Photos of washing machine and hose on Respondent's property, dated 9/2005
Ex. 6:	Email to Baggett from Wickert, dated 8/30/2006
Ex. 7:	Photos from Wickert's inspection of the property, undated
Ex. 9:	Smith Affidavit, dated 5/8/2006
Ex. 10:	Pearce Affidavit, dated 5/8/2006
Ex. 12:	Warning Letter to Mills from Baggett, dated 6/27/2006
Ex. 13:	Pre-Enforcement Notice to Mills from Baggett, dated 8/18/2006
Ex. 14:	Letter to Mills from Baggett, dated 11/30/2007
Ex. 15:	Economic Benefit Analysis, dated 3/16/2007

CERTIFICATE OF MAILING

On September 23, 2008, I mailed the foregoing Second Amended Proposed and Final Order in OAH Case No. 700293.

By: First Class and Certified Mail
Certified Mail Receipt # 7006 2760 0000 1252 2493

Sherman Mills
264 NW 9th St
Ontario OR 97914

By: First Class Mail

Bryan Smith
Dept. of Environmental Quality
811 SW 6th St
Portland OR 97204

Pam Arcari
Administrative Specialist
Hearing Coordinator

RECEIVED
SEP 12 2008

BEFORE THE OFFICE OF ADMINISTRATIVE HEARINGS
STATE OF OREGON
for the
THE ENVIRONMENTAL QUALITY COMMISSION

IN THE MATTER OF:

SHERMAN DENNIS MILLS

) **AMENDED**
PROPOSED AND FINAL ORDER
)
) OAH Case No.: 700293
) Agency Case No.: WQ/OS-ER-06-225

HISTORY OF THE CASE

On May 18, 2007, the Department of Environmental Quality for the State of Oregon (DEQ or Department) issued a Notice of Violation, Department Order and Assessment of Civil Penalty to Sherman Dennis Mills (Respondent) alleging violations of the DEQ Water Quality Division rules. Respondent timely requested a hearing challenging the violation notice.

On November 8, 2007, the DEQ referred the hearing request to the Office of Administrative Hearings (OAH). Administrative Law Judge (ALJ) Alison Greene Webster was assigned to preside at hearing.

A hearing was held on April 22, 2008, in Ontario, Oregon. Respondent Mills appeared without counsel and testified on his own behalf. The DEQ was represented by case presenter Bryan Smith, who appeared via telephone. The following witnesses testified on behalf of the DEQ: Brian Wickert, former Environmental Health Director for Malheur County; Bud Smith, neighboring landowner; John Pearce, neighboring landowner; and Robert Baggett, DEQ National Resource Specialist. The record closed on April 22, 2008 at the conclusion of the hearing.

ISSUES

1. Whether on, or prior to, March 25, 2005, Respondent or his agent discharged partially treated or untreated sewage onto the ground surface in violation of OAR 340-071-0130(3).

2. Whether on, or prior to, March 25, 2005, Respondent caused or allowed the construction, alteration or repair of an onsite sewage disposal system without first obtaining a permit from the DEQ in violation of ORS 454.655 and OAR 340-071-0130(15)(a).

3. Whether on, or prior to, March 29, 2005, Respondent or his agent connected to or used an onsite sewage disposal system without obtaining a Certificate of Satisfactory Completion in violation of OAR 340-071-0175(6).

4. Whether, on or about September 9, 2005, Respondent failed to connect existing plumbing fixtures from which wastewater or sewage is discharged to a sewage, septic or other

disposal system approved by the DEQ, in violation of ORS 468B.080 and OAR 340-071-0120(2)(b).

5. If one or more violations are established, whether the proposed civil penalty is appropriate.

EVIDENTIARY RULING

Exhibits 1 through 15, offered by the DEQ, were admitted into the record without objection.

FINDINGS OF FACT

1. Respondent Sherman Dennis Mills is the owner of real property located at 3286 NW 4th Avenue in Malheur County, Oregon. There are two mobile homes on the property, which Respondent rents to tenants. There has been a septic tank system in use on the property since approximately 1977. (Test. of Mills.)

2. At some point prior to February 24, 2005, the tenants had problems with the septic system on the property. On February 24, 2005, Respondent had Bud's Septic Tank Service pump out the system. This did not resolve the problem. Therefore, in March 2005, Respondent hired Rick McPhail to perform additional work on the system.[1] Respondent hired McPhail to do the work because he had been with the company that had originally installed the septic system on the property in 1977. (Test. of Mills.)

3. In early March 2005, Bud Smith, who lives across the street from Respondent's property, saw someone (one of the renters, he believed) using a hose to pump sewage from the system. Smith saw that the hose was discharging sewage onto the ground at the rear of the property, close to the abutting property owned by John Pearce. Smith heard the buzz from the pump, and smelled a foul odor, which he attributed to the discharged sewage. He was concerned this discharged sewage would contaminate the neighbor's well and ground water. (Test. of Bud Smith; Ex. 9.)

4. Around that same time, in early March 2005, John Pearce heard the sound of heavy equipment being operated on Respondent's property. He saw a backhoe at work. He also saw an open trench, an uncovered septic tank and a pumping hose inserted into the tank. He noted piles of drain rock and broken pieces of PVC pipe lying near the open trench. Pearce was concerned that Respondent was digging a new drain field without a permit. Pearce was also concerned that sewage was being discharged onto the ground surface and possibly contaminating his drinking water supply. (Test. of Pearce; Ex. 10.)

5. On March 25, 2005, Pearce called the Malheur County Environmental Health office to complain that Respondent was pumping sewage out of the septic tank and onto the ground.

[1] McPhail is not licensed to construct, install or repair onsite wastewater treatment systems in Oregon. (Test. of Baggett.)

Pearce reported that there was "septic running all over the ground" and "it smells awful." (Ex. 1.)

6. That same day, Brian Wickert, the then Environmental Health Director for Malheur County, went to Respondent's property to investigate Pearce's complaint. He saw fresh digging along the entire length and width of the drain field. He took photographs and spoke with one of Respondent's renters. The renter advised that Respondent had installed a new leach line. Wickert gave the renter his contact information and a stop work order. (Test. of Wickert; Exs. 2 and 3.)

7. On March 29, 2005, Wickert met with Respondent at the property. Respondent told Wickert that McPhail had dug up the septic lines to remove roots that were clogging it. Respondent also advised that they had had to dig up the entire drain field. In talking with Respondent's neighbors, Pearce and Smith, the next day, Wickert learned that McPhail had dug a new septic line and installed an infiltrator system on the property. Wickert determined that Respondent had done repair work on the septic system without a permit and in violation of the environmental laws. He asked Respondent to apply for a repair permit and to bring the septic system into compliance with the DEQ's requirements. (Test. of Wickert; Ex. 3.)

8. In August 2005, Wickert followed up with Respondent. He wrote Respondent a letter asking that Respondent apply for a septic repair permit and properly repair the failing system on his property. (Ex. 4.)

9. In early September 2005, Wickert received another environmental health complaint about Respondent's property. The complainant indicated that the tenants were using a washing machine on their front porch that was not connected to the septic system. The complainant asserted that the washer had a hose connected to it that was discharging wastewater to the back of the property. Wickert returned to the property to investigate and take photographs. He saw the washer on the front porch. He saw a hose connected to the washer that terminated in the back yard. He determined that the washer was not connected to the on-site system, but was instead discharging gray water[2] onto the ground surface in the back yard. (Test. of Wickert; Ex. 5.)

10. Although Respondent submitted a permit application for septic repair work in late August or early September 2005, the application was incomplete and he was not issued a permit. (Test. of Baggett.)

11. At some point after his September 2005 visit to Respondent's property, Wickert turned the matter over to the DEQ. On June 27, 2006, Brian Baggett of DEQ's Eastern Region Bend Office wrote Respondent a "Warning Letter" advising Respondent that he was responsible for violations of Oregon environmental law because of the unpermitted installation and/or repair work to the septic system on his property. Baggett requested that, within 45 days, Respondent obtain a repair permit from the Malheur County Environmental Health office and make the

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necessary changes to the property's septic system to obtain a Certificate of Satisfactory Compliance. (Ex. 12.)

12. On August 18, 2006, Baggett sent Respondent a "Pre-Enforcement Notice" in follow up to the June 27, 2006 Warning Letter. The letter advised, in part, as follows:

> I have been informed by Brian Wickert of the County that you have made application for a repair permit but you have not uncovered requested portions of the system so that the County can determine what corrections need to be made to the system. Therefore, you have failed to make the necessary corrections to the system. Because you have not been cooperative with the County and have failed to perform the corrective actions specified in the Warning Letter, I am referring these violations to the Department's Office of Compliance and Enforcement for formal enforcement action, which may include assessment of civil penalties and/or issuance of a Department Order.

(Ex. 13.)

13. On August 29, 2006, Wickert returned to Respondent's property to inspect the system and determine what work needed to be done to bring the system into compliance with the environmental laws. Respondent hired a contractor who dug up portions of the drain field so that Wickert could inspect the system. Wickert found that the infiltrator was installed at approximately 42 to 46 inches to the top of the units, and that the drain field was approximately 60 feet in length. He noted that at approximately 15 feet there was a blue water line lying directly on top of the infiltrator. He saw no odor or discoloration around the units, and found the infiltrator was relatively new and unused. (Test. of Wickert; Ex. 6.)

14. During this inspection, Respondent advised Wickert that the septic system was working "just fine." Respondent also said that he did not get a permit for the work McPhail had performed because the property was outside the city, and he did not realize that the county required a permit for such work. (Test. of Wickert; Ex. 6.)

15. Wickert determined that the infiltration system McPhail installed in 2005 did not meet the applicable state environmental standards because of sizing and depth problems. The system was installed too deep for the water table and was too close to a well on the neighboring property. (Test. of Wickert.)

16. Respondent hired a company to make the repairs to the system to bring it into compliance with DEQ's standards. He submitted a wastewater treatment system repair application, but the DEQ determined that the system proposed by Respondent's installer did not reasonably eliminate the public health hazard. In a November 30, 2007 letter to Respondent, Baggett advised Respondent that, to obtain a permit for the repair work, he would need to submit a detailed set of plans for a sand filter system. The letter set out the minimum system plan requirements that Respondent needed to submit to obtain a permit for the system. The letter

further advised that, in lieu of the repair work, Respondent could elect to decommission the system. (Ex. 14.)

17. Respondent did not respond to the November 30, 2007 letter. He did not submit a detailed plan for repairs or construction of an onsite system that complied with the DEQ's rules. He also did not notify the DEQ of any plan to decommission the system. (Test. of Baggett,) Respondent did not want to spend the money needed to install a sand filter system proposed by DEQ, and is hoping to find a less expensive, yet acceptable alternative onsite wastewater treatment system. (Test. of Mills.)

CONCLUSIONS OF LAW

1. On or prior to March 25, 2005, Respondent or his agent discharged partially treated or untreated sewage onto the ground surface in violation of OAR 340-071-0130(3).

2. On or prior to March 25, 2005, Respondent caused or allowed the construction, alteration or repair of an onsite sewage disposal system without first obtaining a permit from the DEQ in violation of ORS 454.655 and OAR 340-071-0130(15)(a).

3. On or prior to March 29, 2005, Respondent or his agent connected to or used an onsite sewage disposal system without obtaining a Certificate of Satisfactory Completion in violation of OAR 340-071-0175(6).

4. On or about September 9, 2005, Respondent failed to connect existing plumbing fixtures from which wastewater or sewage was or may be discharged to a sewage, septic or other disposal system approved by DEQ, in violation of ORS 468B.080 and OAR 340-071-0120(2)(b).

5. The proposed civil penalty of $3,548 is appropriate.

OPINION

In its notice, the DEQ charged Respondent with four violations of the statutes and rules pertaining to onsite wastewater treatment systems. Specifically, the DEQ asserted that Respondent or his agent: (1) discharged sewage to the ground surface from the septic tank on the property; (2) caused or allowed the construction, alteration or repair of an onsite sewage disposal system without first obtaining a permit; (3) connected to or used an onsite sewage disposal system without first obtaining a Certificate of Satisfactory Completion; and (4) failed to connect the clothes washing machine to an approved system and instead disposed waste water onto the ground surface in the back yard of the property. The DEQ seeks to impose a civil penalty for the first two violations in the total amount of $3,548.

"The burden of presenting evidence to support a fact or position in a contested case rests on the proponent of the fact or position." ORS 183.450(2). As the proponent, the DEQ has the burden of proving its allegations by a preponderance of the evidence. *See Harris v. SAIF*, 292 Or 683, 690 (1982) (general rule regarding allocation of burden of proof is that the burden is on the proponent of the fact or position.); *Cook v. Employment Div.*, 47 Or App 437 (1980) (in the

absence of legislation adopting a different standard, the standard in administrative hearings is preponderance of the evidence). Proof by a preponderance of evidence means that the fact finder is persuaded that the facts asserted are more likely true than false. *Riley Hill General Contractors v. Tandy Corp.*, 303 Or 390 (1989).

In this case, the Department has the burden to prove the alleged violations. After reviewing the record, I conclude that the Department has met its burden.

1. Discharge of sewage onto the ground surface.

Under OAR 340-071-0130(3), certain discharges of wastewater are prohibited: "A person may not discharge untreated or partially treated wastewater or septic tank effluent directly or indirectly onto the ground surface or into public waters. Such discharge constitutes a public health hazard and is prohibited."

Respondent's neighbor, Smith, saw sewage being discharged onto the ground surface on Respondent's property. He smelled the foul odor. Respondent does not dispute that, during March 2005, sewage may have been discharged onto the ground surface while someone was pumping or repairing the septic system on the property. Respondent contends, however, that he did not cause the discharge, and he questions his liability for the actions of others on his property.

Under OAR 340-071-0120(2) each owner of real property is jointly and severally responsible for the following:

> (a) Treating wastewater generated on that property in conformance with the rules adopted by the commission;
>
> (b) Connecting all plumbing fixtures from which wastewater is or may be discharged to a sewerage facility or onsite system approved by the department or an agent;
>
> (c) Maintaining, repairing, and replacing the onsite system on that property as necessary to ensure proper operation of the system; and
>
> (d) Complying with all requirements for construction, installation, maintenance, replacement, and repair of onsite systems required in this division and OAR chapter 340, division 073.

Given this standard, even though Respondent may not have personally caused the discharge, he is responsible for the violation as the property's owner. A violation of OAR 340-071-0130(3) has been established.

2. Failing to obtain a permit for the construction, alteration or repair work.

Pursuant to ORS 454.655(1), a permit from the DEQ is required before constructing or installing an onsite sewage disposal system:

> Except as otherwise provided in ORS 454.675,[3] without first obtaining a permit from the Department of Environmental Quality, no person shall construct or install a subsurface sewage disposal system, alternative sewage disposal system or part thereof. However, a person may undertake emergency repairs limited to replacing minor broken components of the system without first obtaining a permit.

ORS 454.655(2) provides that the permit required by subsection (1) "shall be issued only in the name of an owner or contract purchaser in possession of the land." The administrative rule similarly requires that the permit be issued to the owner of the real property the system will serve. OAR 340-0710-160(1).

The permit requirements for onsite sewage disposal systems are set out in OAR 340-071-0130(15)(a):

> A person may not cause or allow construction, alteration, or repair of a system or any part thereof without a WPCF permit[4] issued under OAR 340-071-0162 or a construction-installation, alteration, or repair permit under OAR 340-071-0210, and 340-0710215 except for emergency repairs authorized under OAR 340-071-0215(1) and (2).

In this case, the evidence establishes that McPhail performed more than emergency repairs on the septic system on Respondent's property. McPhail dug up the entire drain field, replaced pipes, installed new infiltrator components and connected those components to the septic system on the property. Respondent did not obtain a permit before this work was done, and is therefore in violation of ORS 454.655(1) and OAR 340-071-0130(15)(a).

3. Failing to obtain a Certificate of Satisfactory Completion.

Pursuant to OAR 340-071-0175(6), "[a] person may not connect to or use any system completed after January 1, 1974, unless a Certificate of Satisfactory Completion has been issued for the installation or deemed issued by operation of law in accordance with this rule."

The system has been in use on Respondent's property since McPhail installed the infiltration components in March 2005. Respondent told Wickert in August 2006 that the system was working "just fine." Following Wickert's inspection of the system, the DEQ determined that the system does not comply with the applicable standards for onsite subsurface sewage disposal systems. Respondent has not been issued a Certificate of Satisfactory Completion. As

[3] ORS 454.675 sets out exemptions for sewage disposal systems constructed prior to 1974 that are not creating a public health hazard or causing water pollution. The exemptions are not applicable here.

[4] "WPCF permit" means a Water Pollution Control Facilities permit that has been issued under OAR chapter 340, divisions 045 or 071. ORS 371-071-0100 (176).

the property owner, Respondent is responsible for the violation of OAR 340-071-0175(6). OAR 340-071-0120(2).

4. Failing to connect the clothes washer to an approved system.

As set out above, the DEQ also asserts that Respondent violated ORS 468B.080 and OAR 340-071-0120(2)(b) because the clothes washing machine on the front porch of one of the mobile homes was not connected to the onsite system, and was instead discharging wastewater onto the ground surface in the back yard.

ORS 468B.080 provides, in pertinent part, that "all plumbing fixtures in buildings or structures, including prior existing plumbing fixtures from which waste water or sewage is or may be discharged, shall be connected to and all waste water or sewage from such fixtures in buildings or structures shall be discharged into a sewerage system, septic tank system or other disposal system approved by the department." OAR 340-071-0120(2)(b) makes the property owner responsible for connecting plumbing fixtures from which wastewater is or may be discharged to an approved sewerage facility or onsite system.

Respondent asserts that he cannot control the conduct of his renters. Although Respondent may not have been the one using the washer on his property, and he did not personally cause the discharge of gray water onto the ground surface, he is nevertheless responsible for the acts or omissions of his tenants under the environmental laws. The violation of ORS 468B.080 and OAR 340-071-0120(2)(b) has been established.

5. Civil Penalty Assessment.

As previously noted, the DEQ seeks to assess a civil penalty against Respondent for two of the four violations: (1) discharging sewage onto the ground surface and (2) failing to obtain a permit. The DEQ is authorized to assess civil penalties for any violations of its rules or statutes. OAR 340-012-0042 (2004 ed.). The amount of civil penalties assessed is determined through use of a matrix and formula contained in OAR 340-012-0045. *See* OAR 340-012-0042 (2004 ed.)

OAR 340-012-0060 (2004 ed.) sets out the classifications for violations pertaining to onsite sewage disposal systems. Pursuant to subsection (1)(c), it is a Class One violation to install or cause to be installed an onsite sewage disposal system or any part thereof, or repairing any part thereof, without first obtaining a permit. Pursuant to subsection (1)(d), it is a Class One violation to dispose of "septic tank, holding tank, chemical toilet, privy or other treatment facility contents in a manner or location not authorized by the Department."

For the violation of OAR 340-071-0130(3), discharging sewage onto the ground surface, The DEQ seeks a penalty of $1,748. For the violation of ORS 454.655 and OAR 340-071-0160(1), failing to obtain a permit, the DEQ seeks a penalty for $1,800. As explained below, these penalties are appropriate.

The DEQ determined the proposed penalties by calculating the base penalty (BP) and considering other factors, such as prior significant actions (P), past history (H), the number of occurrences (O), the cause of the violation (R), Respondent's level of cooperation (C), the economic benefit that Respondent gained by noncompliance with the Department's rules and statutes (EB), and the magnitude of the violation. The formula for determining civil penalties in this case is expressed as "BP + [(0.1 x BP) x (P + H + O + R + C)] + EB.

For violation one, the DEQ assigned a magnitude of moderate pursuant to OAR 340-012-0045. The base penalty (BP) is $1,000 pursuant to OAR 340-012-0042(3)(a)(A)(ii). The DEQ assigned a value of 6 to the R factor, because the conduct was intentional, in that Respondent's agent intentionally pumped contents of the tank onto the ground surface. The DEQ also determined that Respondent gained an economic benefit (EB) of $148 by not complying with the law, *i.e., i.e.,* by not having the tank pumped again by a licensed pumper. (Ex. 15.)

Using the civil penalty formula, the Department calculated Respondent's penalty for violation one as follows:

Penalty = $1,000 [BP] + [(0.1 x $1,000) x (0 + 0 + 0 + 6 + 0)] + $148 [EB]
= $1,000 + ($100 x 6) + $148
= $1,000 + $600 + $148
= $1,748

For violation two, the DEQ again assigned a magnitude of moderate pursuant to OAR 340-012-0045. The base penalty (BP) is $1,000 pursuant to OAR 340-012-0042(3)(a)(A)(ii). The DEQ assigned a value of 6 to the R factor, because the conduct was intentional, in that Respondent made the conscious decision to have McPhail perform work on the system without first obtaining a permit. Respondent was aware of the permit requirement, even if he believed that it was not necessary if the property was located in the county. The DEQ also assigned a value of 2 to the C factor (cooperativeness) because Respondent has yet to submit a complete application and obtain the required permit. Finally, the DEQ determined that the EB factor should be 0 because the delayed cost of obtaining a repair permit was minimal.

The Department calculated Respondent's penalty for violation two as follows:

Penalty = $1,000 [BP] + [(0.1 x $1,000) x (0 + 0 + 0 + 6 + 2)] + $0 [EB]
= $1,000 + ($100 x 8) + 0
= $1,000 + $800 + $0
= $1,800

Based on this record, and in consideration of the DEQ's formula for determining penalties, the proposed total penalty of $3,548 ($1,748 + $1,800) is appropriate.

ORDER

I propose the DEQ issue the following order:

(1) Respondent is subject to a civil penalty in the amount of $1,748 for discharging sewage onto the ground surface in violation of OAR 340-071-0130(3).

(2) Respondent is subject to a civil penalty in the amount of $1,800 for allowing the construction or repair of an onsite sewage disposal system, or part thereof, without obtaining an onsite sewage disposal system repair permit in violation of ORS 454.655(1) and OAR 340-071-0130(15)(a).

(3) Within 20 days of this order becoming final, Respondent is required to

(a) (i) submit a completed repair permit application to the Malheur County Environmental Health Office;

(ii) within 30 days of issuance of the repair permit, complete construction of the system in accordance with the permit;

(iii) within 7 days of completing the repair of the system, request an inspection from the Malheur County Environmental Health Office; and

(iv) obtain a Certificate of Satisfactory Completion; or

(b) decommission the system on the property and provide documentation of such to the DEQ.

Alison Greenlee

Administrative Law Judge
Office of Administrative Hearings

ISSUANCE AND MAILING DATE: September 10, 2008

APPEAL RIGHTS

If you are not satisfied with this decision, you have the right to have the decision reviewed by the Oregon Environmental Quality Commission. To have the decision reviewed, you must file a "Petition for Review" within 30 days of the date this order is served on you as provided in Oregon Administrative Rule (OAR) 340-011-0132(1) and (2). The Petition for Review must be filed with:

Environmental Quality Commission
c/o Stephanie Hallock, Director, DEQ
811 SW Sixth Avenue
Portland, OR 97204.

Within 30 days of filing the Petition for Review, you must also file exceptions and a brief as is provided in OAR 340-011-0132(3). If the petition, exceptions and brief are filed in a timely manner, the Commission will set the matter for oral argument and notify you of the time and place of the Commission's meeting. The requirements for filing a petition, exceptions and briefs are set out in OAR 340-011-0132.

Unless you timely and appropriately file a Petition for Review as set forth above, this Proposed Order becomes the Final Order of the Environmental Quality Commission 30 days from the date of service on you of this Proposed Order. If you wish to appeal the Final Order, you have 60 days from the date the Proposed Order becomes the Final Order to file a petition for review with the Oregon Court of Appeals. See ORS 183.400 et. seq.

APPENDIX A
LIST OF EXHIBITS CITED

Ex. 1: Complaint Form, Malheur County Environmental Health, dated 3/25/2005

Ex. 2: Photos of excavation on Respondent's property, dated 3/2005

Ex. 3; Memo re Complaint, Malheur County Environmental Health, undated

Ex. 4: Letter to Mills from Wickert, dated 8/2005

Ex. 5: Photos of washing machine and hose on Respondent's property, dated 9/2005

Ex. 6: Email to Baggett from Wickert, dated 8/30/2006

Ex. 7: Photos from Wickert's inspection of the property, undated

Ex. 9: Smith Affidavit, dated 5/8/2006

Ex. 10: Pearce Affidavit, dated 5/8/2006

Ex. 12: Warning Letter to Mills from Baggett, dated 6/27/2006

Ex. 13: Pre-Enforcement Notice to Mills from Baggett, dated 8/18/2006

Ex. 14: Letter to Mills from Baggett, dated 11/30/2007

Ex. 15: Economic Benefit Analysis, dated 3/16/2007

CERTIFICATE OF MAILING

On September 10, 2008, I mailed the foregoing Amended Proposed and Final Order in OAH Case No. 700293.

By: First Class and Certified Mail
Certified Mail Receipt #7006 2760 0000 1252 2400

Sherman Mills
1252 SW Fourth Ave
Ontario OR 97914

By: First Class Mail

Bryan Smith
Dept. of Environmental Quality
811 SW 6th St
Portland OR 97204

Pam Arcari
Administrative Specialist
Hearing Coordinator

This hearing decison has been copied to: Jane, field person & his[illegible]r mngr, Staff folder, DA, Business Office, Hearing decision notebook, West Publishing & Lexus Nexus. Let me know if anyone else needs a copy. Amy

BEFORE THE OFFICE OF ADMINISTRATIVE HEARINGS
STATE OF OREGON
for the
THE ENVIRONMENTAL QUALITY COMMISSION

IN THE MATTER OF:	) **PROPOSED AND FINAL ORDER**
	)
SHERMAN DENNIS MILLS	) OAH Case No.: 700293
	) Agency Case No.: WQ/OS-ER-06-225

HISTORY OF THE CASE

On May 18, 2007, the Department of Environmental Quality for the State of Oregon (DEQ or Department) issued a Notice of Violation, Department Order and Assessment of Civil Penalty to Sherman Dennis Mills (Respondent) alleging violations of the DEQ Water Quality Division rules. Respondent timely requested a hearing challenging the violation notice.

On November 8, 2007, the DEQ referred the hearing request to the Office of Administrative Hearings (OAH). Administrative Law Judge (ALJ) Alison Greene Webster was assigned to preside at hearing.

A hearing was held on April 22, 2008, in Ontario, Oregon. Respondent Mills appeared without counsel and testified on his own behalf. The DEQ was represented by case presenter Bryan Smith, who appeared via telephone. The following witnesses testified on behalf of the DEQ: Brian Wickert, former Environmental Health Director for Malheur County; Bud Smith, neighboring landowner; John Pearce, neighboring landowner; and Robert Baggett, DEQ National Resource Specialist. The record closed on April 22, 2008 at the conclusion of the hearing.

ISSUES

1. Whether on, or prior to, March 25, 2005, Respondent or his agent discharged partially treated or untreated sewage onto the ground surface in violation of OAR 340-071-0130(3).

2. Whether on, or prior to, March 25, 2005, Respondent caused or allowed the construction, alteration or repair of an onsite sewage disposal system without first obtaining a permit from the DEQ in violation of ORS 454.655 and OAR 340-071-0130(15)(a).

3. Whether on, or prior to, March 29, 2005, Respondent or his agent connected to or used an onsite sewage disposal system without obtaining a Certificate of Satisfactory Completion in violation of OAR 340-071-0175(6).

4. Whether, on or about September 9, 2005, Respondent failed to connect existing plumbing fixtures from which wastewater or sewage is discharged to a sewage, septic or other

disposal system approved by the DEQ, in violation of ORS 468B.080 and OAR 340-071-0120(2)(b).

5. If one or more violations are established, whether the proposed civil penalty is appropriate.

EVIDENTIARY RULING

Exhibits 1 through 15, offered by the DEQ, were admitted into the record without objection.

FINDINGS OF FACT

1. Respondent Sherman Dennis Mills is the owner of real property located at 3286 NW 4th Avenue in Malheur County, Oregon. There are two mobile homes on the property, which Respondent rents to tenants. There has been a septic tank system in use on the property since approximately 1977. (Test. of Mills.)

2. At some point prior to February 24, 2005, the tenants had problems with the septic system on the property. On February 24, 2005, Respondent had Bud's Septic Tank Service pump out the system. This did not resolve the problem. Therefore, in March 2005, Respondent hired Rick McPhail to perform additional work on the system.[1] Respondent hired McPhail to do the work because he had been with the company that had originally installed the septic system on the property in 1977. (Test. of Mills.)

3. In early March 2005, Bud Smith, who lives across the street from Respondent's property, saw someone (one of the renters, he believed) using a hose to pump sewage from the system. Smith saw that the hose was discharging sewage onto the ground at the rear of the property, close to the abutting property owned by John Pearce. Smith heard the buzz from the pump, and smelled a foul odor, which he attributed to the discharged sewage. He was concerned this discharged sewage would contaminate the neighbor's well and ground water. (Test. of Bud Smith; Ex. 9.)

4. Around that same time, in early March 2005, John Pearce heard the sound of heavy equipment being operated on Respondent's property. He saw a backhoe at work. He also saw an open trench, an uncovered septic tank and a pumping hose inserted into the tank. He noted piles of drain rock and broken pieces of PVC pipe lying near the open trench. Pearce was concerned that Respondent was digging a new drain field without a permit. Pearce was also concerned that sewage was being discharged onto the ground surface and possibly contaminating his drinking water supply. (Test. of Pearce; Ex. 10.)

5. On March 25, 2005, Pearce called the Malheur County Environmental Health office to complain that Respondent was pumping sewage out of the septic tank and onto the ground.

[1] McPhail is not licensed to construct, install or repair onsite wastewater treatment systems in Oregon. (Test. of Baggett.)

Pearce reported that there was "septic running all over the ground" and "it smells awful." (Ex. 1.)

6. That same day, Brian Wickert, the then Environmental Health Director for Malheur County, went to Respondent's property to investigate Pearce's complaint. He saw fresh digging along the entire length and width of the drain field. He took photographs and spoke with one of Respondent's renters. The renter advised that Respondent had installed a new leach line. Wickert gave the renter his contact information and a stop work order. (Test. of Wickert; Exs. 2 and 3.)

7. On March 29, 2005, Wickert met with Respondent at the property. Respondent told Wickert that McPhail had dug up the septic lines to remove roots that were clogging it. Respondent also advised that they had had to dig up the entire drain field. In talking with Respondent's neighbors, Pearce and Smith, the next day, Wickert learned that McPhail had dug a new septic line and installed an infiltrator system on the property. Wickert determined that Respondent had done repair work on the septic system without a permit and in violation of the environmental laws. He asked Respondent to apply for a repair permit and to bring the septic system into compliance with the DEQ's requirements. (Test. of Wickert; Ex. 3.)

8. In August 2005, Wickert followed up with Respondent. He wrote Respondent a letter asking that Respondent apply for a septic repair permit and properly repair the failing system on his property. (Ex. 4.)

9. In early September 2005, Wickert received another environmental health complaint about Respondent's property. The complainant indicated that the tenants were using a washing machine on their front porch that was not connected to the septic system. The complainant asserted that the washer had a hose connected to it that was discharging wastewater to the back of the property. Wickert returned to the property to investigate and take photographs. He saw the washer on the front porch. He saw a hose connected to the washer that terminated in the back yard. He determined that the washer was not connected to the on-site system, but was instead discharging gray water[2] onto the ground surface in the back yard. (Test. of Wickert; Ex. 5.)

10. Although Respondent submitted a permit application for septic repair work in late August or early September 2005, the application was incomplete and he was not issued a permit. (Test. of Baggett.)

11. At some point after his September 2005 visit to Respondent's property, Wickert turned the matter over to the DEQ. On June 27, 2006, Brian Baggett of DEQ's Eastern Region Bend Office wrote Respondent a "Warning Letter" advising Respondent that he was responsible for violations of Oregon environmental law because of the unpermitted installation and/or repair work to the septic system on his property. Baggett requested that, within 45 days, Respondent obtain a repair permit from the Malheur County Environmental Health office and make the

[2] "Gray water" means household sewage other than "black wastes," such as bath water, kitchen waste water, and laundry wastes. OAR 340-071-0100(75).

necessary changes to the property's septic system to obtain a Certificate of Satisfactory Compliance. (Ex. 12.)

12. On August 18, 2006, Baggett sent Respondent a "Pre-Enforcement Notice" in follow up to the June 27, 2006 Warning Letter. The letter advised, in part, as follows:

> I have been informed by Brian Wickert of the County that you have made application for a repair permit but you have not uncovered requested portions of the system so that the County can determine what corrections need to be made to the system. Therefore, you have failed to make the necessary corrections to the system. Because you have not been cooperative with the County and have failed to perform the corrective actions specified in the Warning Letter, I am referring these violations to the Department's Office of Compliance and Enforcement for formal enforcement action, which may include assessment of civil penalties and/or issuance of a Department Order.

(Ex. 13.)

13. On August 29, 2006, Wickert returned to Respondent's property to inspect the system and determine what work needed to be done to bring the system into compliance with the environmental laws. Respondent hired a contractor who dug up portions of the drain field so that Wickert could inspect the system. Wickert found that the infiltrator was installed at approximately 42 to 46 inches to the top of the units, and that the drain field was approximately 60 feet in length. He noted that at approximately 15 feet there was a blue water line lying directly on top of the infiltrator. He saw no odor or discoloration around the units, and found the infiltrator was relatively new and unused. (Test. of Wickert; Ex. 6.)

14. During this inspection, Respondent advised Wickert that the septic system was working "just fine." Respondent also said that he did not get a permit for the work McPhail had performed because the property was outside the city, and he did not realize that the county required a permit for such work. (Test. of Wickert; Ex. 6.)

15. Wickert determined that the infiltration system McPhail installed in 2005 did not meet the applicable state environmental standards because of sizing and depth problems. The system was installed too deep for the water table and was too close to a well on the neighboring property. (Test. of Wickert.)

16. Respondent hired a company to make the repairs to the system to bring it into compliance with DEQ's standards. He submitted a wastewater treatment system repair application, but the DEQ determined that the system proposed by Respondent's installer did not reasonably eliminate the public health hazard. In a November 30, 2007 letter to Respondent, Baggett advised Respondent that, to obtain a permit for the repair work, he would need to submit a detailed set of plans for a sand filter system. The letter set out the minimum system plan requirements that Respondent needed to submit to obtain a permit for the system. The letter

further advised that, in lieu of the repair work, Respondent could elect to decommission the system. (Ex. 14.)

17. Respondent did not respond to the November 30, 2007 letter. He did not submit a detailed plan for repairs or construction of an onsite system that complied with the DEQ's rules. He also did not notify the DEQ of any plan to decommission the system. (Test. of Baggett.) Respondent did not want to spend the money needed to install a sand filter system proposed by DEQ, and is hoping to find a less expensive, yet acceptable alternative onsite wastewater treatment system. (Test. of Mills.)

CONCLUSIONS OF LAW

1. On or prior to March 25, 2005, Respondent or his agent discharged partially treated or untreated sewage onto the ground surface in violation of OAR 340-071-0130(3).

2. On or prior to March 25, 2005, Respondent caused or allowed the construction, alteration or repair of an onsite sewage disposal system without first obtaining a permit from the DEQ in violation of ORS 454.655 and OAR 340-071-0130(15)(a).

3. On or prior to March 29, 2005, Respondent or his agent connected to or used an onsite sewage disposal system without obtaining a Certificate of Satisfactory Completion in violation of OAR 340-071-0175(6).

4. On or about September 9, 2005, Respondent failed to connect existing plumbing fixtures from which wastewater or sewage was or may be discharged to a sewage, septic or other disposal system approved by DEQ, in violation of ORS 468B.080 and OAR 340-071-0120(2)(b).

5. The proposed civil penalty of $3,548 is appropriate.

OPINION

In its notice, the DEQ charged Respondent with four violations of the statutes and rules pertaining to onsite wastewater treatment systems. Specifically, the DEQ asserted that Respondent or his agent: (1) discharged sewage to the ground surface from the septic tank on the property; (2) caused or allowed the construction, alteration or repair of an onsite sewage disposal system without first obtaining a permit; (3) connected to or used an onsite sewage disposal system without first obtaining a Certificate of Satisfactory Completion; and (4) failed to connect the clothes washing machine to an approved system and instead disposed waste water onto the ground surface in the back yard of the property. The DEQ seeks to impose a civil penalty for the first two violations in the total amount of $3,548.

"The burden of presenting evidence to support a fact or position in a contested case rests on the proponent of the fact or position." ORS 183.450(2). As the proponent, the DEQ has the burden of proving its allegations by a preponderance of the evidence. *See Harris v. SAIF*, 292 Or 683, 690 (1982) (general rule regarding allocation of burden of proof is that the burden is on the proponent of the fact or position.); *Cook v. Employment Div.*, 47 Or App 437 (1980) (in the

absence of legislation adopting a different standard, the standard in administrative hearings is preponderance of the evidence). Proof by a preponderance of evidence means that the fact finder is persuaded that the facts asserted are more likely true than false. *Riley Hill General Contractors v. Tandy Corp.*, 303 Or 390 (1989).

In this case, the Department has the burden to prove the alleged violations. After reviewing the record, I conclude that the Department has met its burden.

1. Discharge of sewage onto the ground surface.

Under OAR 340-071-0130(3), certain discharges of wastewater are prohibited: "A person may not discharge untreated or partially treated wastewater or septic tank effluent directly or indirectly onto the ground surface or into public waters. Such discharge constitutes a public health hazard and is prohibited."

Respondent's neighbor, Smith, saw sewage being discharged onto the ground surface on Respondent's property. He smelled the foul odor. Respondent does not dispute that, during March 2005, sewage may have been discharged onto the ground surface while someone was pumping or repairing the septic system on the property. Respondent contends, however, that he did not cause the discharge, and he questions his liability for the actions of others on his property.

Under OAR 340-071-0120(2) each owner of real property is jointly and severally responsible for the following:

> (a) Treating wastewater generated on that property in conformance with the rules adopted by the commission;
>
> (b) Connecting all plumbing fixtures from which wastewater is or may be discharged to a sewerage facility or onsite system approved by the department or an agent;
>
> (c) Maintaining, repairing, and replacing the onsite system on that property as necessary to ensure proper operation of the system; and
>
> (d) Complying with all requirements for construction, installation, maintenance, replacement, and repair of onsite systems required in this division and OAR chapter 340, division 073.

Given this standard, even though Respondent may not have personally caused the discharge, he is responsible for the violation as the property's owner. A violation of OAR 340-071-0130(3) has been established.

2. Failing to obtain a permit for the construction, alteration or repair work.

Pursuant to ORS 454.655(1), a permit from the DEQ is required before constructing or installing an onsite sewage disposal system:

> Except as otherwise provided in ORS 454.675,[3] without first obtaining a permit from the Department of Environmental Quality, no person shall construct or install a subsurface sewage disposal system, alternative sewage disposal system or part thereof. However, a person may undertake emergency repairs limited to replacing minor broken components of the system without first obtaining a permit.

ORS 454.655(2) provides that the permit required by subsection (1) "shall be issued only in the name of an owner or contract purchaser in possession of the land." The administrative rule similarly requires that the permit be issued to the owner of the real property the system will serve. OAR 340-0710-160(1).

The permit requirements for onsite sewage disposal systems are set out in OAR 340-071-0130(15)(a):

> A person may not cause or allow construction, alteration, or repair of a system or any part thereof without a WPCF permit[4] issued under OAR 340-071-0162 or a construction-installation, alteration, or repair permit under OAR 340-071-0210, and 340-0710215 except for emergency repairs authorized under OAR 340-071-0215(1) and (2).

In this case, the evidence establishes that McPhail performed more than emergency repairs on the septic system on Respondent's property. McPhail dug up the entire drain field, replaced pipes, installed new infiltrator components and connected those components to the septic system on the property. Respondent did not obtain a permit before this work was done, and is therefore in violation of ORS 454.655(1) and OAR 340-071-0130(15)(a).

3. Failing to obtain a Certificate of Satisfactory Completion.

Pursuant to OAR 340-071-0175(6), "[a] person may not connect to or use any system completed after January 1, 1974, unless a Certificate of Satisfactory Completion has been issued for the installation or deemed issued by operation of law in accordance with this rule."

The system has been in use on Respondent's property since McPhail installed the infiltration components in March 2005. Respondent told Wickert in August 2006 that the system was working "just fine." Following Wickert's inspection of the system, the DEQ determined that the system does not comply with the applicable standards for onsite subsurface sewage disposal systems. Respondent has not been issued a Certificate of Satisfactory Completion. As

[3] ORS 454.675 sets out exemptions for sewage disposal systems constructed prior to 1974 that are not creating a public health hazard or causing water pollution. The exemptions are not applicable here.

[4] "WPCF permit" means a Water Pollution Control Facilities permit that has been issued under OAR chapter 340, divisions 045 or 071. ORS 371-071-0100 (176).

the property owner, Respondent is responsible for the violation of OAR 340-071-0175(6). OAR 340-071-0120(2).

4. Failing to connect the clothes washer to an approved system.

As set out above, the DEQ also asserts that Respondent violated ORS 468B.080 and OAR 340-071-0120(2)(b) because the clothes washing machine on the front porch of one of the mobile homes was not connected to the onsite system, and was instead discharging wastewater onto the ground surface in the back yard.

ORS 468B.080 provides, in pertinent part, that "all plumbing fixtures in buildings or structures, including prior existing plumbing fixtures from which waste water or sewage is or may be discharged, shall be connected to and all waste water or sewage from such fixtures in buildings or structures shall be discharged into a sewerage system, septic tank system or other disposal system approved by the department." OAR 340-071-0120(2)(b) makes the property owner responsible for connecting plumbing fixtures from which wastewater is or may be discharged to an approved sewerage facility or onsite system.

Respondent asserts that he cannot control the conduct of his renters. Although Respondent may not have been the one using the washer on his property, and he did not personally cause the discharge of gray water onto the ground surface, he is nevertheless responsible for the acts or omissions of his tenants under the environmental laws. The violation of ORS 468B.080 and OAR 340-071-0120(2)(b) has been established.

5. Civil Penalty Assessment.

As previously noted, the DEQ seeks to assess a civil penalty against Respondent for two of the four violations: (1) discharging sewage onto the ground surface and (2) failing to obtain a permit. The DEQ is authorized to assess civil penalties for any violations of its rules or statutes. OAR 340-012-0042 (2004 ed.). The amount of civil penalties assessed is determined through use of a matrix and formula contained in OAR 340-012-0045. *See* OAR 340-012-0042 (2004 ed.)

OAR 340-012-0060 (2004 ed.) sets out the classifications for violations pertaining to onsite sewage disposal systems. Pursuant to subsection (1)(c), it is a Class One violation to install or cause to be installed an onsite sewage disposal system or any part thereof, or repairing any part thereof, without first obtaining a permit. Pursuant to subsection (1)(d), it is a Class One violation to dispose of "septic tank, holding tank, chemical toilet, privy or other treatment facility contents in a manner or location not authorized by the Department."

For the violation of OAR 340-071-0130(3), discharging sewage onto the ground surface, The DEQ seeks a penalty of $1,748. For the violation of ORS 454.655 and OAR 340-071-0160(1), failing to obtain a permit, the DEQ seeks a penalty for $1,800. As explained below, these penalties are appropriate.

The DEQ determined the proposed penalties by calculating the base penalty (BP) and considering other factors, such as prior significant actions (P), past history (H), the number of occurrences (O), the cause of the violation (R), Respondent's level of cooperation (C), the economic benefit that Respondent gained by noncompliance with the Department's rules and statutes (EB), and the magnitude of the violation. The formula for determining civil penalties in this case is expressed as "BP + [(0.1 x BP) x (P + H + O + R + C)] + EB.

For violation one, the DEQ assigned a magnitude of moderate pursuant to OAR 340-012-0045. The base penalty (BP) is $1,000 pursuant to OAR 340-012-0042(3)(a)(A)(ii). The DEQ assigned a value of 6 to the R factor, because the conduct was intentional, in that Respondent's agent intentionally pumped contents of the tank onto the ground surface. The DEQ also determined that Respondent gained an economic benefit (EB) of $148 by not complying with the law, *i.e., i.e.,* by not having the tank pumped again by a licensed pumper. (Ex. 15.)

Using the civil penalty formula, the Department calculated Respondent's penalty for violation one as follows:

Penalty = $1,000 [BP] + [(0.1 x $1,000) x (0 + 0 + 0 + 6 + 0)] + $148 [EB]
= $1,000 + ($100 x 6) + $148
= $1,000 + $600 + $148
= $1,748

For violation two, the DEQ again assigned a magnitude of moderate pursuant to OAR 340-012-0045. The base penalty (BP) is $1,000 pursuant to OAR 340-012-0042(3)(a)(A)(ii). The DEQ assigned a value of 6 to the R factor, because the conduct was intentional, in that Respondent made the conscious decision to have McPhail perform work on the system without first obtaining a permit. Respondent was aware of the permit requirement, even if he believed that it was not necessary if the property was located in the county. The DEQ also assigned a value of 2 to the C factor (cooperativeness) because Respondent has yet to submit a complete application and obtain the required permit. Finally, the DEQ determined that the EB factor should be 0 because the delayed cost of obtaining a repair permit was minimal.

The Department calculated Respondent's penalty for violation two as follows:

Penalty = $1,000 [BP] + [(0.1 x $1,000) x (0 + 0 + 0 + 6 + 2)] + $0 [EB]
= $1,000 + ($100 x 8) + 0
= $1,000 + $800 + $0
= $1,800

Based on this record, and in consideration of the DEQ's formula for determining penalties, the proposed total penalty of $3,548 ($1,748 + $1,800) is appropriate.

ORDER

I propose the DEQ issue the following order:

(1) Respondent is subject to a civil penalty in the amount of $1,748 for discharging sewage onto the ground surface in violation of OAR 340-071-0130(3).

(2) Respondent is subject to a civil penalty in the amount of $1,800 for allowing the construction or repair of an onsite sewage disposal system, or part thereof, without obtaining an onsite sewage disposal system repair permit in violation of ORS 454.655(1) and OAR 340-071-0130(15)(a).

(3) Within 20 days of this order becoming final, Respondent is required to

(a) (i) submit a completed repair permit application to the Malheur County Environmental Health Office;

(ii) within 30 days of issuance of the repair permit, complete construction of the system in accordance with the permit;

(iii) within 7 days of completing the repair of the system, request an inspection from the Malheur County Environmental Health Office; and

(iv) obtain a Certificate of Satisfactory Completion; or

(b) decommission the system on the property and provide documentation of such to the DEQ.

Alison Greene Webster
Administrative Law Judge
Office of Administrative Hearings

ISSUANCE AND MAILING DATE: May 23, 2008

APPEAL RIGHTS

If you are not satisfied with this decision, you have the right to have the decision reviewed by the Oregon Environmental Quality Commission. To have the decision reviewed, you must file a "Petition for Review" within 30 days of the date this order is served on you as provided in Oregon Administrative Rule (OAR) 340-011-0132(1) and (2). The Petition for Review must be filed with:

Environmental Quality Commission
c/o Stephanie Hallock, Director, DEQ
811 SW Sixth Avenue

Portland, OR 97204.

Within 30 days of filing the Petition for Review, you must also file exceptions and a brief as is provided in OAR 340-011-0132(3). If the petition, exceptions and brief are filed in a timely manner, the Commission will set the matter for oral argument and notify you of the time and place of the Commission's meeting. The requirements for filing a petition, exceptions and briefs are set out in OAR 340-011-0132.

Unless you timely and appropriately file a Petition for Review as set forth above, this Proposed Order becomes the Final Order of the Environmental Quality Commission 30 days from the date of service on you of this Proposed Order. If you wish to appeal the Final Order, you have 60 days from the date the Proposed Order becomes the Final Order to file a petition for review with the Oregon Court of Appeals. See ORS 183.400 et. seq.

APPENDIX A
LIST OF EXHIBITS CITED

Ex. 1:	Complaint Form, Malheur County Environmental Health, dated 3/25/2005
Ex. 2:	Photos of excavation on Respondent's property, dated 3/2005
Ex. 3:	Memo re Complaint, Malheur County Environmental Health, undated
Ex. 4:	Letter to Mills from Wickert, dated 8/2005
Ex. 5:	Photos of washing machine and hose on Respondent's property, dated 9/2005
Ex. 6:	Email to Baggett from Wickert, dated 8/30/2006
Ex. 7:	Photos from Wickert's inspection of the property, undated
Ex. 9:	Smith Affidavit, dated 5/8/2006
Ex. 10:	Pearce Affidavit, dated 5/8/2006
Ex. 12:	Warning Letter to Mills from Baggett, dated 6/27/2006
Ex. 13:	Pre-Enforcement Notice to Mills from Baggett, dated 8/18/2006
Ex. 14:	Letter to Mills from Baggett, dated 11/30/2007
Ex. 15:	Economic Benefit Analysis, dated 3/16/2007

CERTIFICATE OF MAILING

On May 23, 2008, I mailed the foregoing Proposed and Final Order in OAH Case No. 700293.

By: First Class and Certified Mail
Certified Mail Receipt #7006 0100 0002 2811 1450

David Coughlin
Attorney at Law
1650 Dewey
PO Box 1026
Ontario OR 97814

By: First Class Mail

Bryan Smith
Dept. of Environmental Quality
811 SW 6th St
Portland OR 97204

Pam Arcari
Administrative Specialist
Hearing Coordinator

RECEIVED
JAN 09 2008
OFFICE OF COMPLIANCE AND ENFORCEMENT
DEPARTMENT OF ENVIRONMENTAL QUALITY

BEFORE THE OFFICE OF ADMINISTRATIVE HEARINGS
STATE OF OREGON
for the
DEPT. OF ENVIRONMENTAL QUALITY

IN THE MATTER OF:	)	**NOTICE OF IN-PERSON HEARING**
	)	
SHERMAN D MILLS	)	OAH Case No.: 700293
	)	Agency Case No.: WQ/OS-ER-06-225

PLEASE TAKE NOTICE that a contested case hearing has been scheduled in the above matter before the Office of Administrative Hearings.

Hearing Date: **April 22, 2008**

Hearing Time: **9:00 am Pacific Time**

Location: **Economic Development Building**
Suite 2
316 NE Goodfellow St
Ontario OR 97914

Your case has been assigned to **Administrative Law Judge Alison Greene Webster** an employee of the Office of Administrative Hearings. The Office of Administrative Hearings is an impartial tribunal, and is independent of the agency proposing the action.

Unless otherwise notified, all correspondence, inquiries, exhibits and filings should be sent to:

Alison Greene Webster
Office of Administrative Hearings
7995 SW Mohawk St.
Tualatin, OR 97062
Fax: (503) 612-4340

OAR 137-003-0520 requires a copy of any correspondence, exhibits or other filings to be provided to all parties and the agency at the same time they are provided to the ALJ. **Please use the OAH case number above on all correspondence and filings.**

A request for reset of the hearing must be submitted in writing prior to the hearing. A postponement request will only be granted on a showing of good cause and with the approval of the administrative law judge.

If you are hearing impaired, need a language interpreter or require another type of accommodation to participate in or attend the hearing, immediately notify the Office of Administrative Hearings at (503) 945-5547 or TDD at 1-800-735-1232 to make the appropriate arrangements. The Office of Administrative Hearings can arrange for an interpreter at the hearing. Interpreters must be certified or qualified in order to participate in a contested case hearing and may not have a conflict of interest with the hearing participants.

You are required to notify the Office of Administrative Hearings at (503) 945-5547 immediately if you change your address or telephone number prior to a decision in this matter.

CERTIFICATE OF MAILING

On January 4, 2008, I mailed the foregoing NOTICE OF IN-PERSON HEARING in OAH Case No. 700293.

By: First Class and Certified Mail
Certified Mail Receipt # 7006 0100 0002 2811 1207

David Coughlin
Attorney at Law
1650 Dewey
PO Box 1026
Baker City OR 97814

By: First Class Mail

Bryan Smith
Dept. of Environmental Quality
300 SE Reed Market Rd
Bend OR 97702

Pam Arcari
Administrative Specialist
Hearing Coordinator

DEPARTMENT OF ENVIRONMENTAL QUALITY HEARINGS

IMPORTANT INFORMATION FOR PREPARING FOR YOUR HEARING

NOTICE OF CONTESTED CASE RIGHTS AND PROCEDURES

Under ORS 183.413(2), you must be informed of the following:

1. Law that applies. The hearing is a contested case and it will be conducted under ORS Chapter 183 and Oregon Administrative Rules of the Department of Environmental Quality, Chapters 137 and 340.

2. Rights to an attorney. You may represent yourself at the hearing, or be represented by an attorney or an authorized representative, such as a partner, officer, or an employee. If you are a company, corporation, organization or association, you must be represented by an attorney or an authorized representative. Prior to appearing on your behalf, an authorized representative must provide a written statement of authorization. If you choose to represent yourself, but decide during the hearing that an attorney is necessary, you may request a recess. About half of the parties are not represented by an attorney. DEQ will be represented by an Assistant Attorney General or an Environmental Law Specialist.

3. Administrative law judge. The person presiding at the hearing is known as the administrative law judge. The administrative law judge is an employee of the Office of Administrative Hearings under contract with the Environmental Quality Commission. The administrative law judge is not an employee, officer or representative of the agency.

4. Appearance at hearing. If you withdraw your request for a hearing, notify either DEQ or the administrative law judge that you will not appear at the hearing, or fail to appear at the hearing, a final default order will be issued. This order will be issued only upon a prima facie case based on DEQ's file. No hearing will be conducted.

5. Address change or change of representative. It is your responsibility to notify DEQ and the administrative law judge of any change in your address or a withdrawal or change of your representative.

6. Interpreters. If you have a disability or do not speak English, the administrative law judge will arrange for an interpreter. DEQ will pay for the interpreter if (1) you require the interpreter due to a disability or (2) you file with the administrative law judge a written statement under oath that you are unable to speak English and you are unable to obtain an interpreter yourself. You must provide notice of your need for an interpreter at least 14 days before the hearing.

7. Witnesses. All witnesses will be under oath or affirmation to tell the truth. All parties and the administrative law judge will have the opportunity to ask questions of all witnesses. DEQ or the administrative law judge will issue subpoenas for witnesses on your behalf if you show that their testimony is relevant to the case and is reasonably needed to establish your position. You are not required to issue subpoenas for appearance of your own witnesses. If you are represented by an attorney, your attorney may issue subpoenas. Payment of witness fees and mileage is your responsibility.

8. Order of evidence: A hearing is similar to a court trial but less formal. The purpose of the hearing is to determine the facts and whether DEQ's action is appropriate. In most cases, DEQ will offer its evidence first in support of its action. You will then have an opportunity to present evidence to oppose DEQ's evidence. Finally, DEQ and you will have an opportunity to rebut any evidence.

9. Burden of presenting evidence. The party who proposes a fact or position has the burden of proving that fact or position. You should be prepared to present evidence at the hearing which will support your position. You may present physical, oral or written evidence, as well as your own testimony.

10. Admissible evidence. Only relevant evidence of a type relied upon by reasonably prudent persons in the conduct of their serious affairs will be considered. Hearsay evidence is not automatically excluded. Rather, the fact that it is hearsay generally affects how much the Commission will rely on it in reaching a decision.

There are four kinds of evidence:

a. Knowledge of DEQ and the administrative law judge. DEQ or the administrative law judge may take "official notice" of conclusions developed as a result of its knowledge in its specialized field. This includes notice of general, technical or scientific facts. You will be informed should DEQ or the administrative law judge take "official notice" of any fact and you will be given an opportunity to contest any such facts.

b. Testimony of witnesses. Testimony of witnesses, including you, who have knowledge of facts may be received in evidence.

c. Writings. Written documents including letters, maps, diagrams and other written materials may be received in evidence.

d. Experiments, demonstrations and similar means used to prove a fact. The results of experiments and demonstrations may be received in evidence if they are reliable.

11. Objections to evidence. Objections to the consideration of evidence must be made at the time the evidence is offered. Objections are generally made on one of the following grounds:

a. The evidence is unreliable;

b. The evidence is irrelevant or immaterial and has no tendency to prove or disprove any issue involved in the case;

c. The evidence is unduly repetitious and duplicates evidence already received.

12. Continuances. There are normally no continuances granted at the end of the hearing for you to present additional testimony or other evidence. Please make sure you have all your evidence ready for the hearing. However, if you can show that the record should remain open for additional evidence, the administrative law judge may grant you additional time to submit such evidence.

13. Record. A record will be made of the entire proceeding to preserve the testimony and other evidence for appeal. This will be done by tape recorder. This tape and any exhibits received in the record will be the whole record of the hearing and the only evidence considered by the administrative law judge. A copy of the tape is available upon payment of a minimal amount, as established by DEQ. A transcript of the record will not normally be prepared, unless there is an appeal to the Court of Appeals.

14. Proposed and Final Order. The administrative law judge has the authority to issue a proposed order based on the evidence at the hearing. The proposed order will become the final order of the Environmental Quality Commission if you do not petition the Commission for review within 30 days of service of the order. The date of service is the date the order is mailed to you, not the date that you receive it. The Department must receive your petition seeking review within 30 days. See OAR 340-011-0132.

15. Appeal. If you are not satisfied with the decision of the Commission, you have 60 days from the date of service of the order, to appeal this decision to the Court of Appeals. See ORS 183.480 *et seq.*

COUGHLIN, LEUENBERGER & MOON P.C.

Lawyers
J. DAVID COUGHLIN, P.C.
MARTIN LEUENBERGER
J. ROBERT MOON, JR.
DOUGLAS J. ROCK

CHRISTOPHER W. ZUERCHER

Ontario Office
153 S.W. First Street
Post Office Box 908
Ontario, Oregon 97914
Phone (541)889-7621
Fax (541)889-7705

RECEIVED
JUL 05 2007
COMPLIANCE
ENFORCEMENT
DEPARTMENT OF ENVIRONMENTAL QUALITY

July 3, 2007

Mr. Dick Pedersen
Deputy Director
Department of Environmental Quality
811 SW 6th Avenue
Portland, OR 97204-1390
VIA FACSIMILE 1-503-229-6762

Re: WQ/OS-ER-06-225
Malheur County

ANSWER & REQUEST FOR HEARING

We represent Mr. Mills who received a Notice of Violation. We are replying within the 20-day mandatory period.

In answer to your various allegations:

1) It is my understanding that Mr. Mills has obtained a permit. Because I do not know all of the details, I am presuming this has been corrected.

2) Mr. Mills knows nothing about pumping the sewage. He did not authorize it if it was done and did not have any knowledge of it. We are checking with a person who did some work for Mr. Mills to see if he actually did that, but Mr. Mills denies it because he does not know anything about it.

3) With regard to operating an on-site sewage disposal system, this presents a serious problem. The system has been in place for a number of years. He was told not to do anything about this several years ago by a representative of your department, and, accordingly, was simply complying. We need to determine what needs to be done.

4) There is an allegation that there was a clothes washing machine putting gray water on the property. Again, he was not aware of that. If it happened, a renter apparently was doing it, and that situation no longer exists. Unfortunately, he does not have control on a day-to-day, hour-to-hour basis of his renters.

There are a number of mitigating factors in this, including his putting up needy families in appropriate housing when they are unable to obtain other housing. These facilities provide a needed number of rooms which the occupants may not otherwise be able to obtain.

Additionally, requiring a complete re-do of the system would be so onerously expensive that you would have to shut down his whole facility. This would cause substantial economic hardship.

On behalf of Mr. Mills, we are requesting an informal discussion in addition to a contested case hearing. In that particular, I would appreciate it if you would send me:

1) Copies of all reports received by the Department from any source whatsoever, regarding Mr. Mill's property;

2) Any photographs you may have;

3) Any notes or interviews from any third parties with regard to this;

4) Any maps or diagrams of the property showing exactly what the problem is with the system;

5) Any suggested changes which can be made to bring this matter into compliance, presuming it is not within compliance. Additionally, any photographs or maps would be helpful to me in this regard.

6) Copies to/from Mr. Mills.

I will look forward to receiving this material from you and I assure you that we will cooperate to bring this matter to an appropriate conclusion.

Thank you very much.

Very truly yours,

Dictated and mailed without attorney's signature in his absence to avoid delay

J. David Coughlin
Attorney at Law

Cc: Dennis Mills

Oregon
Theodore R. Kulongoski, Governor

Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204-1390
503-229-5696
TTY: 503-229-6993

May 18, 2007

CERTIFIED MAIL NO. 7000 0520 0012 1762 3592

Sherman Dennis Mills
1252 SW Fourth Avenue
Ontario, OR 97914

Re: Notice of Violation, Department Order and Assessment of Civil Penalty
No. WQ/OS-ER-06-225
Malheur County

Dear Mr. Mills:

On March 25, 2005, the Malheur County Environmental Health office (the County) received a complaint about an onsite sewage disposal system serving rental property you own at 3286 N.W. Fourth Avenue in Ontario, Oregon (the Property). The complaint alleged that repairs were being performed even though you had not obtained the required permit for that work. The complaint also alleged that the sewage from the septic tank was being pumped onto the ground surface.

On March 29, 2005, you met with Brian Wickert of the County at the Property. You explained that you were trying to alleviate problems you were having with the septic system. First, you had your worker pump the septic tank. When this did not help, your worker dug up a portion of the drainfield to search for roots, then installed new components and connected those components to the septic system. Your actions violate several provisions of Oregon law.

First, Oregon law requires that a permit be issued before an onsite sewage disposal system can be repaired or installed. The permit process ensures that the system will be sited properly and will meet engineering and construction standards. An improperly constructed onsite sewage disposal system may not function properly and may create a public health hazard through inadequate treatment and distribution of sewage effluent. You caused or allowed the installation or repair of an onsite sewage disposal system without a permit, and this is a Class I violation of Oregon's environmental laws.

Second, when you allowed your worker to pump the sewage from the septic tank onto the ground surface, you caused the illegal discharge of untreated or partially treated sewage to the ground surface. Sewage that is discharged to the ground surface presents a potential public health threat through direct human contact or through contact with insects that have been in contact with the sewage. For this reason, discharging sewage onto the ground surface is a serious violation of Oregon's environmental laws.

Third, you have been operating the onsite sewage disposal system at the Property without a Certificate of Satisfactory Completion (CSC) since at least March 29, 2005. Your continued

operation of the unapproved septic system at the Property is a violation of Oregon's environmental laws.

Finally, on September 6, 2005, Mr. Wickert observed that a clothes washing machine on the front porch of the residence at the Property was not connected to an approved onsite sewage disposal system, and instead had a hose connected to it that terminated in the back yard of the Property. The wastewater from the washing machine is sewage, and your failure to connect existing plumbing fixtures from which wastewater or sewage is or may be discharged to a sewerage system, septic tank system or other disposal system approved by the Department is an additional violation of Oregon's environmental laws.

On June 27, 2006, the Department of Environmental Quality (the Department) sent you a "Warning Letter with Opportunity to Correct." The Warning Letter informed you that if you did not obtain a repair permit from the County, and make the necessary repairs to obtain a CSC by August 11, 2006, you would be referred for formal enforcement action. You did not obtain a repair permit or a CSC, and on August 18, 2006, the Department sent you a "Pre-Enforcement Notice" informing you that you were being referred for formal enforcement.

In the enclosed Notice and Order, the Department has assessed a civil penalty of $3,548. The amount of the penalty was determined using the procedures set forth in OAR 340-012-0045. The Department's findings and civil penalty determination are attached to the Notice and Order as Exhibit Nos. 1 and 2.

In addition to the civil penalty assessment, the enclosed Order (Section V) requires you to take one of the following actions within twenty (20) days of receiving this Notice and Order: either (1) submit a completed repair permit application to the County, complete the necessary repairs within thirty (30) days of issuance of the repair permit, request an inspection from the County and obtain a CSC for the septic system within 7 days of completing repairs; or (2) permanently cap the onsite sewage disposal system at the Property and provide documentation of this action to the Department.

The steps you must follow to request a review of the Department's allegations and determinations in this matter are set forth in Section VI of the enclosed Notice and Order. If you wish to have a hearing on this matter, you must specifically request a hearing in writing. Attached to the hearing request must be your Answer in which you admit or deny each of the facts alleged in Sections II and III of the Notice and Order. In your Answer, you should also allege all affirmative defenses and provide reasons why they apply in this matter. You will not be allowed to raise these issues at a later time, unless you can show good cause for your failure.

The applicable rules are enclosed for your review. You need to follow the rules to ensure that you do not lose your opportunity to dispute the Department's findings (see OAR 340-011-0530 and OAR 137-003-0528). If the Department does not receive your request for a hearing and Answer within **20 calendar days** from the date you received the Notice and Order, a Default Order will be entered against you and the civil penalty and Order will become final and enforceable at that time. You can fax your request for hearing and Answer to the Department at (503) 229-6762.

If you wish to discuss this matter, or believe there are mitigating factors which the Department might not have considered in assessing the civil penalty, you may request an informal discussion by attaching the request to your appeal. Your request to discuss this matter with the Department will not waive your right to a contested case hearing.

I look forward to your cooperation in complying with Oregon's environmental laws in the future. However, if any additional violations occur, you may be assessed additional civil penalties.

If you have any questions about this action, please contact Bryan Smith with the Department's Office of Compliance and Enforcement in Bend at 541-388-6146, extension 245.

Sincerely,

Dick Pedersen

Dick Pedersen
Deputy Director

Enclosures

cc: Robert Baggett, Eastern Region, Bend Office, DEQ
Brian Wickert, Malheur County Environmental Health Office
Water Quality Division, DEQ
Oregon Department of Justice
Malheur County District Attorney

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

IN THE MATTER OF: SHERMAN DENNIS MILLS, Respondent.	)	NOTICE OF VIOLATION, DEPARTMENT ORDER AND ASSESSMENT OF CIVIL PENALTY No. WQ/OS-ER-06-225 MALHEUR COUNTY

I. AUTHORITY

This Notice of Violation, Department Order and Assessment of Civil Penalty (Notice and Order) is issued to Respondent, Sherman Dennis Mills, by the Department of Environmental Quality (Department) pursuant to Oregon Revised Statutes (ORS) 468.100 and ORS 468.126 through 468.140, ORS Chapter 183; and Oregon Administrative Rules (OAR) Chapter 340, Divisions 11 and 12.

II. FINDINGS AND VIOLATIONS

1. On or prior to March 25, 2005, Respondent discharged partially treated or untreated sewage directly or indirectly onto the ground surface, in violation of OAR 340-071-0130(3). Specifically, Respondent or his agent, Rick McVail, used a hose to discharge sewage to the ground surface from the septic tank of an onsite sewage disposal system serving property owned by Respondent and located at 3286 N.W. Fourth Avenue in Ontario, Oregon (the Property). According to OAR 340-012-0060(1)(d), this is a Class I violation.

2. On or prior to March 25, 2005, Respondent caused or allowed the construction, alteration, or repair of an onsite sewage disposal system, or a part thereof, without first applying for and obtaining a permit from the Department, in violation of ORS 454.655(1) and OAR 340-071-0130(15)(a). Specifically, Respondent allowed Rick McVail to dig up a portion of the drainfield of the onsite sewage disposal system at the Property, then install infiltrator components and connect those components to the onsite sewage disposal system at the Property. Respondent caused or allowed these repairs or alterations to be performed without first obtaining

a permit from the Department or its Agent. Respondent has not obtained the required permit. According to OAR 340-012-0060(1)(c), this is a Class I violation.

3. On or prior to March 29, 2005 through the present, Respondent connected to or used an onsite sewage disposal system without first obtaining a Certificate of Satisfactory Completion (CSC), in violation of OAR 340-071-0175(6). Specifically, Respondent connected to or used an onsite sewage disposal system at the Property without first obtaining a CSC, and Respondent still has not obtained a CSC. According to OAR 340-012-0060(2)(c), this is a Class II violation.

4. On or about September 9, 2005, Respondent failed to connect existing plumbing fixtures from which wastewater or sewage is or may be discharged to a sewerage system, septic tank system or other disposal system approved by the Department, in violation of ORS 468B.080 and OAR 340-071-0120(2)(b). Specifically, the clothes washing machine on the front porch of Respondent's Property was not connected to an approved system, and instead had a hose connected to it that terminated in the back yard of the Property. According to OAR 340-012-0060(2)(g), this is a Class II violation.

III. ASSESSMENT OF CIVIL PENALTY

The Department imposes a civil penalty for the violations cited in Section II, Paragraphs 1 and 2 as follows:

Violation	Penalty Amount
1	$1,748
2	$1,800

Respondent's total civil penalty is $3,548.

The findings and determination of the amount of Respondent's civil penalty, pursuant to OAR 340-012-0045, are attached and incorporated as Exhibit Nos. 1 and 2.

/////

/////

/////

IV. DEPARTMENT ORDER

Based upon the foregoing FINDINGS AND VIOLATIONS, Respondent is hereby ORDERED TO:

1. Immediately initiate actions necessary to correct all of the above-cited violations and come into full compliance with Oregon's laws and rules.

2. Immediately cease discharging sewage to the ground surface of the Property; fence off the area of discharge; and treat with lime any and all areas on which sewage has been discharged.

3. Within twenty (20) days of receipt of this Notice and Order, take one of the following actions:

A. i. Submit a completed repair permit application to the Malheur County Environmental Health Office, located at 251 B Street West, #9 in Vale, Oregon 97918;

ii. Within thirty (30) days of issuance of the repair permit, complete construction of the system repairs in accordance with the repair permit;

iii. Within seven (7) days of completing repair of the system, request an inspection from the Malheur County Environmental Health Office; and

iv. Obtain a Certificate of Satisfactory Completion; or

B. Permanently cap the onsite sewage disposal system serving the property and provide documentation to the Department.

V. OPPORTUNITY FOR CONTESTED CASE HEARING

Respondent has the right to have a contested case hearing before the Environmental Quality Commission (Commission) or its hearings officer regarding the matters contained in this Notice and Order, provided Respondent files a written request for a hearing and an Answer within **twenty (20) calendar days** from the date of service of this Notice and Order. Pursuant to OAR 340-011-0530(4), if Respondent fails to file a timely request for a hearing, the late filing will not be allowed unless the late filing was beyond Respondent's reasonable control. Pursuant to OAR 137-003-

0528(1), if Respondent fails to file a timely Answer, the late filing will not be allowed unless Respondent can show good cause for the late filing.

The request for a hearing must either specifically request a hearing or state that Respondent wishes to appeal this Notice and Order. In the written Answer, Respondent must admit or deny each allegation of fact contained in this Notice and Order, and must specifically state all affirmative defenses to the assessment of the civil penalty that Respondent may have and the reasoning in support of any defenses. The contested case hearing will be limited to those issues raised in this Notice and Order and in the Answer. Unless Respondent is able to show good cause:

1. Factual matters not denied in a timely manner will be considered admitted;

2. Failure to timely raise a defense will waive the ability to raise that defense at a later time;

3. New matters alleged in the Answer will be presumed to be denied by the Department unless admitted in subsequent pleading or stipulation by the Department or Commission.

Send the request for hearing and Answer to: **Deborah Nesbit, Oregon Department of Environmental Quality, 811 S.W. 6th Avenue, Portland, Oregon 97204 or via fax at 503-229-6762.** Following the Department's receipt of a request for hearing and an Answer, Respondent will be notified of the date, time and place of the hearing.

Failure to file a timely request for hearing or an Answer may result in the entry of a Default Order for the relief sought in this Notice and Order.

Failure to appear at a scheduled hearing may result in an entry of a Default Order.

The Department's case file at the time this Notice and Order was issued may serve as the record for purposes of entering a Default Order.

VI. OPPORTUNITY FOR INFORMAL DISCUSSION

In addition to filing a request for a contested case hearing, Respondent may also request an informal discussion with the Department by attaching a written request to the hearing request and Answer.

VII. PAYMENT OF CIVIL PENALTY

The civil penalty is due and payable ten (10) days after an Order imposing the civil penalty becomes final by operation of law or on appeal. Respondent may pay the penalty before that time. Respondent's check or money order in the amount of $3,548 should be made payable to **"State Treasurer, State of Oregon"** and sent to the **Business Office, Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204**

5/18/07
Date

Dick Pedersen
Deputy Director

EXHIBIT 1

FINDINGS AND DETERMINATION OF RESPONDENT'S CIVIL PENALTY PURSUANT TO OREGON ADMINISTRATIVE RULE (OAR) 340-012-0045

VIOLATION 1: Discharging untreated or partially treated sewage directly onto the ground surface, in violation of Oregon Administrative Rule (OAR) 340-071-0130(3).

CLASSIFICATION: This is a Class I violation pursuant to OAR 340-012-0060(1)(d).

MAGNITUDE: The magnitude of the violation is moderate pursuant to OAR 340-012-0130(1), as there is no selected magnitude specified in OAR 340-012-0135 for this violation, and the information reasonably available to the Department does not indicate a minor or major magnitude.

CIVIL PENALTY FORMULA: The formula for determining the amount of penalty of each violation is:

$$BP + [(0.1 \times BP) \times (P + H + O + R + C)] + EB$$

"BP" is the base penalty, which is $1,000 for a Class I moderate magnitude violation in the matrix listed in OAR 340-012-0042(3)(a)(A)(ii) and applicable pursuant to OAR 340-012-0042(3)(b)(A).

"P" is Respondent's prior significant actions and receives a value of 0 pursuant to OAR 340-012-0045(1)(c)(A)(i), because there are no prior significant actions.

"H" is the past history of Respondent in taking all feasible steps or procedures necessary to correct any prior significant actions and receives a value of 0 pursuant to OAR 340-012-0045(1)(c)(B)(ii), because there is no prior history.

"O" is whether or not the violation was repeated or continuous and receives a value of 0 according to OAR 340-012-0045(1)(c)(C)(i), because the violation existed for one day or less and did not recur on the same day.

"R" is the cause of the violation and receives a value of 6 pursuant to OAR 340-012-0045(1)(c)(D)(iii), because Respondent's conduct was intentional. Respondent or his agent intentionally inserted a hose into Respondent's septic tank and intentionally pumped the contents of the septic tank onto the ground surface of Respondent's property. Respondent had the conscious objective of discharging sewage to the ground surface of the property.

"C" is Respondent's cooperativeness in correcting the violation and receives a value of 0 according to OAR 340-012-0045(1)(c)(E)(ii), because the violation could not be corrected.

"EB" is the approximate economic benefit that an entity gained by not complying with the law. It is designed to "level the playing field" by taking away any economic advantage the entity gained and to deter potential violators from deciding it is cheaper to violate and pay the penalty than to pay the costs of compliance. In this case, "EB" receives a value of $148. This is the amount Respondent gained by not spending $230 to have the sewage in his septic tank pumped and properly disposed

of by a licensed pumper. This cost should have been incurred on or before March 25, 2005. This "EB" was calculated pursuant to OAR 340-012-0150(1) using the U.S. Environmental Protection Agency's BEN computer model.

PENALTY CALCULATION:

Penalty = BP + [(0.1 x BP) x (P + H + O + R + C)] + EB
= $1,000 + [(0.1 x $1,000) x (0 + 0 + 0 + 6 + 0)] + $148
= $1,000 + [($100) x (6)] + $148
= $1,000 + $600 + $148
= $1,748

EXHIBIT 2

FINDINGS AND DETERMINATION OF RESPONDENT'S CIVIL PENALTY PURSUANT TO OREGON ADMINISTRATIVE RULE (OAR) 340-012-0045

VIOLATION 2: Causing or allowing the construction or the repair of an onsite sewage disposal system, or part thereof, without obtaining an on-site sewage disposal system repair permit, in violation of Oregon Revised Statute (ORS) 454.655(1) and Oregon Administration Rule (OAR) 340-071-0130(15)(a).

CLASSIFICATION: This is a Class I violation pursuant to OAR 340-012-0060(1)(c).

MAGNITUDE: The magnitude of the violation is moderate pursuant to OAR 340-012-0130(1), as there is no selected magnitude specified in OAR 340-012-0135 for this violation, and the information reasonably available to the Department does not indicate a minor or major magnitude.

CIVIL PENALTY FORMULA: The formula for determining the amount of penalty of each violation is: $BP + [(0.1 \times BP) \times (P + H + O + R + C)] + EB$

"BP" is the base penalty, which is $1,000 for a Class I moderate magnitude violation in the matrix listed in OAR 340-012-0042(3)(a)(A)(ii) and applicable pursuant to OAR 340-012-0042(3)(b)(A).

"P" is Respondent's prior significant actions and receives a value of 0, as Respondent has no prior significant actions as defined in OAR 340-012-0030(14).

"H" is the past history of Respondent in taking all feasible steps or procedures necessary to correct any prior significant actions and receives a value of 0, as Respondent has no prior significant actions.

"O" is whether or not the violation was repeated or continuous and receives a value of 0 according to OAR 340-012-0045(1)(c)(C)(i), because the violation existed for one day or less and did not recur on the same day.

"R" is the cause of the violation and receives a value of 6 pursuant to OAR 340-012-0045(1)(c)(D)(iii), because Respondent's conduct was intentional. Respondent had the conscious objective of repairing an onsite sewage disposal system without obtaining the required permit. Respondent was aware of the permit requirement, but chose to cause or allow the repairs to be performed without first obtaining the required permit.

"C" is Respondent's cooperativeness in correcting the violation and receives a value of 2 pursuant to OAR 340-012-0045(1)(c)(E)(iii), because Respondent has failed to take reasonable efforts to correct the violation. Respondent was notified in writing in August 2005, June 2006 and August 2006 that he must apply for and obtain a repair permit for his septic system. Respondent applied for a repair permit in July 2006, but the application was incomplete and Respondent still has not obtained the required permit.

"EB" is the approximate dollar sum of the economic benefit pursuant to OAR 340-012-0045(1)(c)(F) that the Respondent gained through noncompliance and receives a value of $0 because the delayed cost of obtaining a repair permit was de minimis.

PENALTY CALCULATION:

Penalty = BP + [(0.1 x BP) x (P + H + O + R + C)] + EB
= $1,000 + [(0.1 x $1,000) x (0 + 0 + 0 + 6 + 2)] + $0
= $1,000 + [($100) x (8)] + $0
= $1,000 + $800 + $0
= $1,800

MALHEUR COUNTY ENVIRONMENTAL HEALTH
251 B Street West, #9 _ Vale, Oregon 97918 _ (541) 473-5186 _ Fax (541) 473-5168

COMPLAINT FORM

COMPLAINT:

Neighbor has septic running all over the ground. It smells awful. He dug a new leach line a day or two ago. He doesn't have any permits. He is pumping the sewage out of the septic tank and onto the ground.

Neighbor's name is Mills.

LOCATION: 3286/3310 NW 4th Avenue, Ontario

DATE REPORTED: March 25, 2005

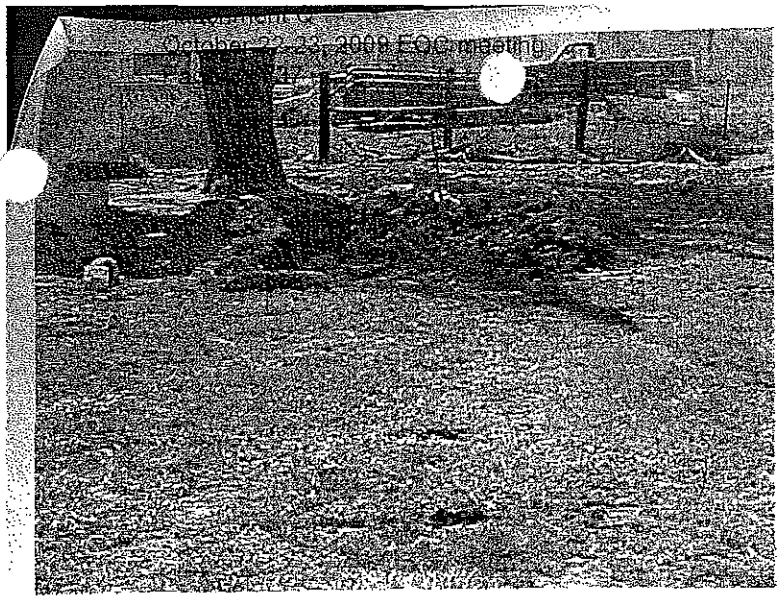
REPORTED TO: Barb

COMPLAINANT:

NAME: John Pearce
ADDRESS: 3250 NW 4th Avenue
Ontario OR 97914
PHONE: 541-881-1153

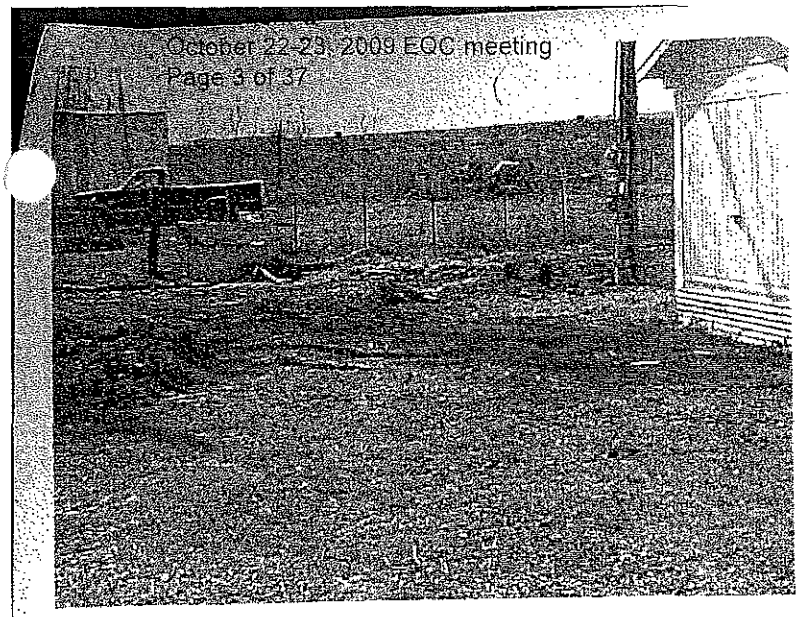
ACTION TAKEN:

RECEIVED
APR 17 2008
Eastern Region - Bend



March 05

Ex. 2-1



MALHEUR COUNTY ENVIRONMENTAL HEALTH
251 B Street West, #9 ■ Vale, Oregon 97918 ■ (541) 473-5186 ■ Fax (541) 473-5168

Complainants: John Pearce
3250 NW 4th Avenue
Ontario, Oregon 97914
(541) 881-1153

Bud Smith
3261 NW 4th Avenue
Ontario, Oregon 97914

Complaint: Both complainants claim that their neighbor (rental home owned by Dennis Mills, (541) 889-7697 or (208) 230-7697) was illegally installing a drain field and possibly pumping raw sewage on the ground.

On March 25, 2005 our office received a call from Mr. Pearce regarding his neighbor's digging of a new drain field on March 24, 2005, and possibly pumping raw sewage out of the tank onto his property. The same day we traveled to 3286 NW 4th Avenue in Ontario. When we arrived we noticed that there was fresh digging along the entire length and width of the drain field. We approached the home and talked to the renter. The renter stated that the owner had added a new leach line. A business card with our information was left, as was a stop work order.

On March 29, 2005 Mr. Mills called our office and wanted to meet with us regarding the situation. We went to the property in question and met with Mr. Mills and the gentleman that did the work (Rick is all that we know). Mr. Mills stated that they had the septic tank pumped to alleviate the problem with the system. This did not seem to help. Therefore, they dug up the lines, and found that a root had clogged the drain line. They claim that they had to dig up the entire drain field in order to check for more roots.

On March 30, 2005 we met with John Pearce and Bud Smith. Both parties claim that they saw a backhoe working in the yard, and digging up the septic drain field. Mr. Smith stated that he saw a load of gravel being delivered by a concrete truck, the digging of a new line, the installation of an Infiltrator system, and the pumping of effluent on Mr. Pearce's property.

MALHEUR COUNTY ENVIRONMENTAL HEALTH
251 B Street West, #9 , Vale, Oregon 97918 , (541) 473-5186 , Fax (541) 473-5168

August/2005

Sherman Mills
1252 S.W. 4th Ave.
Ontario, OR 97914

RE: Illegal Septic repair
T18, R47, Sec.16 Tax Lot 1800, 3286 & 3287 N.W. 4th Ave.

Dear Mr. Mills:

On March 29, 2005 I met with you at your rentals (referenced above) regarding the illegal septic repair that took place on 3-24-05. According to our conversation I believe that you illegally repaired your septic system. During our conversation you said that you would apply for a repair permit and correctly fix the system this summer (2005.) So, with this said please contact my office by August 26, 2005 to apply for a septic repair permit. Upon application you have thirty days to repair the failing system. A prompt response will prevent any citations.

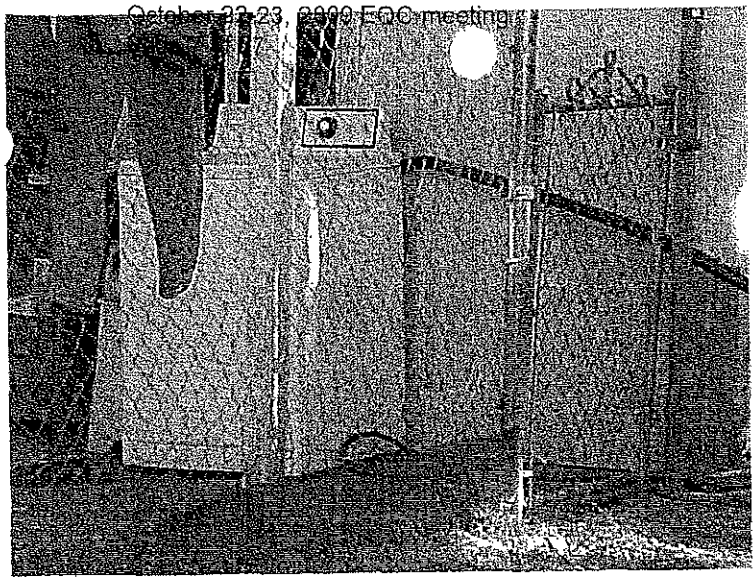
If you have any questions please call me at (541) 473-5186.

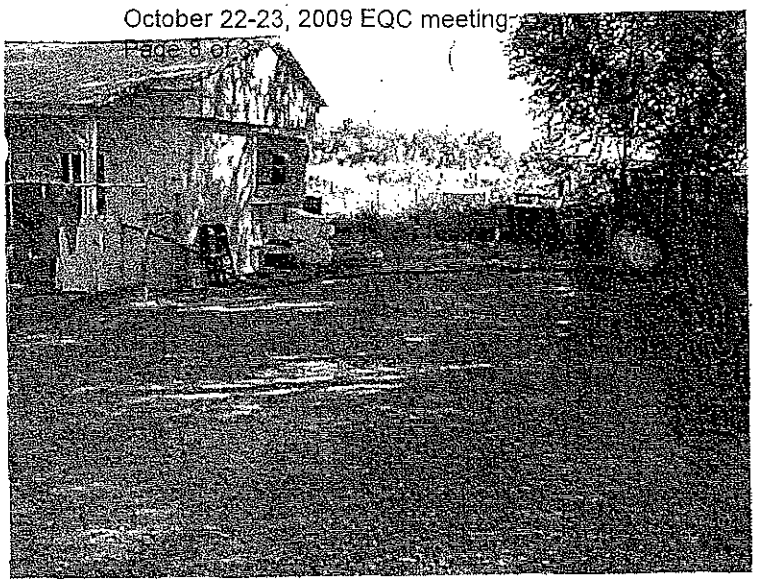
Sincerely,

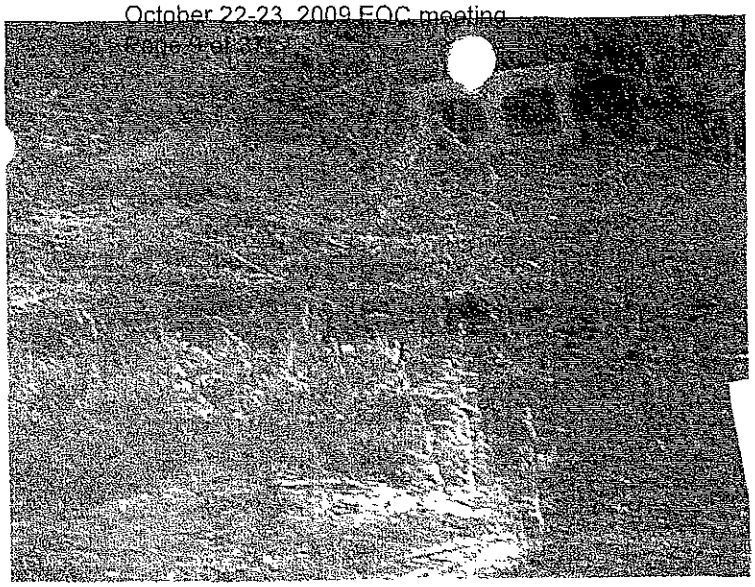
Brian D. Wickert
Environmental Health Specialist
Director of Environmental Health

The following pictures were taken by Brian Wickert of Malheur Co. on or a day or two before September 9, 2005 at the Sherman Mills rental property at 3286 N.W. 4th Ave Ontario, OR 97914. They were sent to Robert Baggett with the DEQ via e-mail on September 9, 2005.

Attachment Q
October 23-23, 2009 EOC meeting







Washer Pipe going into backyard

BAGGETT Robert

From: WICKERT Brian
Sent: Wednesday, August 30, 2006 8:57 AM
To: BAGGETT Robert
Subject: Mills

Bob,
Yesterday (8-29-06) I met an installer at Mr. Mills's property. We dug up the beginning and end of the drain field. We found the drain field to be infiltrator installed at about 42-46 inches to the top of the units. The drain field is approximately 60 feet in length. At about 15 feet there is a blue water line lying directly on top of the infiltrator. The infiltrator looks relatively new and unused. There was no odor or discoloration around the units. Mr. Mills was concerned why he had to dig up the drain field and who complained. He also could not understand what was wrong with the system it was working fine. He said that the system was installed in 2003 by Rick McVall and that in March of 2005 Rick was just removing roots from the system. He did not get a permit because it was out of the city and he did not think anyone cared about the County.

SMITH Bryan

From: WICKERT Brian
Sent: Monday, October 30, 2006 10:04 AM
To: SMITH Bryan
Subject: RE: mills: 3/29/05

Here is some pictures of when I went out to Mills to dig up his system.

-----Original Message-----
From: SMITH Bryan [mailto:SMITH.Bryan@deq.state.or.us]
Sent: Monday, October 30, 2006 9:51 AM
To: WICKERT Brian
Subject: RE: mills: 3/29/05

Thanks Brian.

-----Original Message-----
From: WICKERT Brian
Sent: Monday, October 30, 2006 8:43 AM
To: SMITH Bryan
Subject: RE: mills: 3/29/05

It looks like Eric wrote the memo

From: SMITH Bryan [mailto:SMITH.Bryan@deq.state.or.us]
Sent: Thursday, October 26, 2006 9:35 AM
To: WICKERT Brian
Cc: SMITH Bryan
Subject: RE: mills: 3/29/05

Thanks Brian. Can you please show the memo to Eric and see if you can figure out which one of you wrote it?

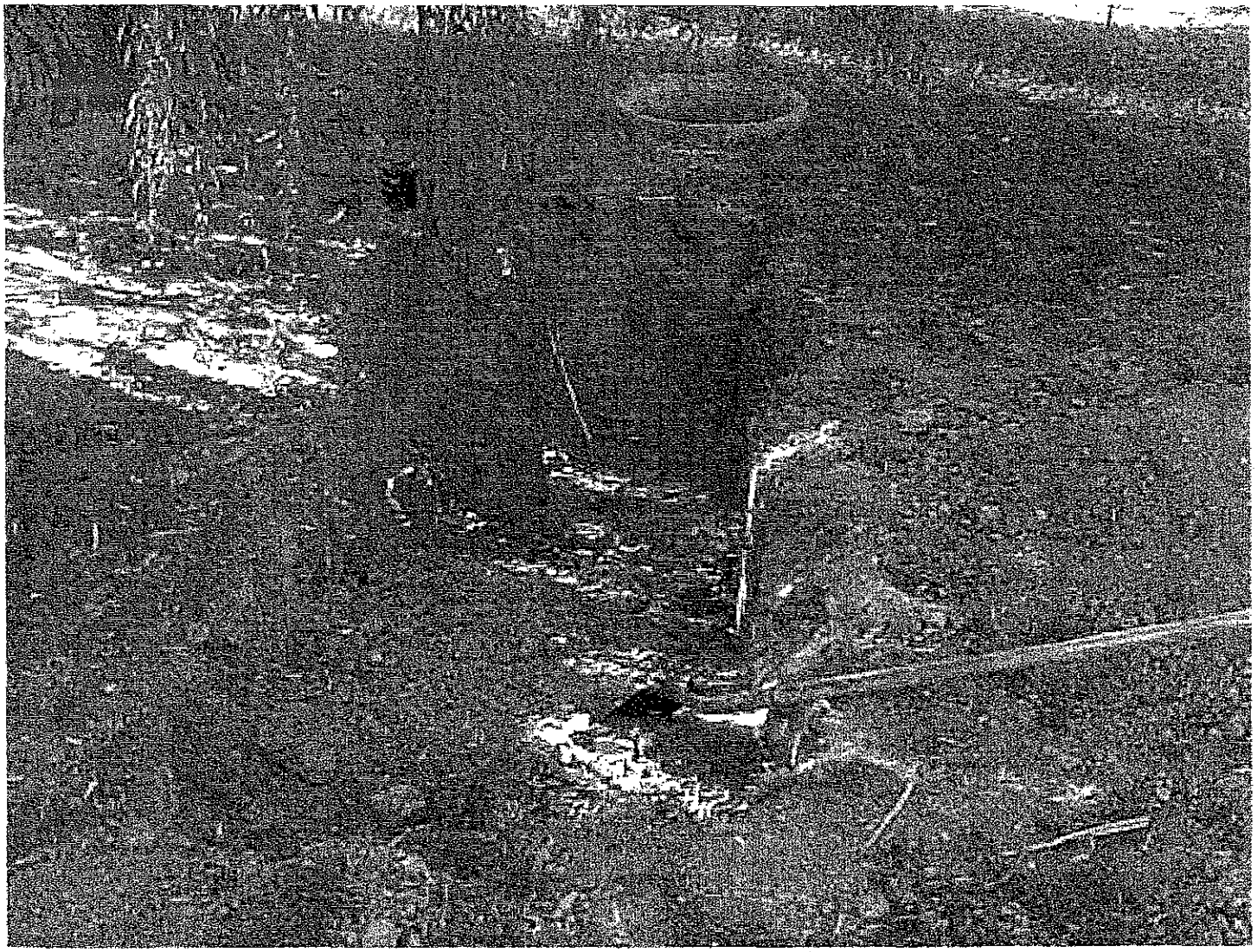
-----Original Message-----
From: WICKERT Brian
Sent: Thursday, October 26, 2006 6:26 AM
To: SMITH Bryan; 'SMITH Bryan'
Cc: 'BAGGETT Robert'
Subject: RE: mills: 3/29/05

I am not sure who wrote the memo it was either Eric Evans or myself. Eric is the other EHS in my office.

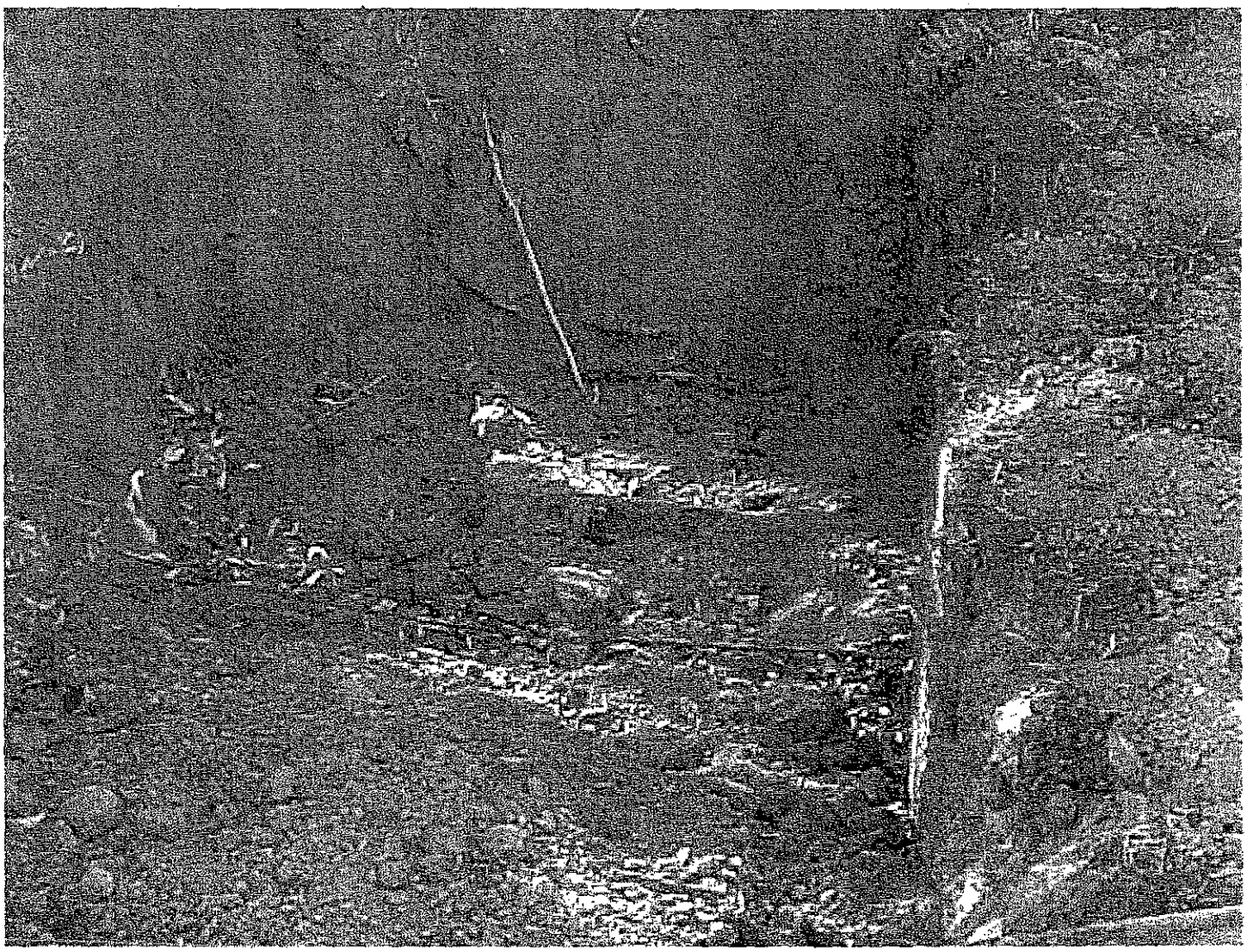
From: SMITH Bryan [mailto:SMITH.Bryan@deq.state.or.us]
Sent: Wednesday, October 25, 2006 10:03 AM
To: SMITH Bryan; WICKERT Brian
Cc: BAGGETT Robert
Subject: RE: mills: 3/29/05

Brian, there is a memo in the file that says that on the above date "we" went to Mills' property and spoke with him.

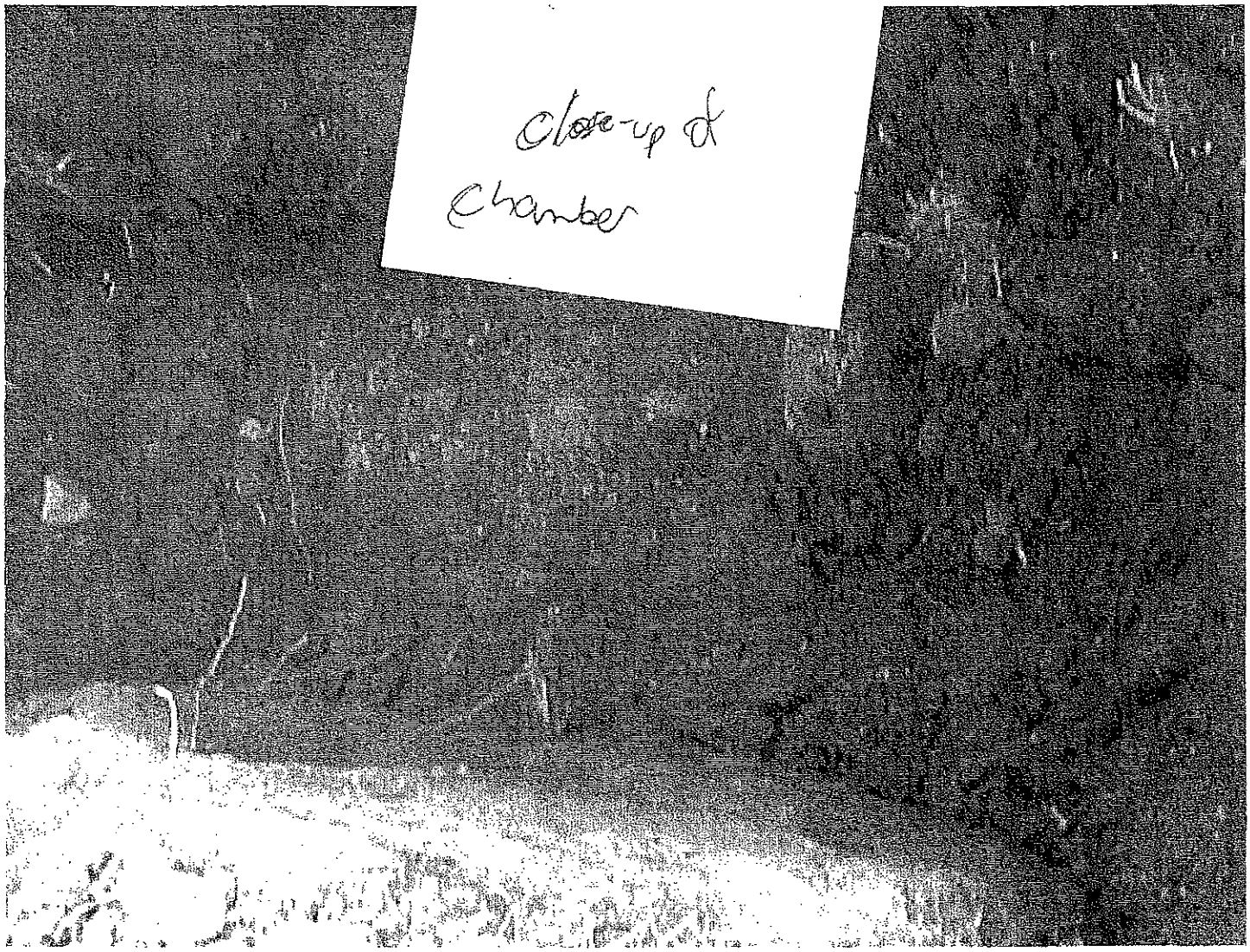
Who wrote this memo, and who is "we"?

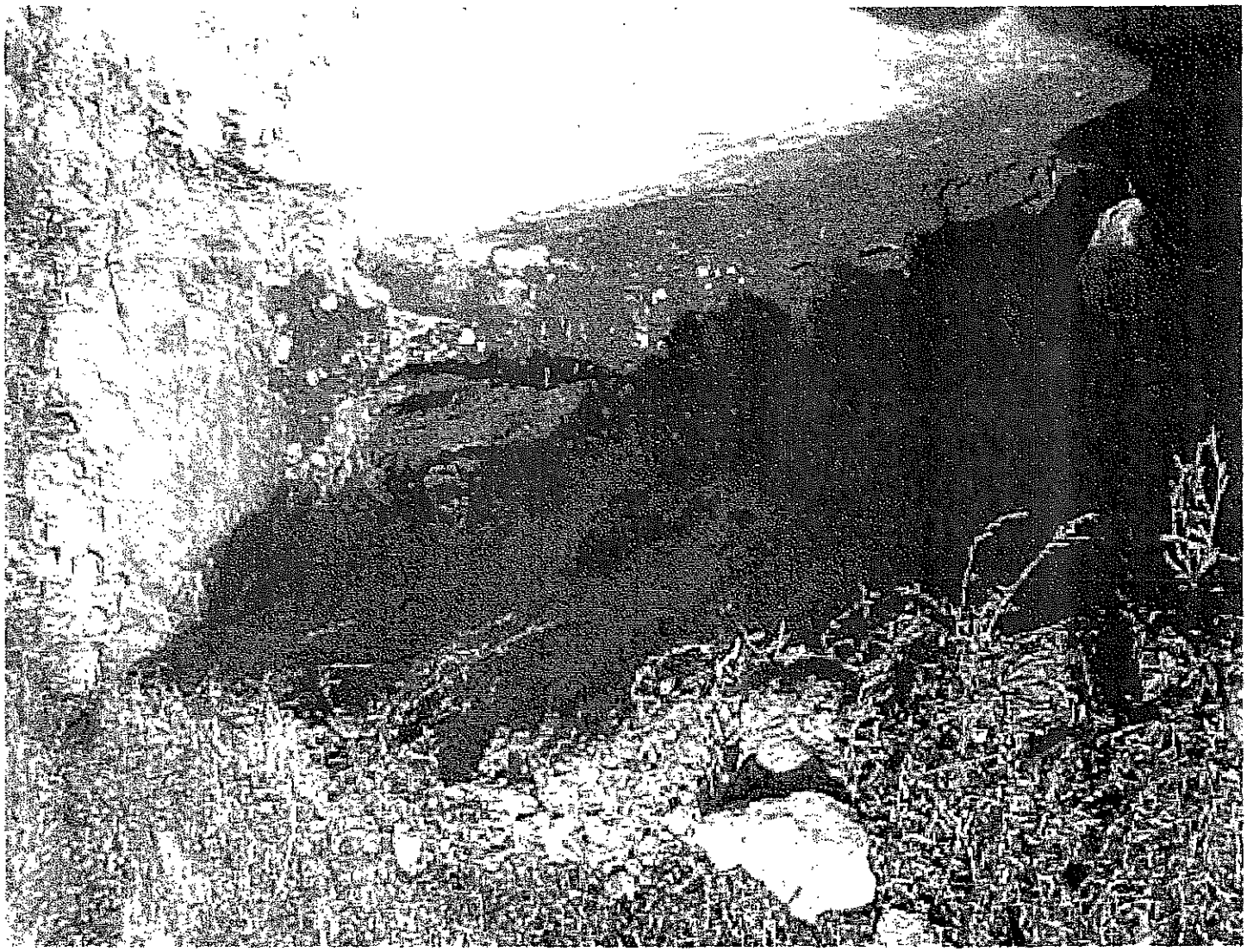


Ex. 7-2



heater pipe





AFFIDAVIT OF _____

STATE OF OREGON)
) ss.
County of Malheur)

I, James W. Stotler being first duly sworn, do hereby depose and state that I personally saw the following septic/sewer matter: concerning the 2 neboring residences adjacent on the west to the property of John Robert Pearce, namely that there was in use a backhoe which was moving back & forth behind the 2 dwellings as mentioned, excavating a ditch behind said dwellings.

I was not attracted to this operation by the noise of the backhoe in operation. On inspection I discovered that they were excavating, as mentioned, also I noticed that, at various times, trucks were moving to & fro from the property, I cannot say as to what they were transporting as I really didn't pay that much attention.

2. The above observations where on the following date: 1st wk of March, ~~2005~~ 2006.

3. The above observations where at the following location 3286 NW 4th Ave Ontario, OR 97914 in Malheur County, Oregon.

4. I am over the age of 18 years old. JE JLOS

DATED this ~~26~~ 8 day of ~~February~~ May 2006. JE JLOS

James W. Stotler

SUBSCRIBED AND SWORN to before me this 8 day of ~~November 2001.~~ May 2006 JE

Janean M. Erlebach JLOS
Notary Public for Oregon
My Commission Expires: May 16, 2006

Page – 1 AFFIDAVIT

OFFICIAL SEAL
JANEAN M. ERLEBACH
NOTARY PUBLIC-OREGON
COMMISSION NO. 357870
MY COMMISSION EXPIRES MAY 16, 2006

AFFIDAVIT OF _____

STATE OF OREGON)
) ss.
County of Malheur)

I, Buddy Smith being first duly sworn, do hereby depose and state that I personally saw the following septic/sewer matter:

Please See attatched.

2. The above observations where on the following date: Finish Part of March

3. The above observations where at the following location 3286 N.W 4th ave Ontario Oregon in Malheur County, Oregon.

4. I am over the age of 18 years old. - 74 yo.

DATED this 8 day of ~~February~~ May 2006.

Buddy E Smith

SUBSCRIBED AND SWORN to before me this __ day of November 2001.

_____
Notary Public for Oregon
My Commission Expires: _____

Approxamtly ~~Around~~ March 2, 2005 I witnessed a pump inserted into the Septic System at 3286 was pumping Sewage onto the property to the Rear of theirs property, owned by John Pierce.

The owner of the property located at 3286 NW 4th Ave started digging up the septic System around March 15th, 2005. I noticed that the drain field for these two trailers was only 50-60 feet + long and at the end they dug a huge pit as deep as the back hoe could dig. I would guess about 15-20 feet deep. The water level in this area is about 8-10 feet deep, So we now know that the sewage is Running directly into the ground water.

Shortly after this time the inspector for water and Sewage for Malheur Co. Came to inspect the new system and Red tagged it.

The owner pulled the red tags and Closed it up without changing anything. The inspector never followed up to make Sure that it was Repaired and up to Code.

AFFIDAVIT OF _____

STATE OF OREGON)
) ss.
County of Malheur)

I, John R. Pence being first duly sworn, do hereby depose and state that I personally saw the following septic/sewer matter:

On or about the first of March, 2005 I saw a backhoe working next door to my residence, I would look from time to time to see what they were doing, I saw the top of the septic tank uncovered the lid removed and some sort of hose inserted into the tank. also I saw a long, ditch excavated running east and west a few feet from my property line, although I did not see the actual work being done (OVER)

2. The above observations where on the following date: 1ST PART MARCH 2005

3. The above observations where at the following location 3286 NW 4TH AVE ONTARIO, OR 97914 in Malheur County, Oregon.

4. I am over the age of 18 years old.

DATED this 8 day of ~~February~~ May 2006.

John Robert Pence
JP JE

SUBSCRIBED AND SWORN to before me this 8 day of ~~November 2001.~~ May 2006

Janean M. Erlebach
Notary Public for Oregon
My Commission Expires: May 16, 2006

Page – 1 AFFIDAVIT

OFFICIAL SEAL
JANEAN M. ERLEBACH
NOTARY PUBLIC-OREGON
COMMISSION NO. 357870
MY COMMISSION EXPIRES MAY 16, 2006

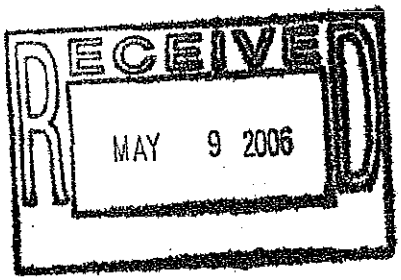
I did see sections of old four inch P.V.C. Pipe white in color and broken on out laying on the ditch bank. I also saw some what appeared to be washed rock laying on the surface close to the end of the trench around what appeared to be a large round hole partially filled with dirt. I also saw dirt piled up along the trench which was approximately 70 LF. I called the Environmental health dept and they came and took Verbal statements from me, Jim Statler and Lud Smith, at that time more information as to new done type leach field pieces were mentioned, also it was disclosed that a large trucks delivered rock fills to the site, I also saw a black A.B.S. Pipe being used as a drain for the wash machine located on the front porch draining to my field.

Dear Brian May 8, 2006

Due to the length of time that has gone by, I would think it would be helpful for you to visit the site and to talk to the respective witnesses again as some of the information you have told the first time is not disclosed on these statements. I know you were told about the nature of the repairs such as the dome type pieces installed and the truck delivering rock, the pump in operation Etc. Because of the age and health of two of the witnesses it is not easy to get notarized statements, and in addition we do not know the terminology for the dome type parts. We do know and are willing to testify to the nature of the work done, and the equipment being used. As residents of this county, we are concerned about the Quality of our water and our health, as well as are compliance to the laws we must live by.

With best Regards

John Pearce



Ex 11

Oregon
Theodore Kulongoski, Governor

Department of Environmental Quality
Eastern Region Bend Office
2146 NE 4th, Suite 104
Bend, OR 97701
(541) 388-6146
FAX (541) 388-8283

Certified Mail #7005 1160 0003 6508 3665

June 27, 2006

Sherman D. & Alice H. Mills, Property Owners
1252 SW 4th Ave.
Ontario, OR 97914

Re: **Warning Letter with Opportunity to Correct**
Office - Program: ERB - WQ/OS
Notice #: WC-ERB-WQ-2006-0168
File Number: 90201
TRS T18 R 47 Sec 06D TL 300
Malheur County

Dear Mr. & Mrs. Mills:

On March 25, 2005 the Malheur County Environmental Health (County) office received a complaint that you had performed repair work to a septic system at 3286 NW 4th Ave. without having a Department of Environmental Quality (Department) repair permit. Brian Wickert with the County investigated the complaint and had reason to believe you had performed some repair work to your system, and also informed you of the need to get a Department permit. In that conversation with Mr. Wickert, you agreed to apply for a repair permit and to correctly fix the system. To date, you have not obtained a permit. Malheur County Environmental Health is an Agent for the Department and as a condition of an intergovernmental agreement with the Department the County is required to refer violations of State environmental laws to the Department.

Based upon our investigation, the Department has concluded that as the property owners you are both responsible for the following violations of Oregon environmental law:

Violation:

Violation (1) -- Oregon Revised Statute 454.655(2) and Oregon Administrative Rule 340-071-0160 (2), Specifically Sherman D. & Alice H. Mills as owners of the above referenced property, installed or repaired an onsite wastewater treatment system, or a part thereof, without first obtaining a permit from the Department.

This is a **Class I** violation
Enforcement Rule 340-012-0060(1)(c): Installing or causing to be installed an on-site sewage disposal system or any part thereof, or repairing any part thereof, without first obtaining a permit;

Corrective Action(s): Violation (1) -- **Within forty-five (45) days from date of this letter, by Friday, August 11, 2006,** you need to have obtained a repair permit from the Malheur County Environmental Health office and have made necessary changes to the system such that a Certificate of Satisfactory Completion has been issued.

Class I violations are considered to be the most serious violations; Class III violations are the least serious.

The rules for Onsite Wastewater Treatment Systems prescribe the requirements for the construction, alteration, repair, operation, and maintenance of on-site sewage disposal systems. Their purpose is to restore and maintain the quality of public waters and to protect the public health and general welfare of the people of the State of Oregon.

This notice is a warning letter. The Department does not intend to take formal enforcement action at this time. However, should you not comply with all corrective actions and the time schedule noted above these violations may be referred to the Department's Office of Compliance and Enforcement for formal enforcement action, including assessment of a civil penalty and/or a Department order. Civil penalties can be assessed for each day of violation.

Your immediate cooperation in resolving this matter would be appreciated. If you feel the Department has issued this Warning Letter in error, you may provide information to the office at the address shown to clarify the facts surrounding the alleged violation(s). If the Department determines that one or more violations were cited in error, the Department will amend or withdraw this Warning Letter. The Department endeavors to assist you in your compliance efforts. Should you have any questions about the content of this letter, please contact me at 541-388-6146, ext. 230.

You can access and view the Oregon laws referenced in this letter by going to the following web site on the internet: http://www.deq.state.or.us/wq/onsite/onsite.htm

Sincerely,

Robert Baggett, REHS
Natural Resource Specialist 4
Onsite Wastewater Treatment Program
Water Quality, Bend Office

REB/ns

cc: Brian Wickert, Malheur County
Richard Nichols, WQ Manager, Bend Office – file copy
Bryan Smith, Office of Compliance and Enforcement

Oregon
Theodore Kulongoski, Governor

Department of Environmental Quality
Eastern Region Bend Office
2146 NE 4th, Suite 104
Bend, OR 97701
(541) 388-6146
FAX (541) 388-8283

CERTIFIED MAIL # 7005 1160 0003 6508 3719

August 18, 2006

Sherman D. & Alice H. Mills, Property Owner
1252 SW 4th Ave.
Ontario, OR 97914

Re: **Pre-Enforcement Notice**
Sherman Mills, ERB - WQ/OS
Notice Number: PE-ERB-WQ-2006-0186
File Number: 90201, Malheur County

Dear Mr. & Mrs. Sherman:

On March 25, 2005 the Malheur County Environmental Health office, herein referred to as the County, received a complaint that you had performed repair work to a septic system at 3286 NW 4th Ave. without having obtained a required Department of Environmental Quality (DEQ) repair permit. Brian Wickert with the County investigated the complaint and had reason to believe you had performed some repair work to your system, and also informed you of the need to get a DEQ permit. In that conversation with Mr. Wickert, you agreed to apply for a repair permit and to correctly repair the system. As a condition of an intergovernmental agreement with DEQ, the County is required to refer situations of non-compliance of State environmental laws to the Department.

On June 27, 2006 I sent you a "Warning Letter with Opportunity to Correct" which you received as a certified mailing on June 29, 2006. In that notice the following violations of Oregon environmental law were noted and correction actions specified.

Violations:

Violation (1) -- Oregon Revised Statute 454.655(2) and Oregon Administrative Rule 340-071-0130(15)(a), Specifically Sherman D. & Alice H. Mills as owners of the above referenced property, installed or repaired an onsite wastewater treatment system, or a part thereof, without first obtaining a permit from the Department.

This is a **Class I** violation
Enforcement Rule 340-012-0060(1)(c): Installing or causing to be installed an on-site sewage disposal system or any part thereof, or repairing any part thereof, without first obtaining a permit;

Corrective Action(s): Violation (1) -- **Within forty-five (45) days from date of this letter, by Friday, August 11, 2006,** you need to have obtain a repair permit from the Malheur County Environmental Health office and have made necessary changes to the system such that a Certificate of Satisfactory Completion has been issued.

Class I violations are considered to be the most serious violations; Class III violations are the least serious.

I have been informed by Brian Wickert of the County that you have made application for a repair permit but you have not uncovered requested portions of the system so that the County can determine what corrections need to be made to the system. Therefore, you have failed to make the necessary corrections to the system. Because you have not been cooperative with the County and have failed to perform the corrective actions specified in the Warning Letter, I am referring these violations to the Department's Office of Compliance and Enforcement for formal enforcement action, which may include assessment of civil penalties and/or issuance of a Department order. A formal enforcement action may include a civil penalty assessment for each day of violation.

If you believe any of the facts in this Pre-Enforcement Notice are in error, you may provide written information to me at the address shown at the top of the letter. The Department will consider new information you submit and take appropriate action.

You can access and view the Oregon laws referenced in this letter by going to the following web site on the internet: http://www.deq.state.or.us/wq/onsite/onsite.htm.

The Department endeavors to assist you in your compliance efforts. Should you have any questions about the content of this letter, please contact me at (541) 541-388-6146, ext 230 or email me at baggett.robert@deq.state.or.us.

Sincerely,

Robert Baggett, REHS
Natural Resource Specialist 4
Water Quality Program
Bend Office

RB/ns

cc: Mr. Brian Wickert, Malheur County
Mitch Wolgamott, Water Quality Manager, DEQ Pendleton
Office of Compliance and Enforcement, DEQ Portland

Oregon
Theodore R. Kulongoski, Governor

Department of Environmental Quality
300 SE Reed Market Road
Bend, OR 97702
(541) 388-6146

Eastern Region
Bend Office

Certified Mail # 7005 1160 0003 6508 3887

November 30, 2007

RECEIVED
DEC 04 2007
OFFICE OF COMPLIANCE AND ENFORCEMENT
DEPARTMENT OF ENVIRONMENTAL QUALITY

Sherman Dennis Mills
1252 SW 4th Ave.
Ontario, OR 97914

Dear Mr. Mills,

In response to your onsite wastewater treatment system repair application and a subsequent field visit on November 9, 2007 by our Malheur County contract agent Brian Wickert, REHS a determination consistent with Oregon Administrative Rule (OAR) 340-071-215 (4) (b) [which states, "If the site characteristics or standards in OAR 340-071-0220 cannot be met, the agent may allow a reasonable repair installation to eliminate a public health hazard, including the installation of an alternative system as necessary."] has been made.

Findings & Design Information:

The repair system is to serve two (2) residential rental structures, each unit having two (2) bedrooms and a kitchen. Based on OAR 340-071-0220 Table 2, Quantities of Sewage Flow, these structures have a combined projected daily peak flow of 600 gallons per day (gpd). This quantity of flow is what system design is to be based on even though actual average daily flows are generally less. This allows for a safety margin in system design for peak daily flows that can often occur.

During our field visit we determined that the highest level of ground water at this site comes to 50 inches of the ground surface. This highest level probably occurs during snow melt in the spring or at peak irrigation time periods.

The soils at the site consist of a silt loam texture.

System Types:

For a Standard type system, the groundwater cannot come closer than 66 inches of the ground surface, OAR 340-071-0220. Again, at this site we determined the ground water comes to 50 inches of the ground surface.

For a Capping Fill system, the ground water cannot come closer than 60 inches of the ground surface, OAR 340-071-0265. Again, at this site we determined the ground water comes to 50 inches of the ground surface.

Therefore, given the soil and groundwater conditions at the site, an alternative sand filter system is required to meet the separation distance from the bottom of the absorption trench to the highest level of ground water. In a silt loam soil, the ground water cannot come any higher than 30 inches of the

ground surface where a sand filter is used. This means that at this site, disposal trenches following a sand filter can be placed no deeper than 20 inches (50 – 30 = 20) into the native soil. So the maximum trench depth is 20 inches and the minimum trench depth is 18 inches. If needed, the minimum trench depth can be 12 inches, but where the trench depth is less than 18 inches, capping fill type trench design will be required.

The amount of disposal trench to follow a sand filter unit is based on the type of soil texture. In a silt loam soil the sizing formula requires 45 lineal feet of disposal trench per 150 gallons of projected daily flow. Your repair proposal is at 600 gpd so (600/150 = 4; 4 x 45 = 180) 180 lineal feet of disposal trench is required.

The system diagram your installer provided shows enough room for 265 lineal feet of disposal trench. However it is not clear how much of the proposed trench is within the 100 foot setback of the well on the property. It was also not made clear where wells are located on adjacent lots. With the sand filter unit only requiring 180 lineal feet of disposal trench there is greater potential that the 100 ft. setback from all wells can be met. Additionally, the treated effluent from a sand filter unit poses less of a threat to the area ground water and water supply wells.

The minimum setback from a sand filter container unit and septic tank is only 50 ft. so room probably exists for the filter unit and tank on site. At minimum a 1500 gallon two (2) compartment septic/dose tank will be necessary to pump septic tank effluent to the sand filter unit. Depending on how the system is designed, gravity flow from the sand filter unit to the disposal trenches is likely. If not, then another pump basin located within the sand filter unit would be necessary to pump sand filter treated effluent to the disposal trenches.

In order to issue you a repair permit you will need to submit a detailed set of plans for the sand filter system.

Minimum System Plan Requirements

1.) A detailed set of construction plans with a high degree of detail is required. PLANS AND DETAILS MUST BE ADEQUATE FOR CONSTRUCTION.

2.) Current Onsite Wastewater Treatment Rules should be used plan development. The construction plan shall include a site diagram signifying the location of approved test holes, dimensions of property, all proposed and existing development such as driveways, easements, structures, water source, water lines, and all wells within 200 feet of property.

3.) The plans need to include a complete product specification sheets, a cross section view of the sand filter unit, and an elevation profile for the entire system. There shall be a current sieve analysis of both the sand filter media (medium sand) and under drain media to be used. If the soil cover to the sand filter unit cannot maintain a three to one slope, then for site and system stability, an engineered design will be required and the engineer must sign off on the construction.

4.) The plans are to include written narratives describing specifics of how work is to be accomplished. The plans and details must demonstrate knowledge, familiarity, and adherence to all appropriate DEQ rules. Blind acceptance of statements that "system will be constructed in conformance with the rules" is not acceptable.

A DEQ agent may reject, as incomplete, plans and specifications with major omissions and require the applicant to resubmit. Minor deficiencies can be rectified in writing by a DEQ agent as a permit condition.

In lieu of the requirements above, you can elect to vacate all the structures served by this onsite wastewater treatment system and then decommission the system as outlined in OAR 340-071-0185. If this becomes your choice you will need to notify the Department immediately in writing and have vacated the residences and decommissioned the system within sixty (60) days of this notice.

Note: Any request for a deadline extension must be in writing to the Department. Any such request for extension must first be approved by the Department before going into effect.

In consultation with DEQ's Office of Compliance and Enforcement, you must provide this information to Brian Wickert at the Malheur County Environmental Health office at 251 B St., Vale Oregon 97918 within twenty 20 days after receipt of this certified letter. If you do not provide this information by this time, the DEQ will proceed to a contested case hearing regarding Notice of Violation, Department Order and Assessment of Civil Penalty No. WQ/OS-ER-06-255, which you were assessed on May 18, 2007.

If you have any questions regarding this letter or needed technical assistance in completing the above noted requirements, please feel free in contacting either me at 541-388-6146, ext. 230. You can also access the DEQ's Onsite Wastewater Treatment System web site at: http://www.deq.state.or.us/wq/onsite/onsite.htm

Sincerely,

Robert Baggett, REHS
Natural Recourse Specialist 4
Bend Office

Enc.: CFSmanual.doc

Cc: Bryan Smith, Office of Compliance and Enforcement, DEQ, Portland
Brian Wickert, Malheur County Environmental Health, 251 B St., Vale Oregon 97918
David Coughlin, 153 SW First St., Ontario OR 97914

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

FAX Transmittal Memorandum

No. of Pages: 8
Date: March 16, 2007

To:	Bryan Smith	**From:**	Dave LeBrun
Phone:	541-388-6146	**Phone:**	503-229-6742
FAX:	541 388-8283	**FAX:**	503-229-6762

Message: **Bryan Here are the Mills EB docs. Dave.**

Ex. 15

Received Time Mar. 16. 11:46AM

Received Time Mar. 16. 11:46AM

State of Oregon
Department of Environmental Quality **Memorandum**

Date: March 16, 2007
To: File
From: Dave LeBrun, Environmental Law Specialist, Office of Compliance and Enforcement
Subject: BEN calculation for Sherman and Alice Mills

I. General Purpose and Authority

The economic benefit portion of the civil penalty formula is simply the monetary benefit that an entity gained by not complying with the law. It is designed to "level the playing field" by taking away any economic advantage the entity gained and to deter potential violators from deciding it is cheaper to violate and pay the penalty than to pay the costs of compliance.

Oregon Revised Statute 468.130(2)(c,h) directs the Environmental Quality Commission to consider economic conditions of the entity in assessing a penalty as well as other factors that Commission makes relevant by rule. Accordingly, the Commission adopted economic benefit as part of its penalty calculation in Oregon Administrative Rules (OAR) 340-012-0045(1)(e) and -0155. Pursuant to OAR 340-012-0150, the Department generally uses the U.S. Environmental Protection Agency's BEN computer model to determine economic benefit and will use it upon request of a respondent.

II. Theory of Economic Benefit

Compliance with environmental regulations may require an entity to expend financial resources. These expenditures support the public goal of better environmental quality, but often do not yield direct financial return to the entity. Economic benefit is the amount by which an entity is financially better off from not having complied with environmental requirements in a timely manner. If an entity avoids an expenditure, it increases its profit margin or has additional funds available for other profit-making activities. Sometimes the benefit may not be intuitive. For example, if an entity would have had to obtain a loan to make the expenditure, it might seem that the entity did not enjoy the benefit of the extra money – but avoiding the need to repay a loan is a direct financial advantage. If an entity did not make the expenditure on time, but later did make the expenditure, it might seem that the entity did not retain an economic advantage – but temporary access to the monies it should have spent is equivalent to an interest-free loan during the period of noncompliance which is also a direct financial advantage. For this reason BEN generally ignores the potential or likely source of the monies not used.

Economic benefit is "no fault" in nature. An entity need not have deliberately chosen to delay compliance, or even have been aware of its noncompliance, for it to accrue an economic benefit of noncompliance. An economic benefit may accrue before the entity is in actual

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violation because planning costs, permitting fees, and similar costs often must be paid long before beginning the regulated activity that is in violation.

An appropriate economic benefit calculation represents the amount of money that would make the entity indifferent between compliance and noncompliance. If DEQ does not recover, through a civil penalty, at least this economic benefit, then the entity will retain a gain. Because of the precedent of this retained gain, other regulated companies may see an economic advantage in similar noncompliance. The U.S. Supreme Court has noted that deterrence is a primary purpose of a penalty[1] and that a penalty which fails to include sufficient economic benefit to remove the advantage of noncompliance will fail to deter future violations.[2]

III. Basis of the Costs Considered

Determining economic benefit always requires evaluating circumstances to determine what necessary or reasonable costs would have been required to obtain compliance or to determine what benefits were received from noncompliance. Often, an entity has more than one option to reach compliance and the Department evaluates the circumstances to determine what probable or reasonable steps the entity should have taken. The Department then estimates the reasonable costs and benefits pursuant to OAR 340-012-0150(2).

Mr. Sherman Mills and his wife Alice Mills should have spent $230 by March 25, 2005 to hire a licensed pumper to pump out the contents of a septic tank for a tank they owned. By avoiding this cost until the present, Mr. and Mrs. Mills benefited by an estimated **$148**.

IV. Applicability of Standard Rates Presumed by Rule

The BEN model relies on income-tax rates, inflation rates, and discount rates. The model allows the operator to input particular rates, but in the absence of operator input, the BEN model uses standard values based on the years of the violation, the state where the violation occurred and the entity's legal and profit status (*e.g.*, C-corporation, other for profit, non-profit, municipality, or federal facility). It calculates inflation rates from the Plant Cost Index (PCI) published by the magazine *Chemical Engineering* and from the Consumer Price Index. Alternative optional inflation indices include:

---

[1] *See Tull v. United States*, 481 U.S. 412 (1987) (finding that the legislature intended penalties for environmental violations under the Clean Water Act to create deterrence). *Note also* OAR 340-012-0026(1)(c) which states that a goal of enforcement under the Oregon Environmental Quality Commission rules is deterrence.

[2] *See Friends of the Earth v. Laidlaw Environmental Services, Inc.*, 528 U.S. 167, fn. 2 (2000) (discussing the insufficiency of the economic benefit portion of a penalty for hazardous waste violations).

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Abbreviation and Full Name		Description	Typical Applications
2.5 %	Constant rate of 2.5%	Assumes annual inflation rate is constant at 2.5 percent.	
CCI	Construction Cost Index	Construction costs (based on 1.128 tons Portland cement, 1,088 bd. ft. 2x4 lumber) and 200 common labor.	General construction costs, especially where labor costs are a high proportion of total costs.
ECI	Employment Cost Index	Total civilian compensation for all workers, seasonally adjusted.	One-time nondepreciable expenditures or annual costs that comprise mainly labor.
GDP	Gross Domestic Product Implicit Price Deflator	Measured by U.S. Commerce Department through the Bureau of Economic Analysis. Equals GDP in current dollars divided by GDP in constant dollars.	general expenses that affect multiple sectors of the economy (e.g., labor and construction).
PCI	Plant Cost Index	Plant cost index published by *Chemical Engineering*.	Standard default and for plant equipment costs.
PPI	Producer Price Index for Finished Goods	Reflects the price level for processing finished goods.	Processing finished goods, general expenses that affect multiple sectors of the economy (e.g., labor and construction).

Pursuant to OAR 340-012-0150(1), the "model's standard values for income tax rates, inflation rate and discount rate shall be presumed to apply to all Respondents unless a specific Respondent can demonstrate that the standard value does not reflect the Respondent's actual circumstance."

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V. Description of the Attached Run

BEN calculates the economic benefits gained from delaying and avoiding required environmental expenditures. Such expenditures can include: (1) capital investments (*e.g.*, larger pollution control or monitoring equipment, costs of design and installation), (2) one-time non-depreciable expenditures (*e.g.*, permit fees, clean-up costs, setting up a reporting system, acquiring land needed for a capital improvement), (3) annually recurring costs (*e.g.*, routine operating and maintenance costs, utilities). Each of these expenditures can be either delayed or avoided. BEN's baseline assumption is that capital investments and one-time non-depreciable expenditures are merely delayed over the period of noncompliance, whereas annual costs are avoided entirely over this period.

The calculation incorporates the economic concept of the "time value of money." Stated simply, a dollar today is worth more than a dollar tomorrow, because you can invest today's dollar to start earning a return immediately. Thus, the further in the future the dollar is, the less it is worth in "present-value" terms. Similarly, the greater the time value of money (*i.e.*, the greater the "discount" or "compound" rate used to derive the present value), the lower the present value of future costs. To calculate an entity's economic benefit, BEN uses standard financial cash flow and net-present-value analysis techniques based on modern and generally accepted financial principles, which were subjected to extensive national notice-and-comment processes.[3]

Inputs to the model include costs specific to the situation of the entity which include the values described in Section III as well as the presumed standard indexes and rates described in Section IV. The values used are listed in the lower three-quarters of the attached BEN Run Table. Using these values, BEN makes a series of calculations the results of which are listed in the top of the attached BEN Run Table by the letter indicated below.

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[3] *See* Calculation of the Economic Benefit of Noncompliance in EPA's Civil Penalty Enforcement Cases, Request for comment, 61 Fed. Reg. 53025-53030 (Oct. 9, 1996); Calculation of the Economic Benefit of Noncompliance in EPA's Civil Penalty Enforcement Cases, Extension of time for request for comment, 61 Fed. Reg. 65391 (Dec. 12, 1996); Calculation of the Economic Benefit of Noncompliance in EPA's Civil Penalty Enforcement Cases, Advance notice of proposed action, response to comment, and request for additional comment, 64 Fed. Reg. 32947-32972 (June 18, 1999); Calculation of the Economic Benefit of Noncompliance in EPA's Civil Penalty Enforcement Cases, Advance notice of proposed action, response to comment, and request for additional comment, 64 Fed. Reg. 39135-39136 (July 21, 1999); Calculation of the Economic Benefit of Noncompliance in EPA's Civil Penalty Enforcement Cases, Notice of final action and response to comment, 70 Fed. Reg. 50326-50345 (August 26, 2005) available at http://www.epa.gov/EPA-GENERAL/2005/August/Day-26/g17033.htm.

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A) **On-Time Capital & One-Time Costs**. This is what compliance would have cost had the entity made its purchases of capital on time or paid its one-time costs on time. BEN calculates this value from the estimated costs as of the date the costs are estimated by discounting the annual cash flows at an average of the cost of capital throughout this time period. The value of the costs is adjusted to account for tax deductibility and depreciation. " A" is the value of noncompliance as of the date of initial noncompliance. (*See* **Fig. 1**) If " A" is zero, there are no capital or one-time costs in the calculation.

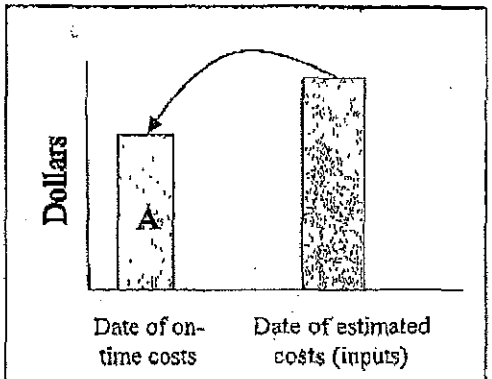


Fig 1. Calculating on-time capital and one-time costs from estimated costs

B) **Delay Capital & One Time Costs**. If the entity eventually did pay or will pay the costs of compliance in the future, BEN calculates what the entity would have needed to set aside on the date of noncompliance so as to have sufficient funds as of the date of delayed compliance. This number is used to mitigate the economic benefit by considering the known amount the entity will pay. BEN derives this number by: (1) determining the predicted delayed costs by adjusting for inflation and to account for tax deductibility in the year in which the funds were or will be spent and also for future depreciation tax shields, and (2) discounting the annual cash flows at an average of the cost of capital throughout this time period to account for interest. (*See* **Fig. 2**) " B" will be zero if all costs were avoided.

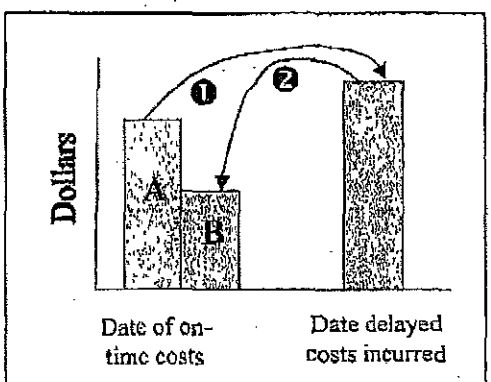


Fig. 2. Calculating the delayed capital and one-time costs from estimated costs

C) **Avoided Annually Recurring Costs**. This is the value of the avoided annual recurring costs as of the date of initial noncompliance. BEN derives this value by discounting the annual cash flows at an average of the cost of capital throughout this time period and accounting for tax deductibility. (*See* **Fig. 3**) " C" will be zero if there are no recurring annual costs.

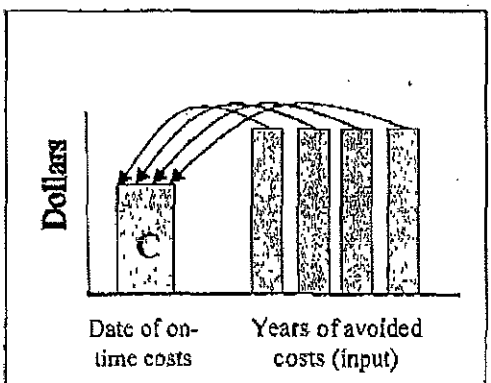


Fig. 3. Calculating annual recurring costs

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D) **Initial Economic Benefit (A – B+ C).** The values for A, B, and C are all values as of the date of noncompliance. The economic benefit received as of the date of noncompliance is determined by taking the on-time capital and one-time costs that should have been paid (A), subtracting the delayed capital and one-time costs which had been or will be paid (B), and adding the avoided annually recurring costs (C). The result is the economic benefit received as of the date of noncompliance. (*See* **Fig. 4**) The economic benefit is often much lower than the originally-estimated costs. This is because inflation tends to make more recent costs higher than historical costs and because the entity could have taken a tax deduction for the year in which the expenditure was made.

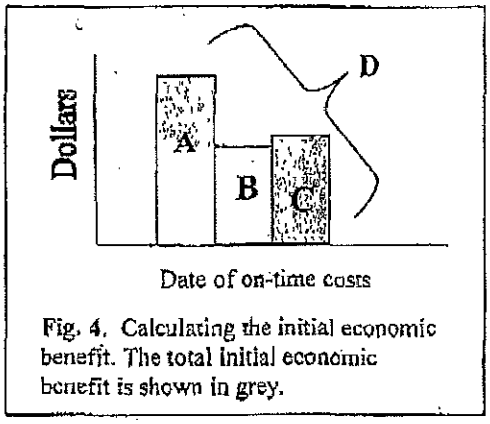


Fig. 4. Calculating the initial economic benefit. The total initial economic benefit is shown in grey.

E) **Final Economic Benefit at Penalty Payment Date.** BEN compounds the initial economic benefit forward to the penalty payment date at the same cost of capital to determine the final economic benefit of noncompliance. (*See* **Fig. 5**) Occasionally an entity looses money because the economic benefit is a negative number. In that case the economic benefit used in the penalty calculation is zero.

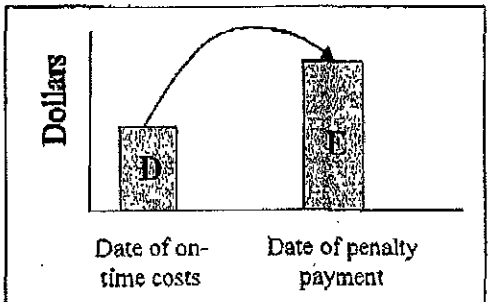


Fig 5. Final economic benefit

IV. Final Economic Benefit Is Likely an Underestimate

The economic benefit calculated above may underestimate the total economic benefit that the respondent received to date because it is based on conservative assumptions and does not include unknown or incidental costs. It also does not address uncertain indirect financial benefits, including:

- *Advantage-of-risk* – the value of (1) the risk of never getting caught and (2) keeping future options open by delaying a decision to institute a process or purchase capital;
- *Competitive advantage* – (1) beginning production earlier than would be possible if in compliance; (2) attracting clients by avoiding compliance costs, having a higher profit margin and therefore being able to offer goods or services at a lower cost than competitors;

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(3) keeping those clients attracted by lower prices because of brand loyalty or high switching costs; or (4) using the time or money saved to increase production; and

- *Illegal profits* – selling illegal products or services.

EPA has undertaken a review of these indirect factors and may craft an economic method for calculating them.[4] Until that evaluation is complete, I consider these other economic benefits to be "de minimis" in light of the difficulties in calculation. Pursuant to OAR 340-012-0150(3), the Department need not calculate an economic benefit if that benefit is de minimis.

Another reason that the estimate above may be an underestimate is that the calculation is based on the time value of money, and is sensitive to when delayed costs are actually incurred and when penalties are actually paid. When the Department calculates an economic benefit for incorporation in a Notice of Civil Penalty Assessment, it often assumes the entity will comply with the schedule in the Order and that the penalty will be paid without the delays required for an appeal. This results in a lower economic benefit than would be obtained if the actual dates were initially known and used. For this reason the Department may recalculate the economic benefit for the hearing or in settlement so as to reach a more accurate final economic benefit.

[4] *See* EPA Office of Enforcement and Compliance Assurance, "*Identifying and Calculating Economic Benefit That Goes Beyond Avoided and/or Delayed Costs*," (May 25, 2003) available at http://www.epa.gov/compliance/resources/publications/civil/programs/econben-costs.pdf; EPA Illegal Competitive Advantage Economic Benefit Advisory Panel of the Science Advisory Board, Advisory no. EPA-SAB-ADV-05-003, (Sept. 7, 2005) available at http://www.epa.gov/sab/pdf/ica_eb_sab-adv-05-003.pdf; EPA Office of Enforcement and Compliance Assurance, Response to advisory, (July 19, 2006) available at http://www.epa.gov/sab/pdf/sab-adv-05-003_response_07-19-06.pdf.

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	Run Name = licenced pumpe
Present Values as of Noncompliance Date (NCD),	25-Mar-2005
A) On-Time Capital & One-Time Costs	$125
B) Delay Capital & One-Time Costs	$0
C) Avoided Annually Recurring Costs	$0
D) Initial Economic Benefit (A-B+C)	$125
E) Final Econ. Ben. at Penalty Payment Date, 15-May-2007	$148
For-Profit (not C-Corp.) w/ OR tax rates	
Discount/Compound Rate	8.2%
Discount/Compound Rate Calculated By:	BEN
Compliance Date	15-May-2007
Capital Investment:	
Cost Estimate	$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A
Consider Future Replacement (Useful Life)	N/A (N/A)
One-Time, Nondepreciable Expenditure:	avoided
Cost Estimate	$230
Cost Estimate Date	16-Mar-2007
Cost Index for Inflation	PCI
Tax Deductible?	y
Annually Recurring Costs:	
Cost Estimate	$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A
User-Customized Specific Cost Estimates:	N/A
On-Time Capital Investment	
Delay Capital Investment	
On-Time Nondepreciable Expenditure	
Delay Nondepreciable Expenditure	

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State of Oregon
Department of Environmental Quality Memorandum

Date: September 29, 2009

To: Environmental Quality Commission

From: Dick Pedersen, Director

Subject: Agenda Item N, Informational Item: 2011 Budget and Legislative Agenda Update
October 22-23, 2009 EQC Meeting

Purpose of Item

Staff will provide an update to commission on the status of the Department of Environmental Quality's 2011-13 Legislative Agenda. This agenda includes the base budget, ten percent reduction options, and budget policy packages that make up the agency request budget. In addition, the agenda includes DEQ's legislative concepts, which if approved for drafting and pre-session filing, become draft bills for legislative consideration. This presentation includes an overview of the process and timeline that will be used in preparation for the 2011 Oregon Legislative Session.

Background

Every two years, state agencies must develop legislative concepts and budget policy packages as part of the legislative and budget development process. This discussion is the beginning of the development of the 2011 Legislative Agenda. This development process will continue into and throughout 2010 in preparation for the 2011 Oregon Legislative Session. Key deadlines in this process include the following:

- Submittal of draft legislative concepts to the Department of Administrative Services in early April 2010; and
- Submittal of the agency request budget on September 1, 2010 to DAS and the Governor's Office that includes the base budget, ten percent reduction options and the budget policy packages.

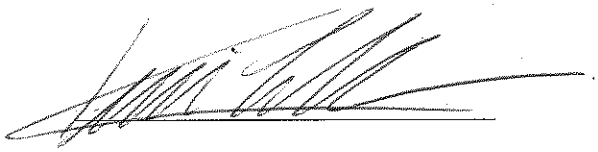
EQC Involvement

At the December 2009 and each of the 2010 commission meetings DEQ plans to bring updates and seek input on the development of the 2011 Legislative Agenda. The goal is for the commission to be actively engaged in the development of legislative concepts, ten percent reduction options, budget policy packages and the base budget. At the August 2010 meeting, the commission chair will need to certify the 2011-13 agency request budget for submittal to DAS and the Governor's Office on September 1, 2010.

Attachments

A. DEQ's 2011-13 Legislative Agenda Development Timeline

Approved:

Division: 

Report Prepared By: Gregory K. Aldrich
Phone: (503) 229-6345

DEQ's 2011-13 Legislative Agenda Development Timeline

June 2009
- DEQ's 2009-11 Budget was adopted

October 2009
- **22-23 - EQC Meeting – Discuss 2011 Legislative Agenda Timeline**

December 2009
- 10-11 - EQC meeting to share preliminary concepts for the legislative agenda

Late 2009 through February 2010
- Development begins on 2011-13 Budget
  - Determine cost of currently approved programs adjusting for 2011-13 costs
  - Estimate future revenues
  - Develop the Trial Budget, DEQ's look at affordability for 2011-13
    - Shift work between funding sources
    - Establish tentative reductions to balance the 2011-13 Trial Budget
    - Determine which reductions will be made permanent and which DEQ will ask to "restore" through requests for new General Funds, new fees or increases to current fees
  - Develop 10% budget reduction options on all funding types.
  - Develop budget package proposals for new work that DEQ anticipates doing
  - Develop legislative concepts

February 2010
- Supplemental Legislative Session for 2009-11.
- EQC Meeting
  - focus on draft legislative concepts and budget policy packages
  - Discussion of projected General Fund availability for 2011-13 and implications for funding prospective policy packages

March 2010
- 1 – Budget and Legislative Concept Instructions are released by DAS (may be sooner)
- Ongoing legislative concept and budget policy package proposal development

April 2010
- Stakeholder Outreach
- Ongoing legislative concept and budget policy package proposal development
- 2 – Legislative concepts are due to DAS (estimated date)
- EQC Meeting – focus on budget development

May 2010
- Ongoing budget development

June 2010
- DAS submits approved legislative concepts to Legislative Counsel
- EQC Meeting – update on legislative agenda; finalize budget decisions to allow for budget submittal to DAS for audit
- Budget request submitted to DAS for audit

July 2010
- Budget narrative development
- 14 – Last day to modify legislative concepts (estimated date)

August 2010
- Budget narrative development
- EQC Meeting – legislative agenda update and Chair signs the Budget Certification Form (part of the agency of budget request document)
- Work with Legislative Counsel on legislative concepts

September 2010
- 1 – Agency Request Budget Document due to DAS and Governor
- Work with Legislative Counsel on legislative concepts

Fall 2010
- DEQ continues to work with Legislative Counsel on draft bills (legislative concepts)
- DAS and Governor review DEQ budget request
- DAS Analyst makes recommendation on Agency Request Budget, DEQ reviews, and makes formal appeal of DAS Analyst's recommendations (if any).Governor's Recommended Budget submitted to the Legislature
- Governor pre-session files approved bills

January 2011
- 10 – 2011 Legislative Session begins

DEQ's 2009-11 Legislative Agenda
October 23, 2009 EQC Talking Points

Brief Presentation Outline

- Purpose:
  - 2010 Special Session Issues
    - Possible reductions to the 2009-11 budget
  - Preparing for 2011 Session
    - Discussing the key activities and deadlines
  - Recent Membership Changes in the Legislature

2010 Special Session:

- Potential Budget Issues
  - 10% Reduction Options for General Fund and Lottery Funds
  - Review of Other Fund ending balances

- Session Details
  - Have not been released
  - No executive branch bills
  - More legislator bills
  - Tentative dates

Preparing for the 2011 Session:

- Review of 2011-13 legislative agenda development timeline
  - Legislative concept development
  - Agency Request Budget development

Recent Membership Changes in the Legislature:

- Senator Chris Edwards replaces Sen. Vicki Walker, D-7- Eugene/Junction City
  - Interim Ways and Means Committee

- Senator Chip Shields replaces Sen. Margaret Carter, D-22 – N/NE Portland
  - Interim Emergency Board

- Rep Val Hoyle replaces Rep Chris Edwards, D-14 – W. Eugene/Junction City
  - Interim Business & Labor; Interim Health Care

- Rep Margaret Doherty replaces Rep Larry Galizio,D-35 – Tigard
  - Interim Human Services; Interim Transportation

- No replacement yet for former Rep Chip Shields, D-43 – N/NE Portland
  - Decision scheduled for 10/22

Next Steps:

Next EQC meeting – December 10-11, 2009

- Update on 2010 Special Session
- Review of draft budget and legislative concepts for 2011 Session

Questions?

Fact Sheet

DEQ 2009-11 Budget

Background

The Legislature approved $402 million for DEQ's 2009-11 budget, of which $195 million, or 49 percent, is funding for loans to Oregon communities for clean water projects and debt service on bonds. The substantial growth in new funding for these loans and grants from the federal stimulus package and the president's proposed 2010 budget is coupled with increased demand from communities. These projects improve the quality of Oregon's water and have a positive impact on local jobs and the Oregon economy.

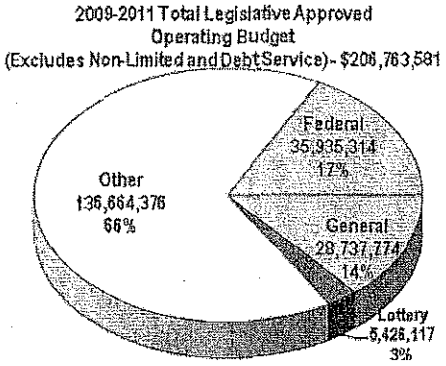
While this increase in loans and grants is directly responsible for a 20 percent increase in DEQ's *total* budget relative to the 2007-09 biennium, these loan funds are pass-through only and cannot be used to provide any of DEQ's other environmental services. DEQ's operating budget for its core services consists of the remaining $206 million.

In addition to the budget approved through Senate Bill 5521, House Bill 5054 further reduced DEQ's 2009-11 budget by more than $5 million. The bill reduced general fund by an additional $718,000 and lottery funds by $130,000. These reductions affect DEQ's compensation package, but not air, land or water program work or number of full-time employees.

For DEQ's ongoing operations, the budget approves:

- $33.3 million in general fund, a 14 percent reduction and 18.4 fewer full-time positions compared to DEQ's 2007-09 Legislatively Approved Budget.
- $5.4 million in lottery funds, maintaining the same level of services as 2007-09.
- $36 million federal funds, a $5.3 million increase driven mainly by federal stimulus money for leaking underground storage tank cleanups ($2.7 million) and diesel upgrade grants ($1.7 million), as well as a grant for maintaining the McCormick and Baxter cleanup site ($1.3 million). Most of the increase will be used directly in Oregon communities rather than funding DEQ services.
- $138 million in other funds, mostly from fees. The increase is driven by a $5.3 million increase in E-waste recycling budget to fund a contractor recycling program.

In the 2009-11 operating budget, general funds make up 14 percent of the budget, lottery funds contribute 3 percent, federal funds provide 17 percent, and fees and other revenues provide the majority – 66 percent.



The budget funds 790 staff (full time equivalents), a net decrease of 7.18 staff from 2007-09 levels. While general fund reductions reduced 18.4 positions, the budget also approved 10.34 new positions for continuing and new work.

Air Quality Program budget

The Air Quality Program's $53.7 million budget includes a $2.1 million general fund decrease since 2007-09, to a 2009-11 level of $7.8 million. The budget also includes $38.5 million in fee funding and a $7.4 million in federal funding, including $1.1million from a one-time federal stimulus grant. The budget supports 236.27 full-time employees, compared to 230.44 for 2007-09.

Reductions. Air quality had a general fund reduction of $2.2 million which resulted in the following effect on program activities:

- Reduced Clean Diesel grants ($1 million) and staffing for diesel reduction outreach and grant administration (2 FTE).
- Reduced air quality technical assistance to small businesses (0.5 FTE).
- Eliminated one air toxics monitoring site in Medford (1 FTE).
- Reduced enforcement work on open burning violations (0.5 FTE).
- Reduced general fund support for Lane Regional Air Protection Agency ($74 K).

State of Oregon
Department of Environmental Quality

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DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.

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Last Updated: 08/14/09
By: M.Aeme
DEQ 09-MSD-007

- Eliminated support for multi-state air quality modeling center, which provides technical data for air pollution reduction work ($206 K).

Highlights. The Air Quality Program received authority for the following new and continuing work:

- Permitting, enforcement and technical assistance for new sources subject to recently adopted federal regulation for hazardous air pollutants.
- Developing and implementing a new greenhouse gas reporting program for Oregon, supported by fees on program participants.
- Restoring an engineering position for Title V permitting and compliance work. No new fees.
- Restoring a diesel grant administration position and some of the diesel grants using one-time federal stimulus funding.

Water Quality Program budget

The Water Quality Program's $58 million budget includes a $870,000 general fund decrease from 2007-09, to a 2009-11 level of $19.3 million. The budget also includes $5.4 million in lottery funds, $12 million in federal funds, and $21.2 million in fees. The budget funds 239.01 full-time employees, compared to 241.45 for 2007-09.

Reductions. A $1.7million general fund reduction, eliminating 8 full-time employees from the program, will affect water quality activities as follows:

- Eliminated the Oregon Plan biomonitoring program (4 FTE).
- Reduced communications and outreach (1 FTE).
- Reduced program support (1 FTE).
- Reduced stormwater program (2 FTE).

Highlights. Although the program had general fund reductions, DEQ also received authority for the following new and continuing work:

- Supporting ongoing implementation of Senate Bill 737, including providing technical assistance to municipal wastewater treatment plants that need to develop toxic reduction plans, developing guidance documents, reviewing the persistent pollutant plans submitting and incorporating those plans into permits.
- Assisting municipalities on water and wastewater infrastructure and opportunities for reducing their carbon footprints; conducting work associated with the required EPA Clean Watersheds Needs Survey; and conduct additional outreach and marketing for the program, which EPA has requested.
- Restoring 2.5 positions in the Onsite Septic System Program that are unaffordable in the 2009-11 biennium.
- Continuing federal funds to protect drinking water in Oregon.
- Continuing federal funds to monitor bacteria levels at Oregon's coastal beaches.

Land Quality Program budget

The Land Quality Program's $72 million budget includes a general fund reduction of $1.4 million from 2007-09, to a 2009-11 level of $1.0 million. The budget also includes $55.6 million in other funds and $15.4 million in federal funds. The budget funds 229.12 FTE, just short of the 229.92 FTE approved for 2007-09.

Reductions. The Land Quality Program had a $1.4 million general fund reduction, which affects program activities as follows:

- Reduced hazardous waste compliance inspections (1 FTE).
- Reduced hazardous waste program management (1 FTE).
- Reduced hazardous waste technical assistance (1FTE). The program saved additional general funds by shifting FTE to other funding sources, making program work, primarily in the hazardous waste program, more reliant on fee funding.

In addition, $957,000 of orphan site cleanup program funds will be used to pay a portion of general fund debt service, reducing the amount available to clean up contaminated sites.

Highlights. The budget authorizes development of product stewardship policies and programs, funded with existing fees.

Cross Program

Cross program is not a program, but a budget structure for funding activities crossing more than one media (air, land or water).

Reductions. The Cross Media Program's general fund budget was reduced by $169,000, which affects program activities as follows:

- Reduced Economic Revitalization Team support of Oregon communities (.60 FTE). The FTE will be redirected to environmental work in other DEQ programs.

Highlights. DEQ received continued federal funding for positions working on the National Environmental Exchange Network.

Agency Management

Reductions. The Agency Management Program is funded by a surcharge on the air, water and land quality budgets. Due to program budget reductions, the Agency Management Program's budget is reduced by $1 million and 5.5 full-time employees. The reductions affected activities as follows:

- Eliminated senior policy support for high priority environmental issues (1 FTE).
- Eliminated policy support for performance measure coordination (1 FTE).
- Eliminated support for Communication and Outreach and Human Resources (1.5 FTE).
- Eliminated grant coordination (1 FTE).
- Eliminated an Accounting position (1 FTE).

Alternative formats

Alternative formats (Braille, large type) of this document can be made available. Contact DEQ's Office of Communications & Outreach, Portland, at (503) 229-5696, or toll-free in Oregon at 1-800-452-4011, ext. 5696.

30% General Fund Reduction Options - Annotated for Co-Chairs Budget 05/18/09

Oregon Department of Environmental Quality

2009 - 2011 Biennium — Agency Number: 34000

Options without shading were recommended by the Ways & Means Co-Chairs budget for reduction/elimination from DEQ's bubu[illegible]. Shaded [illegible]ns will remain in the DEQ budget.

Detail of 30% Reduction to 2009-11 Essential Budget Level

1	2	3	4	5	6	7	8	9	10	11	12	13	14	16	
Priority (ranked with lowest priority first)		**Dept. Initials**	**Prgm. or Activity Initials**	**Program Unit/Activity Description**	**GF**	**LF**	**OF**	**NL-OF**	**FF**	**NL-FF**	**TOTAL FUNDS**	**Pos.**	**FTE**	**Impact of Reduction on Services and Outcomes**	
Dept	**Prgm/ Div**														
1	1	DEQ	AQ	LRAPA 2007-09 Partial Implementation Reduction Included as Part of GRB	73,690						$ 73,690	0	0.00	LRAPA would reduce sampling frequency of its only air toxics monitor, putting the data reliabiility for trend analysis in question. LRAPA would also reduce compliance work and complaint response related to open burning and residential wood heating in the Eugene-Springfield area where PM 2.5 concentrations are close to exceeding the federal standard.	
2	2	DEQ	AQ	Diesel Grant Funds 2007-09 Partial Implementation Reduction Included as Part of GRB	606,045						$ 606,045	0	0.00	Diesel particulate matter ranks in the top three air toxics of concern in Oregon. Cutting 60% of the General Fund grant funding would deminish the public health benefit from diesel emission reduction grants.	
3	3	DEQ	AQ	AQ Local Government Outreach Reduction Included as Part of GRB	41,450						$ 41,450	0	0.00	Reduces funding for local government fine particulate reduction outreach. DEQ support for these former non-attainment areas is a federal requirement of the State Implementation Plan (SIP). Work includes: daily air quality advisories, voluntary woodstove curtailment programs and conducting wood smoke public education activities to reduce emissions. May result in higher fine particulate emissions or in some communities violation of the federal standard.	
4	4	DEQ	AQ	AQ Reduce Small Business Assistance 2007-09 Partial Implementation Reduction Included as Part of GRB	132,000						$ 132,000	0	0.50	Reduces most of the technical assistance to small, non-permitted businesses that are not required to comply with the federal Clean Air Act. With only .25 FTE state-wide remaining after this cut, it would lead to more pollution in the environment and a higher health risk to the public.	1st 5%
5	1	DEQ	WQ	Eliminate Oregon Plan Biomonitoring 2007-09 Partial Implementation Reduction Included as Part of GRB	860,888						$ 860,888	4	4.00	DEQ would no longer be able to meet monitoring commitments to the Oregon Plan as part of the Coastal Coho Recovery Plan. This work includes: • Coordination with and training ODFW crews on the collection of temperature data at 21 locations and macroinvertrbrate samples at 160 locations along the coast. • Processing, analyzing and reporting on the information associated with the data collection in the 21 coastal coho population units. • Supporting the collection, analysis and reporting of additional ambient sites on the Oregon coast. • Providing technical assistance to other agencies on related programs that collect water quality and biological data to determine the effectiveness of management activities. • Facilitating macroinvertebrate data processing and analysis from watershed councils. • Participating in the Oregon Plan Core team or Monitoring team meetings.	
6	1	DEQ	LQ	Reduce HW Compliance Inspections 2007-09 Partial Implementation Reduction Included as Part of GRB	264,122						$ 264,122	1	1.00	Reduce HW inspection staff by 1 FTE, or approximately 10%. This would result in: • approximately 26 fewer inspections of regulated generators per year (8 Large Quantity and 18 Small Quantity) and • a reduced ability to respond to complaints (about 10 – 20 fewer complaint inspections)	

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24	4	DEQ	WQ	Wastewater Permitting (WQ)	500,000						$ 500,000	4	2.00	DEQ would not be able to meet the commitments made for the Stormwater program. Specifically, DEQ would: • Reduce inspections in the stormwater program by 50 percent • Reduce permit issuance. This means that all stormwater permit issuance will be delayed. • Eliminate work to develop approaches for eliminating dual regulation (DEQ and municipalities) of stormwater from construction sites • Delay issuing the 1200C general permit (for construction activities). The permit expires December 31st, 2010.	
					485,426						$ 485,426	3	3.50		
25	10	DEQ	LQ	Orphan Site Cleanups - Hazardous Substance Possession Fee	300,000						$ 300,000	0	0.00	Use Hazardous Substance Possession Fee fund balance in excess of amount required for the fund's share of orphan debt service to pay for a portion of GF debt service. These funds would otherwise have been spent to support orphan cleanup work. Instead, DEQ will use other fund sources to subsidize administrative and overhead (e.g., rent) costs of the orphan program.	
26	11	DEQ	LQ	Orphan Site Cleanups (LQ)	555,000						$ 555,000	0	0.00	This option would use more of the proceeds from the 2008 orphan site bond sale (see Option 20) to pay General Fund debt service, instead of for cleaning up sites. This is the maximum amount of proceeds that can be used for debt service under IRS regulations. Identified orphan spending needs for 2009-11 already exceed available revenues, and there is no reserve for emergencies and as-yet-unidentified high priority sites. This additional reduction would significantly worsen the budget shortfall, jeopardizing public health and investments made to clean up contaminants. At this level, cuts would be made to operations and maintenance (O&M) for already-installed cleanup remedies, federal match obligations and/or investigation and cleanup of highly-contaminated sites where a remedy has not yet been installed.	4th 5%
27	11	DEQ	AQ	LRAPA	57,895						$ 57,895	0	0.00	Because LRAPA has already received cuts in local dues and general fund, this cut would result in an across the board reduction through a furlough (9 days) or other mechanism. It would reduce the amount of inspections, air monitoring/reporting/forecasting, complaint responses, permits issued, enforcement actions, grant applications, open office hours,	

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28	12	DEQ	AQ	State Air Permitting (ACDP)	574,898						$ 574,898	3	2.50	Eliminate most of remaining GF from ACDP, leaving only 1 FTE of non-fee funded FTE in the program. Will delay permit issuance, which negatively impacts businesses expanding or morifying their operations. Will also reduce facility inspections and compliance oversight, eliminate coordinated inspector training and delay or eliminate outreach materials for new sources.	
29	9	DEQ	AQ	Air Toxics Outreach (AQ)	101,961						$ 101,961	1	0.50	Cuts outreach work to reduce benzene and PAH emissions, two of the most significant toxic air pollutants. Reduction efforts target dry cleaners, gas stations and development of community burn ban and woodstove ordinances.	
30	5	DEQ	WQ	WQ Toxics Monitoring Support	694,249						$ 694,249	4	3.59	Reduces support, including a manager, for the Water Quality Toxics Monitoring program. This means: • Development of maps and other visual tools that geographically depict where toxics monitoring was done and the monitoring results will not be available. • The toxics monitoring results will take longer to be uploaded into the public database, thus it will take longer to share the monitoring results. • Remaining staff in the toxics monitoring program will not have administrative support to do copying, filing, mailings, scheduling and database work. • Reduced ability to develop informational materials for the public or conduct public outreach regarding the results of the toxics monitoring results.	5th 5%
31	6	DEQ	WQ	State Water Quality Permitting (WPCF)	482,355						482,355	2	2.00	Reduces inspections, technical assistance and timely permit renewals for permittees that land apply their effluent.	

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32	7	DEQ	WQ	Willamette TMDL Implementation	1,046,224						$ 1,046,224	4	4.00	Reduces implementation work associated with the Willamette TMDL. This work includes: • Providing technical assistance to local communities, watershed councils, local governments, other state agencies, federal agencies, businesses, citizens, and other groups in the Willamette Basin for implementing watershed restoration and pollution control activities • Collecting and analyzing mercury data to ensure DEQ, communities and other stakeholders can better understand how mercury affects the environment and make cost-effective decisions about mercury reduction strategies. This reduction option package includes a manager position.	
33	14	DEQ	AQ	Eliminate Second Air Toxic Monitoring site	249,159						$ 249,159	2	1.00	This would cut the air toxics monitor in Salem or a second monitor in Medford. This, together with cuts already taken, would significantly undermine DEQ's air toxics monitoring effort. The monitors in Medford and Salem were added in the 2007 budget in reponse to substantial public interest, and removing the monitors will undercut expectations.	
34	2	DEQ	WQ	Reduce Groundwater Protection Program	891,993						$ 891,993	4	4.00	DEQ would no longer do work associated with any of the Groundwater Management Areas (GWMAs) that are located in the Lower Umatilla Basin, Northern Malheur County, and in the Southern Willamette Valley. The work associated with the GWMAs includes: • Implementation of Groundwater Management Areas where the water quality has been degraded, beneficial uses are seriously impaired, and public health may be at risk in part from nonpoint source groundwater pollution • Technical assistance to communities and watershed councils engaged in groundwater pollution prevention efforts.	6th 5%
35	15	DEQ	AQ	Air Quality Emission Inventory	214,462						$ 214,462	1	1.00	Delays in air toxics and PM2.5 planning work. Emission inventory is the scientific underpinning of air quality planning, including identification of sources, determining baseline emission levels, evaluating the benefits of proposed emission reduction strategies, and meeting federal technical requirements. With fewer resources, DEQ will have to delay planning efforts to reduce air quality health impacts.	
36	8	DEQ	WQ	Water Quality Enforcement	229,094		15,108				$ 244,202	1	1.00	Reduces enforcement capabilities for water quality violations. This means there will be reduced compliance with legal requirements, less civil penalty money contributed to the General Fund, and fewer Supplemental Environmental Projects funded by violators.	
					12,349,985	-	(570,398)	-	-	-	$ 11,779,587	47	42.09		

Positive numbers are reductions to the 2009-11 budget, negative numbers are limitation increases

Summary	Co-Chairs	Corrected for G18	Corrected for G18	
AQ	2,357,020	2,236,002	4	4.00
WQ	1,733,186	1,733,186	11	8.00
LQ	1,317,650	1,438,668	3	3.50
XP	168,995	168,995	0	0.00
Debt	957,000	957,000	0	0.00
Total	6,533,851	6,533,851	18	15.5

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Oregon Department of Environmental Quality

2009 - 2011 Biennium — Agency Number: 34000

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Detail of 30% Reduction to 2009-11 Essential Budget Level

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Dept	**Prgm/ Div**														
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4	4	DEQ	AQ	AQ Reduce Small Business Assistance 2007-09 Partial Implementation Reduction Included as Part of GRB	132,000						$ 132,000	0	0.50	Reduces most of the technical assistance to small, non-permitted businesses that are not required to comply with the federal Clean Air Act. With only .25 FTE state-wide remaining after this cut, it would lead to more pollution in the environment and a higher health risk to the public.	1st 5%
5	1	DEQ	WQ	Eliminate Oregon Plan Biomonitoring 2007-09 Partial Implementation Reduction Included as Part of GRB	860,888						$ 860,888	4	4.00	DEQ would no longer be able to meet monitoring commitments to the Oregon Plan as part of the Coastal Coho Recovery Plan. This work includes: • Coordination with and training ODFW crews on the collection of temperature data at 21 locations and macroinvertrbrate samples at 160 locations along the coast. • Processing, analyzing and reporting on the information associated with the data collection in the 21 coastal coho population units. • Supporting the collection, analysis and reporting of additional ambient sites on the Oregon coast. • Providing technical assistance to other agencies on related programs that collect water quality and biological data to determine the effectiveness of management activities. • Facilitating macroinvertebrate data processing and analysis from watershed councils. • Participating in the Oregon Plan Core team or Monitoring team meetings.	
6	1	DEQ	LQ	Reduce HW Compliance Inspections 2007-09 Partial Implementation Reduction Included as Part of GRB	264,122						$ 264,122	1	1.00	Reduce HW inspection staff by 1 FTE, or approximately 10%. This would result in: ▪ approximately 26 fewer inspections of regulated generators per year (8 Large Quantity and 18 Small Quantity) and ▪ a reduced ability to respond to complaints (about 10 – 20 fewer complaint inspections)	

30% General Fund Reduction Options - Annotated for Co-Chairs Budget 05/18/09

Oregon Department of Environmental Quality

2009 - 2011 Biennium — Agency Number: 34000

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Detail of 30% Reduction to 2009-11 Essential Budget Level

1	2	3	4	5	6	7	8	9	10	11	12	13	14	16	
Priority (ranked with lowest priority first)		**Dept. Initials**	**Prgm. or Activity Initials**	**Program Unit/Activity Description**	**GF**	**LF**	**OF**	**NL-OF**	**FF**	**NL-FF**	**TOTAL FUNDS**	**Pos.**	**FTE**	**Impact of Reduction on Services and Outcomes**	
Dept	**Prgm/ Div**														
1	1	DEQ	AQ	LRAPA 2007-09 Partial Implementation Reduction Included as Part of GRB	73,690						$ 73,690	0	0.00	LRAPA would reduce sampling frequency of its only air toxics monitor, putting the data reliabiility for trend analysis in question. LRAPA would also reduce compliance work and complaint response related to open burning and residential wood heating in the Eugene-Springfield area where PM 2.5 concentrations are close to exceeding the federal standard.	
2	2	DEQ	AQ	Diesel Grant Funds 2007-09 Partial Implementation Reduction Included as Part of GRB	606,045						$ 606,045	0	0.00	Diesel particulate matter ranks in the top three air toxics of concern in Oregon. Cutting 60% of the General Fund grant funding would deminish the public health benefit from diesel emission reduction grants.	
3	3	DEQ	AQ	AQ Local Government Outreach Reduction Included as Part of GRB	41,450						$ 41,450	0	0.00	Reduces funding for local government fine particulate reduction outreach. DEQ support for these former non-attainment areas is a federal requirement of the State Implementation Plan (SIP). Work includes: daily air quality advisories, voluntary woodstove curtailment programs and conducting wood smoke public education activities to reduce emissions. May result in higher fine particulate emissions or in some communities violation of the federal standard.	
4	4	DEQ	AQ	AQ Reduce Small Business Assistance 2007-09 Partial Implementation Reduction Included as Part of GRB	132,000						$ 132,000	0	0.50	Reduces most of the technical assistance to small, non-permitted businesses that are not required to comply with the federal Clean Air Act. With only .25 FTE state-wide remaining after this cut, it would lead to more pollution in the environment and a higher health risk to the public.	1st 5%
5	1	DEQ	WQ	Eliminate Oregon Plan Biomonitoring 2007-09 Partial Implementation Reduction Included as Part of GRB	860,888						$ 860,888	4	4.00	DEQ would no longer be able to meet monitoring commitments to the Oregon Plan as part of the Coastal Coho Recovery Plan. This work includes: • Coordination with and training ODFW crews on the collection of temperature data at 21 locations and macroinvertrbrate samples at 160 locations along the coast. • Processing, analyzing and reporting on the information associated with the data collection in the 21 coastal coho population units. • Supporting the collection, analysis and reporting of additional ambient sites on the Oregon coast. • Providing technical assistance to other agencies on related programs that collect water quality and biological data to determine the effectiveness of management activities. • Facilitating macroinvertebrate data processing and analysis from watershed councils. • Participating in the Oregon Plan Core team or Monitoring team meetings.	
6	1	DEQ	LQ	Reduce HW Compliance Inspections 2007-09 Partial Implementation Reduction Included as Part of GRB	264,122						$ 264,122	1	1.00	Reduce HW inspection staff by 1 FTE, or approximately 10%. This would result in: ▪ approximately 26 fewer inspections of regulated generators per year (8 Large Quantity and 18 Small Quantity) and ▪ a reduced ability to respond to complaints (about 10 – 20 fewer complaint inspections)	

30% General Fund Reduction Options - Annotated for Co-Chairs Budget 05/18/09

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Detail of 30% Reduction to 2009-11 Essential Budget Level

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7	5	DEQ	AQ	Reduce Ozone, Fine Particulate Monitoring Reduction Included as Part of GRB	308,000						$ 308,000	2	1.50	Eliminates new ozone and fine particulate monitoring provided in the 2007-2009 budget. Lost monitors include: All Eastern Oregon ozone monitors at a time when EPA has tightened the standard. Fine particulate monitors in Madras, Redmond, McMinnville and a background site near Klamath Falls. All sites (except the background site) are at risk of exceeding the standard and are likely above the health level of concern. Loosing the background site for Klamath Falls will make develoment of an implementation strategy for this non-attainment area more difficult.	
8	6	DEQ	AQ	Reduce Fine Particulate Planning Reduction Included as Part of GRB	182,000						$ 182,000	1	1.00	Eliminates an Air Quality Planner developing and coordinating fine particulate and ozone reduction strategies and carrying out mandatory CAA requirements for new federal standards. Delays work to develop an air quality plan for returning Klamath Fall's air to healthy levels. Extended violation of the fine particulate standard negatively impacts public health and economic development in the area. Postpones pollution prevention outreach and strategy development in Oregon communities at risk of violating federal standards and slows the implementation of CAA requirements mandated by new standards.	
10	7	DEQ	AQ	Reduce Clean Diesel Outreach 2007-09 Partial Implementation Reduction Included as Part of GRB	458,000						$ 458,000	2	2.00	Reduce clean diesel outreach work aimed at recruiting fleet owners to clean up their diesel engines. Work includes marketing the state's tax credit program, coordinating entities to take advantage of state and federal grant programs, promoting idle reduction strategies and participating in the development of a regulatory program. Diesel particulate matter ranks in the top three air toxics of concern in Oregon. Loss of staff would most likely reduce Oregon's success in obtaining and administering grants.	2nd 5%
11	8	DEQ	AQ	Eliminate 1 Air Toxic Monitoring Site Reduction Included as Part of GRB	218,000						$ 218,000	1	1.00	Eliminate a Medford air toxics monitoring site. Loss of this background site will make interpretation of air toxics data from the population orientated site in Medford more difficult. Long term, DEQ would move this site to other communities with air toxic levels modeled to be above the health benchmarks.	
12	9	DEQ	AQ	Eliminate Support for Regional Air Quality Modeling Center	205,660						$ 205,660	0	0.00	Reduces the availability of tecnical data needed to reduce fine particulate. NW AirQuest is a technical collaborative with WA and ID to produce meteorological and dispersion modeling used for burn bans and air quality plan development. Replacing this information on our own later for PM2.5 and ozone plans would cost more.	
13	10	DEQ	AQ	Eliminate General Fund Diesel Grants	421,995						$ 421,995	0	0.00	Eliminating all remaining GF grant funding will prevent diesel engine retrofits and repowers that dramatically reduce diesel particulate emissions and public health risks. This funding was match for DERA grants and other competitive federal grants, so federal funds will be lost as well.	
14	4	DEQ	LQ	Hazardous Waste Policy Devopment & Interpretation (LQ)	257,396		(218,164)				$ 39,232	0	0.00	Shift .90 of a policy position to fee funding. This will enable the program to continue haz. waste policy development and interpretation during 09-11, when there are several policy issues to be addressed. It will, however, limit funds available to fund the program in 2011-13.	

30% General Fund Reduction Options - Annotated for Co-Chairs Budget 05/18/09

Oregon Department of Environmental Quality

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Priority (ranked with lowest priority first)		**Dept. Initials**	**Prgm. or Activity Initials**	**Program Unit/Activity Description**	**GF**	**LF**	**OF**	**NL-OF**	**FF**	**NL-FF**	**TOTAL FUNDS**	**Pos.**	**FTE**	**Impact of Reduction on Services and Outcomes**	
15	5	DEQ	LQ	Hazardous Waste Program Management	298,247						$ 298,247	1	1.00	Eliminate one manager position.	
16	6	DEQ	LQ	Shift additional Hazardous Waste FTE to fees	240,917		(200,764)				$ 40,153	0	0.00	Shift an additional 1.13 FTE of hazardous waste program FTE to Other Funds, funded with available fee balances. This would enable the program to continue the work of these positions through 09-11. Continued affordability will be evaluated as part of 11-13 budget development.	
17	1	DEQ	XP	Shift Part of Economic Revitalization Team (ERT) to alternate funding	168,995		(154,629)				$ 14,366	0	0.00	Shifts ERT funding for 0.6 FTE from the General Fund over to fee funding	
18		DEQ	AQ	Air Quality Enforcement	120,612		(8,665)				$ 111,947	1	0.50	Loss of Enforcement staff will eliminate DEQ's abiliity to take enforcement on open burning violations discovered through complaint response, and less enforcement of hazardous waste violations, including improper disposal. Loss of this resource mens there will be reduced compliance with legal requirements, less civil penalty money contributed to the GF and fewer Supplemental Environmental Projects funded by violators.	
			WQ	WQ Enforcement			18,740				$ 18,740	1	0.00		
			LQ	Hazardous Waste Enforcement	121,018		(22,024)				$ 98,994	0	0.50		
19	2	DEQ	WQ	Communications and Outreach	223,014						$ 223,014	1	1.00	DEQ would reduce communications and outreach support for the agency. This means: • Reduced ability to produce informational materials such as news releases and fact sheets on local environmental issues. • Reduced support and expertise for public meetings and public outreach efforts regarding permitting in communities. • Reduced ability to work directly with local communities and local governments in public education campaigns to reduce non-point source pollution. • Reduced ability to cover and communicate local environmental enforcement actions. • Reduced ability to educate and communicate with the public about toxics in the environment and climate change issues.	3rd 5%
20	7	DEQ	LQ	Orphan Site Cleanups (LQ)	102,000						$ 102,000	0	0.00	This option would use proceeds from the 2008 orphan site bond sale to pay General Fund debt service, instead of for cleaning up sites. Identified orphan spending needs for 2009-11 already exceed available revenues, and there is no reserve for emergencies and as-yet-unidentified high priority sites. This reduction would worsen the budget shortfall.	
21	8	DEQ	LQ	Hazardous Waste TA (LQ)	256,968						$ 256,968	1	1.00	Reduce HW technical assistance staff by 1 FTE. This would result in: • 56 fewer technical site visits a biennium and • a reduction in statewide training sessions. Site visits and training sessions help predominately small businesses reduce the use of toxics, comply with complex regulations, and improve overall environmental performance.	
22	3	DEQ	WQ	Water Quality Program Support	149,284						$ 149,284	1	1.00	Reduces administrative support for the water quality program. This work includes filing, copying, mailing, scheduling and database work. This means that existing staff will have less administative support and may not be able to fully focus on technical work.	
23	9	DEQ	LQ	Hazardous Waste Data Management & Development	256,968						$ 256,968	1	1.00	This would eliminate the position responsible for the HW program's data systems development and improvement. It would severely impact the program's ability to: • collect and analyze generator and waste data necessary to evaluate program progress; • identify improvements; • respond to EPA's requests for information; and • fix database problems, compromising data quality. To cover minimum data management functions, we would need to reduce resources devoted to program improvements, policy development, and related activities.	

State of Oregon
Department of Environmental Quality Memorandum

Date: September 29, 2009

To: Environmental Quality Commission

From: Dick Pedersen, Director

Subject: Agenda Item O, Informational and Discussion Item: DEQ 2009 Key Performance Measures Update and EQC Self-Evaluation
October 22-23, 2009 EQC Meeting

Purpose of Item

This item will provide an overview of DEQ's 2009 Key Performance Measures report and status and will introduce a discussion about the commission's self-evaluation on performance measures. DEQ submitted the report to the Department of Administrative Services on September 30, and the report includes the commission's self-evaluation, which is one of DEQ's key performance measures.

Background

Every state agency is required to complete an annual update for its key performance measures report in September. The annual update typically includes adding the data from the previous year and then reflecting on the results. The ultimate goal is to achieve identified targets. The update can also include the modification of an existing key performance measure, the addition of a new measure, or the deletion of an existing measure. For the 2009 annual update, no changes were made to the measures.

The submittals in the even-numbered years are incorporated into the agency budget request document and are a major focus of discussion during the agency budget review process before the Joint Ways and Means Committee. Since this is an odd numbered year, policy analysts at DAS and the Legislative Fiscal Office will review the submitted report. The purpose of the process is to inform as to whether DEQ is on track for achieving the identified targets.

EQC Self-Evaluation: Key Performance Measure #16

The 2005 legislature directed the Department of Administrative Services and the Legislative Fiscal Office to develop a measure for boards and commissions having governance oversight to use in evaluating their own performance. Because the EQC is included in DEQ's budget and because it hires DEQ's director, DAS and LFO deemed the EQC to have governance oversight and identified it as one of the boards and commissions that should have a performance measure.

On December 14, 2006, the EQC adopted the "percent of total best practices met by the commission" as the performance standard. The measure is an annual self-assessment against 15 best practices for boards and commissions, as laid out by DAS and customized to the EQC.

The last EQC self-evaluation was conducted at the August 2008 meeting. In September 2009, EQC members individually completed self-evaluations and submitted the results to DEQ for compilation. At the October meeting, the EQC will hold a group discussion about how it is doing, factors affecting its performance, and what it needs to do to improve future performance.

Due to the timing of the meeting materials and the preparation of the annual report, the appropriate attachments are not yet available. We will be providing the key performance report document and the EQC self-assessment material prior to the October commission meeting.

EQC Involvement

The key performance measure annual reporting process will begin again next summer for the September 2010 submittal. The 2010 annual update will be included in the DEQ 2011 Agency Request Budget document and will be the basis of extensive discussions before the 2011 Ways and Means process. The next update will require another EQC self-assessment in order to complete the update for KPM #16. Between now and next summer, the commission may discuss whether any measures should be modified, added or deleted. In conjunction with the commission's discussion about the agency Strategic Directions, it would be prudent to include a reflection on the measures that DEQ reports to DAS, LFO and the Oregon Legislature.

Approved:

Section: Cheryl Hutchins-Wirth for Keri Nelson

Division: Cheryl Hutchins-Wirth for Keri Nelson

Report Prepared By: Gregory K. Aldrich
Phone: (503) 229-6345

Agency Management Report

KPMs For Reporting Year 2009

Agency: ENVIRONMENTAL QUALITY, DEPARTMENT of

	Green = Target to -5%	Yellow = Target -6% to -15%	Red = Target > -15%	Pending	Exception Can not calculate status (zero entered for either Actual or Target)
Summary Stats:	54.55%	9.09%	18.18%	13.64%	4.55%

Detailed Report:

KPMs	Actual	Target	Status	Most Recent Year	Management Comments
1 - CUSTOMER SERVICE: Percent of customers rating their satisfaction with the agency's customer service as "good" or "excellent": overall, timeliness, accuracy, helpfulness, expertise, availability of information.	73.00	85.00	Yellow	2008	DEQs customer service ratings remain high for the vehicle inspection program, at 94 percent, while overall 76 percent of air, water and septic permit holders rated DEQ customer service as good to excellent. Slower service and correlating customer ratings are likely due to short staffing in the permitting programs and the complex and demanding nature of environmental permits, both of which cause delays in the process.
2 - PERMIT TIMELINESS: Percentage of air contaminant discharge permits issued within the target period.	96.00	90.00	Green	2008	DEQ exceeded the target in 2008 but we believe this is largely due to the type of permits issued. In 2009, we expect to be below the target again given the types of permits we are working on. The good news is that the long-term trend is up meaning we are headed towards meeting the target. In part, this reflects the additional resources approved in 2007.
3 - PERMIT TIMELINESS: Percentage of individual wastewater discharge permits issued within 270 days.	24.00	50.00	Red	2008	DEQ did not meet the target due to litigation affecting permits, EPA's objections regarding municipal permits, requests that DEQ reconsider issued permits and staff turnover. Efforts to shift to a watershed cycle for permit issuance also contribute to delays in permit issuance.

Agency Management Report

KPMs For Reporting Year 2009

KPMs	Actual	Target	Status	Most Recent Year	Management Comments
4 - UPDATED PERMITS: Percent of total wastewater permits that are current.	89.00	80.00	Green	2008	DEQ met the target in 2008. However, due to litigation affecting permits, EPA's objections regarding municipal permits, requests that DEQ reconsider issued permits and staff turnover will likely prevent us from acheiving the target in 2009.
5 - WATER QUALITY TMDLs: Percent of impaired waterbody miles for which a TMDL has been approved.	71.00	73.00	Green	2008	DEQ expects this trend to continue to improve in 2010 as other large TMDLs are completed.
6 - UMATILLA: Cumulative percent of chemical agent destroyed at Umatilla Chemical Demilitarization Facility (UMCDF).	37.00	32.00	Green	2008	DEQ is ahead of the target for 2008 and is meeting the 2009 target. The effort to date has focused on the higher risk munitions. At this time, all rockets, bombs, artillery shells, land mines, and nerve agents have been destroyed. This means the weapons distruction to date has reduced the risk to local residents by 99 percent.
7 a - CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: overall.	79.00	78.00	Green	2008	DEQ is ahead of the target for 2008. This measure shows that DEQ continues to increase the cumulative percentage of sites cleaned up, meaning that more sites are cleaned up each year than new sites discovered. We believe the trend will continue upward toward the 90-92 percent achievement level.
7 b - CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: tanks.	81.00	80.00	Green	2008	DEQ slightly exceeded the 2008 target. This means that each year more sites are cleaned up than new ones are added to the list for cleanup. Since DEQ started tracking tank statistics in 1996, the percentage of sites cleaned up has increased 2 to 3 percent each year, a consistent upward and positive trend.
7 c - CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: hazardous substances.	37.00	36.00	Green	2008	DEQ exceeded the 2008 target. This means that over time more sites are cleaned up than new ones are added to the list for cleanup. Since DEQ started tracking these statistics for over a decade, the percentage of sites cleaned up has increased 1 to 2 percent each year, a consistent upward and positive trend.

Agency Management Report

KPMs For Reporting Year 2009

KPMs	Actual	Target	Status	Most Recent Year	Management Comments
8 - TOXICS PREVENTION AND REDUCTION: Pounds of mercury removed from the environment through DEQ's efforts.	196.00	190.00	Green	2008	In 2008, DEQ exceeded the target. The last three years have shown a fairly consistent trend in recovery of between 180 and 200 pounds of mercury per year. As the DEQ and local government programs achieve success, the amount of mercury collected by DEQ annually will level off and being to decline over time as the locally sponsored programs mature.
9 - SOLID WASTE - Pounds of municipal solid waste landfilled or incinerated per capita.	1,542.00	1,599.00	Green	2008	The 2008 target was exceeded since Oregonians generated less waste than the target. For the first time in four years, Oregon's per capita disposal rate was below the target. In 2008 total waste generation, the amount recycled and the amound disposed all decreased significantly from 2007. These decreases reflect both a strong statewide waste prevention strategy and the economic downturn.
10 a - WATER QUALITY CONDITIONS - Percent of monitored stream sites with significantly increasing trends in water quality.	3.00	75.00	Red	2008	The failure to meet the target for increasing trends in water quality is at least partially a statistical function in that earlier positive trends have resulted in some streams attaining good to excellent condition and stabilizing at that level during the late 1990s.
10 b - WATER QUALITY CONDITIONS - Percent of monitored stream sites with decreasing trends in water quality.	24.00	0.00	Exception	2008	Our target is zero. The percent of streams with declining water quality remained the same from 2007 to 2008 at 24 percent. Many of the stream sites with declining water quality are at stream locations across the state that do not have significant discharges from industrial and municipal point source discharges and are impacted by nonpoint sources. A more detailed analysis is needed to determine what is causing declining trends.

Agency Management Report

KPMs For Reporting Year 2009

KPMs	Actual	Target	Status	Most Recent Year	Management Comments
10 c - WATER QUALITY CONDITIONS – Percent of monitored stream sites with water quality in good to excellent condition.	50.00	40.00	Green	2008	This target was exceeded again in 2008 and has been for the past 10 years. We believe that developing and implementing Total Maximum Daily Loads (clean water plans/TMDLs) and associated water quality management plans have helped increase the number of stream sites with good to excellent water quality conditions.
11 - AIR QUALITY DIESEL EMISSIONS: Quantity of diesel particulate emissions.	3,980.00		Pending	2005	The data for this measure is updated every three years. The 2008 inventory will be released in spring 2010 and will be incorporated into the 2010 update of this measure.
12 a - AIR QUALITY CONDITIONS - Number of days when air is unhealthy for sensitive groups.	109.00	65.00	Red	2008	This measure illustrates that the air is unhealthy for sensitive groups to breathe in many Oregon cities on many individual days. The majority of the unhealthy air days are caused by elevated fine particulate levels resulting from woodstoves and other combustion sources. The increase in unhealthy days that occurred in 2006 and continuing into 2008 is partially a result of the new lower federal standard for fine particulate. In response to the new federal standard, DEQ is working on various strategies to reduce fine particulate pollution. The 2009 Legislature approved legislation that will reduce such pollution from older woodstoves, that will make a difference in the future.

Agency Management Report

KPMs For Reporting Year 2009

KPMs	Actual	Target	Status	Most Recent Year	Management Comments
12 b - AIR QUALITY CONDITIONS - Number of days when air is unhealthy for all groups.	11.00	7.00	Red	2008	This measure illustrates that the air is unhealthy for all groups to breathe in many Oregon cities on many individual days. The majority of the unhealthy air days are caused by elevated fine particulate levels resulting from woodstoves and other combustion sources. The increase in unhealthy days that occurred in 2006 and continuing into 2008 is partially a result of the new lower federal standard for fine particulate. In response to the new federal standard, DEQ is working on various strategies to reduce fine particulate pollution. The 2009 Legislature approved legislation that will reduce such pollution from older woodstoves, that will make a difference in the future.
13 a - AIR QUALITY - NEW SCIENCE - Percent of Oregonians at risk from toxic air pollutants that contribute to cancer.	98.00		Pending	2002	This data originates with a comprehensive inventory of air pollution sources done by DEQ every three years. These inventories are done on a calendar year basis; the last one for 2005. DEQs inventory data is used by EPA to predict toxic air pollutant concentrations and the associated health threat using sophisticated modeling techniques. These methods are well-documented, include substantial quality control but take time to produce results. The last published analysis by EPA was for the 2002 calendar year and released in 2009; the 2005 analysis may be available next year.

Agency Management Report

KPMs For Reporting Year 2009

KPMs	Actual	Target	Status	Most Recent Year	Management Comments
13 b - AIR QUALITY - NEW SCIENCE - Percent of Oregonians at risk from toxic air pollutants that contribute to respiratory problems.	96.00		Pending	2002	This data originates with a comprehensive inventory of air pollution sources done by DEQ every three years. These inventories are done on a calendar year basis; the last one for 2005. DEQs inventory data is used by EPA to predict toxic air pollutant concentrations and the associated health threat using sophisticated modeling techniques. These methods are well-documented, include substantial quality control but take time to produce results. The last published analysis by EPA was for the 2002 calendar year and released in 2009; the 2005 analysis may be available next year.
14 - ERT: Percent of local participants who rank DEQ involvement in Economic Revitalization Team process as good to excellent.	78.90	80.00	Green	2008	In 2008 we received a ranking of 78.9 percent which is slightly lower, but substantially meeting our target goal of 80 percent and about a five percent increase in the performance ranking from 2006. The next ERT survey will be conducted in 2010 and will be included in the measures update.
15 - PERMIT TIMELINESS: Percent of Title V operating permits issued with the target period.	94.00	90.00	Green	2008	DEQ exceeded the target in 2008 but we believe this is largely due to the type of permit modifications issued. In 2009, we expect to be below the target again given the types of permit modifications we are working on. The good news is that the long-term trend is up meaning we are headed towards meeting the target. In part, this reflects the additional resources approved in 2007.

Agency Management Report

KPMs For Reporting Year 2009

KPMs	Actual	Target	Status	Most Recent Year	Management Comments
16 - BOARDS AND COMMISSIONS: Percent of total best practices met by the Environmental Quality Commission.	90.00	100.00	Yellow	2008	The 2008 results show a drop in resutls for this measure. By examining the survey results, we have found specific areas for future improvements. These include assessing the training needs of the commission and engaging in discussion and review of the EQC's best management practices. These two considerations are part of a proposed commission retreat in winter 2010 that would allow the EQC significant planning and discussion time. The goal will be to help the commission reach its target in for the next update.

This report provides high-level performance information which may not be sufficient to fully explain the complexities associated with some of the reported measurement results. Please reference the agency's most recent Annual Performance Progress Report to better understand a measure's intent, performance history, factors impacting performance and data gather and calculation methodology.

ENVIRONMENTAL QUALITY, DEPARTMENT of

Annual Performance Progress Report (APPR) for Fiscal Year (2008-2009)

Proposed KPM's for Biennium (2009-2011)

Original Submission Date: 2009

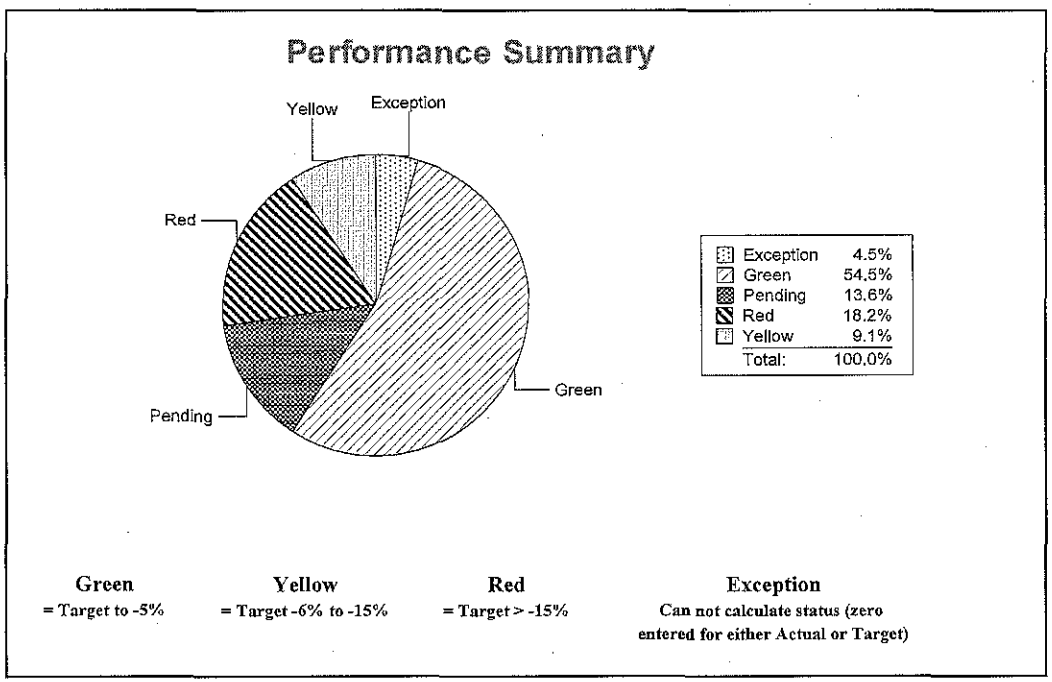
2008-2009 KPM #	2008-2009 Approved Key Performance Measures (KPMs)
1	CUSTOMER SERVICE: Percent of customers rating their satisfaction with the agency's customer service as "good" or "excellent": overall, timeliness, accuracy, helpfulness, expertise, availability of information.
2	PERMIT TIMELINESS: Percentage of air contaminant discharge permits issued within the target period.
3	PERMIT TIMELINESS: Percentage of individual wastewater discharge permits issued within 270 days.
4	UPDATED PERMITS: Percent of total wastewater permits that are current.
5	WATER QUALITY TMDLs: Percent of impaired waterbody miles for which a TMDL has been approved.
6	UMATILLA: Cumulative percent of chemical agent destroyed at Umatilla Chemical Demilitarization Facility (UMCDF).
7 a	CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: overall.
7 b	CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: tanks.
7 c	CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: hazardous substances.
8	TOXICS PREVENTION AND REDUCTION: Pounds of mercury removed from the environment through DEQ's efforts.
9	SOLID WASTE - Pounds of municipal solid waste landfilled or incinerated per capita.
10 a	WATER QUALITY CONDITIONS - Percent of monitored stream sites with significantly increasing trends in water quality.
10 b	WATER QUALITY CONDITIONS - Percent of monitored stream sites with decreasing trends in water quality.

2008-2009 KPM #	2008-2009 Approved Key Performance Measures (KPMs)
10 c	WATER QUALITY CONDITIONS – Percent of monitored stream sites with water quality in good to excellent condition.
11	AIR QUALITY DIESEL EMISSIONS: Quantity of diesel particulate emissions.
12 a	AIR QUALITY CONDITIONS - Number of days when air is unhealthy for sensitive groups.
12 b	AIR QUALITY CONDITIONS - Number of days when air is unhealthy for all groups.
13 a	AIR QUALITY - NEW SCIENCE - Percent of Oregonians at risk from toxic air pollutants that contribute to cancer.
13 b	AIR QUALITY - NEW SCIENCE - Percent of Oregonians at risk from toxic air pollutants that contribute to respiratory problems.
14	ERT: Percent of local participants who rank DEQ involvement in Economic Revitalization Team process as good to excellent.
15	PERMIT TIMELINESS: Percent of Title V operating permits issued with the target period.
16	BOARDS AND COMMISSIONS: Percent of total best practices met by the Environmental Quality Commission.

New Delete	
	Title: **Rationale:**

ENVIRONMENTAL QUALITY, DEPARTMENT of	I. EXECUTIVE SUMMARY
Agency Mission: To be a leader in restoring, maintaining and enhancing the quality of Oregons air, water and land.	

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1. SCOPE OF REPORT

This Annual Performance Progress Report (APPR) for Fiscal Years 2008-2009 provides performance results related to each of the agencys primary environmental programs, e.g., Land, Air and Water Quality. Not all sub-programs are represented in Key Performance Measures, but the highest agency priorities are reflected in the measures.No changes to the KPMs were proposed for the 2009 Legislature. In 2007, the Legislature approved adoption/revision of a number of the Key Performance Measures adopted for the 2005-07 biennium. This includes the formal adoption of several Oregon Benchmarks as agency Key Performance Measures (see Oregon Context, below) and modifications/new measures that reflect new science. Where data is not available yet to support newly adopted measures, implementation and targets are described. Note that the numbering scheme for the agencys Key Performance Measures may change from one year to the next as a result of the adoption and/or deletion of measures by the Oregon Legislature.

2. THE OREGON CONTEXT

The Department of Environmental Qualitys chief responsibility is protecting, maintaining and enhancing environmental conditions in Oregon. DEQ implements federally delegated programs for water quality, air quality and hazardous waste, consistent with federal mandates and the Performance Partnership Agreement (PPA) negotiated between DEQ and EPA Region X. The PPA establishes priority activities and required performance tracking for delegated programs. In addition, DEQ oversees state environmental programs including the states vehicle inspection, solid waste, underground storage tanks, spill response and cleanup programs. Program implementation includes environmental monitoring, permitting, compliance and enforcement, technical assistance and other voluntary programs, and rule-making.DEQ has primary responsibility in achieving several Oregon Benchmarks and a statewide High Level Outcome (HLO), which have been adopted by the agency as Key Performance Measures. These include:

OBM 10a (KPM #2) PERMIT TIMELINESS: Percentage of air contaminant discharge permits issued within the target period.
OBM 10b (KPM #3) - PERMIT TIMELINESS: Percentage of individual wastewater discharge permits issued within 270 days.
HLO 1 (KPM #5) WATER QUALITY TMDLs: Percent of impaired waterbody miles for which a TMDL has been approved.
OBM 85 (KPM #7) CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: overall, tanks, and hazardous substances.
OBM 84 (KPM #9) SOLID WASTE: Pounds of municipal solid waste landfilled or incinerated per capita.
OBM 79 (KPM #10) WATER QUALITY CONDITIONS: Percent of monitored stream sites with significantly increasing trends in water quality, with decreasing trends in water quality, and with water in good to excellent condition.
OBM 75 (KPM #12) AIR QUALITY CONDITIONS: Number of days when air is unhealthy for sensitive groups and for all groups.
OBM 76 (KPM #13) AIR QUALITY NEW SCIENCE: Percent of Oregonians at risk from toxic air pollutants that contribute to cancer and that contribute to respiratory problems.
Protecting and enhancing environmental quality requires the collaboration and involvement of many local agencies, businesses, and Oregon residents. DEQ partners with federal, state and local agencies, and organizations to restore environmental conditions and to encourage individual actions that are protective of the health and environment of Oregon and Oregonians. More information about DEQ programs and partnerships can be found at www.Oregon.gov/DEQ.

3. PERFORMANCE SUMMARY

DEQ is substantially meeting and/or exceeding targets for 11 Key Performance Measures. Environmental and public health benefits associated with the achievement of performance targets are the result of the destruction of chemical agent at the Umatilla Chemical Agent Disposal Facility, removal of mercury from the environment, cleanup of hazardous substance contamination, and air quality diesel emission reductions. The specific Key Performance Measures for which 2008 targets were met include:

KPM 2 (OBM 10a) - PERMIT TIMELINESS: Percentage of air contaminant discharge permits issued within the target period.
KPM 4 - UPDATED PERMITS: Percent of total wastewater permits that are current.
KPM 6 - UMATILLA: Cumulative percent of chemical agent destroyed at Umatilla Chemical Demilitarization Facility (UMCDF.)
KPM 7a (OBM 85) - CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: overall.
KPM 7b (OBM 85) - CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: tanks.
KPM 7c (OBM 85) - CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: hazardous substances.
KPM 8 - TOXICS PREVENTION AND REDUCTION: Pounds of mercury removed from the environment through DEQ's efforts.
KPM 9 (OBM 84) - SOLID WASTE - Pounds of municipal solid waste landfilled or incinerated per capita.
KPM 10c (OBM 79c) - WATER QUALITY CONDITIONS - Percent of monitored stream sites with water quality in good to excellent conditions.
KPM 14 - ERT: Percent of local participants who rank DEQ involvement in Economic Revitalization Team process as good to excellent.
KPM 15 - PERMIT TIMELINESS: Percent of Title V operating permits issued within the target period.

DEQ is not meeting targets for 9 Key Performance Measures, including permit timeliness in the air and water quality programs, solid waste generation, and air and water quality conditions (with the exception that DEQ did meet its targets for streams in good to excellent condition, identified above). Specifically, the following Key

Performance Measures did not meet 2008 targets:
KPM 1 - CUSTOMER SERVICE: Percent of customers rating their satisfaction with the agencys customer service as good or excellent: overall, timeliness, accuracy, helpfulness, expertise, availability of information.
KPM 3 (OBM 10b) - PERMIT TIMELINESS: Percentage of individual wastewater discharge permits issued within 270 days.
KPM 4 - UPDATED PERMITS: Percent of total wastewater permits that are current.
KPM 5 (HLO 1) - WATER QUALITY TMDLs: Percent of impaired waterbody miles for which a TMDL has been approved.
KPM 10a (OBM 79a) - WATER QUALITY CONDITIONS - Percent of monitored stream sites with significantly increasing trends in water quality.
KPM 10b (OBM 79b) - WATER QUALITY CONDITIONS - Percent of monitored stream sites with decreasing trends in water quality.
KPM 11 - AIR QUALITY DIESEL EMISSIONS: Quantity of diesel particulate emissions.
KPM 12a (OBM 75a) - AIR QUALITY CONDITIONS - Number of days when air is unhealthy for sensitive groups.
KPM 12b (OBM 75b) - AIR QUALITY CONDITIONS - Number of days when air is unhealthy for all groups.
KPM 16 - BOARDS AND COMMISSIONS: Percent of total best practices met by the Environmental Quality Commission.

While the agency was successful in the 2007 Legislature in securing authority to obtain additional resources through General Fund and permit fee increases, DEQ did not obtain the funds necessary to fill all additional positions necessary to support meeting our permit timeliness targets. This is reflected in the results for 2008. In 2009, revenue shortfalls and the resulting funding cuts affected all state agencies and this continues into the 2009-11 biennium. DEQ will be seriously challenged to meet some of the measure targets given reduced funding levels. Other performance challenges are described in the narrative for each Key Performance Measure.It is important to recognize that in adopting several high level Oregon Benchmarks as Key Performance Measures, DEQs overall performance results as reflected in the Performance Summary Table, are not solely within DEQs control. Many of the outcomes are shared responsibilities with other state agencies.DEQ is unable to report results for two of our newest Key Performance Measures pending release of data from the Environmental Protection Agency. These measures are:
KPM 13a (OBM 76a) - AIR QUALITY - NEW SCIENCE - Percent of Oregonians at risk from toxic air pollutants that contribute to cancer.
KPM 13b (OBM 76b) - AIR QUALITY - NEW SCIENCE - Percent of Oregonians at risk from toxic air pollutants that contribute to respiratory problems.

4. CHALLENGES

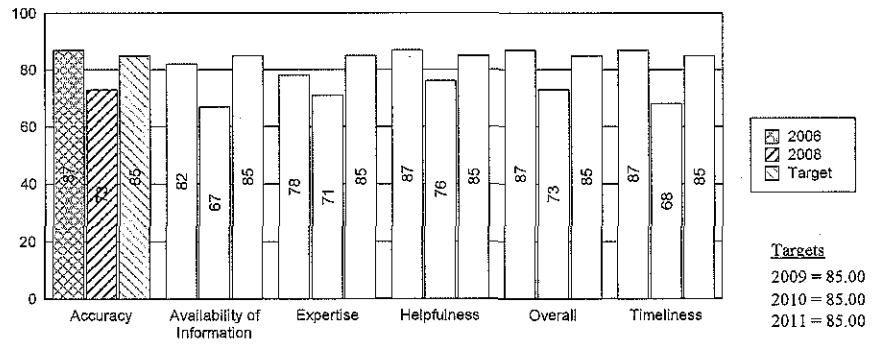
A key challenge DEQ faces in achieving performance results relates to the trend in reduced or static funding, which impacts agency fiscal and staff resources. For example, DEQs water quality program has had to make difficult decisions on how best to focus resources to ensure that the highest priority work is being done, with the result that some work is not completed, or is not completed timely. This has affected our results for a number of air, land, and water quality commitments. In many cases, DEQ is not able to achieve its performance results due to inadequate revenues and mission critical staffing resources, high staffing turnover rates, and insufficient funds to make substantial organizational efficiency improvements.

5. RESOURCES AND EFFICIENCY

DEQs legislatively adopted budget for FY 2009-11 is $401,626,682. Of this $206,763,581 makes up DEQs operating budget which funds DEQ operations. Local communities and partners receive the balance from DEQ to spend on local environmental projects, notably programs like the Clean Water State Revolving Fund for Wastewater and Stormwater andt federal stimulus funding.

KPM #1	CUSTOMER SERVICE: Percent of customers rating their satisfaction with the agency's customer service as "good" or "excellent": overall, timeliness, accuracy, helpfulness, expertise, availability of information.	2006
Goal	EXCELLENCE: Delivering outstanding public service and continuously seeking customer feedback to improve our service.	
Oregon Context	There are no Oregon Benchmarks or High Level Outcomes related to this measure, but excellence in customer service is a priority in the State of Oregon, and all state agencies are required to report their performance results.	
Data Source	Biennial customer service survey of air, and water quality permitted sources, on-site septic system home owners and vehicle inspection program customers.	
Owner	DEQ Office of Communication and Outreach. Joanie Stevens-Schwenger, (503) 229-6585.	

KPM1: Percent of customers rating their satisfaction with the agency's customer service



1. OUR STRATEGY

Deliver excellent public service and implement a biennial survey to determine customer service performance with air and water quality permittees, on-site septic system customers and vehicle inspection program customers. 2006 data is reported for these existing on-site program customers.

2. ABOUT THE TARGETS

DEQ established targets of 85 percent customer ratings of very good to excellent for all categories of surveyed customers.

3. HOW WE ARE DOING

The 2008 customer survey results revealed that DEQ's customer service ratings remain high for the vehicle inspection program and dipped lower than expected for permitting programs. DEQ's vehicle inspection program continues to improve and upgrade vehicle testing technology, has added lane cameras to the website so that customers can see if they will have long wait periods, and now offers the ability to pay for the service with a credit card. All of these improvements, in addition to customer service training within the last two years, have likely resulted in higher customer satisfaction. DEQ's permitting processes on the other hand, are not automated, are demanding of customers time, and customers cannot apply and pay for services online, which would make it faster and easier for them to apply for permits. Low staffing levels in two of the permitting programs for air and water also contributed to the lower rankings particularly in responses regarding timeliness. Permitting customers gave DEQ staff the highest marks for helpfulness. Overall, 76 percent of air, water and septic permit holders rated DEQ customer service as good to excellent, while 94 percent of vehicle inspection customers rated customer service good to excellent.

4. HOW WE COMPARE

In comparison to 2006 levels, DEQ's overall 2008 customer service ratings are lower for permit holders than those measured in 2006, but the same for vehicle inspection program customers. The air quality and onsite septic customers rated service about the same as in 2006, with the water quality permittees reporting that service lacked timeliness and accuracy.

5. FACTORS AFFECTING RESULTS

Slower service and correlating customer ratings are likely due to short staffing in the water quality permit program.

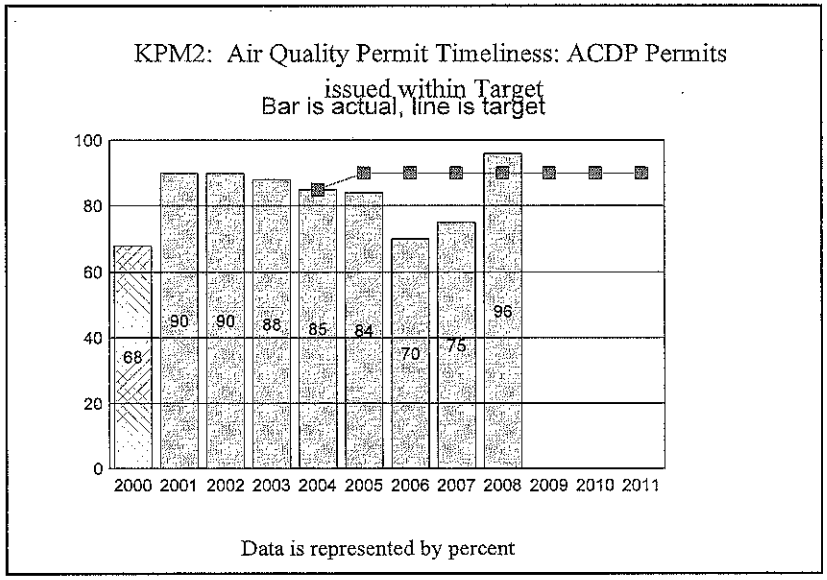
6. WHAT NEEDS TO BE DONE

DEQ needs to continue customer service training, hire staff authorized by the legislature if revenue allows and discuss streamlining measures to speed up the permit process. The legislature restored water quality positions to the budget in 2007, for which the program has not yet collected enough fees to fund. With full staffing and ongoing customer service training, DEQ expects positive ratings to increase during the next biennium.

7. ABOUT THE DATA

The Portland State University Survey Research Lab conducted the survey during May and June 2008. PSU used a telephone survey to statistically sample the targeted populations. The survey was administered to a representative sample of DEQ customers statewide, including 153 air quality permit holders, 267 water quality permit holders, and 203 on-site septic system customers. Sample characteristics described above. Weighting was not necessary because the surveys were kept distinct and separate. The ranges of sampling variability were computed at the 95 percent confidence level. In addition to the three groups of customers represented, DEQ surveyed drivers in the Portland area who bring their cars in for emissions testing. DEQ established a baseline for this group in 2006. We will continue to survey these customer groups every other year to chart our progress. The next customer survey will be conducted in 2010.

KPM #2	PERMIT TIMELINESS: Percentage of air contaminant discharge permits issued within the target period.	1992
Goal	IMPROVE OREGONS AIR AND WATER.	
Oregon Context	KPM #2 is also Oregon Benchmark #10a. It links to: (1) Oregons Statewide Planning Goal 6: Air, water, and land resources quality (OAR 660-015-00 (06)); (2) Oregon Shines Goal 1: Quality jobs for all Oregonians, and (3) Oregon Shines Goal 3: Healthy, Sustainable surroundings.	
Data Source	DEQ Air Quality Permit Tracking database.	
Owner	DEQ Air Quality Program. Margaret Oliphant, (503) 229-5687.	



1. OUR STRATEGY

Air Contaminant Discharge Permits (ACDP) are required for construction of new and modified point sources of all sizes as well as operation of medium sized point sources. DEQ prioritizes air quality permitting resources based on the applicable target period for several categories of ACDP applications to ensure that permits are issued in a timely manner.

2. ABOUT THE TARGETS

DEQ's goal is to issue 90 percent of ACDP permits within the target periods set by the agency. This target sets a high standard for issuing permits in a timely manner. Businesses need quick turn around times on permits to construct, expand or modify their operations. A high percentage of timely permits issued is a key economic development benchmark tracked by the Oregon Progress Board and one indicator of an efficient permitting program.

3. HOW WE ARE DOING

In 2001, DEQ streamlined the ACDP permitting process and developed general permits, a tool that allows for expeditious permitting of entire source categories under one permit rather than more time-consuming individual permits. These streamlining efforts significantly decreased the time required to issue a permit. Along with streamlining, DEQ shortened the target period for timely processing of ACDP permits from an average of 167 days to an average of 69 days. Even with much shorter permit processing time, DEQ was able to exceed the timeliness target. However, beginning in 2005, the percent of on time permits slipped below the target and in 2006 there was a significant drop in the percentage of timely permits issued. Although still below target, DEQs percentage of timely permits issued in 2007 started to improve. In 2008, new federal standards went into effect for area sources, many of which are small businesses. Most of these new sources were able to comply with federal requirements by obtaining a general permit. Of all ACDP permits issued in 2008, 78 percent were general permits and all were issued within the target period. As a result of this extraordinary event, timeliness in 2008 jumped dramatically to 96 percent. Excluding the general permits, ACDP timeliness would have been 80 percent, which is an increase over 2007 but still under target.

4. HOW WE COMPARE

There are no formal public or private industry standards for permit issuance; however, there is a clear expectation that permits be issued in a timely manner.

5. FACTORS AFFECTING RESULTS

Over the years, permit streamlining and the development of simplified general ACDP permits have had the most significant positive effects on permit timeliness. DEQ was able to cut processing times by more than half and still exceed targets because of streamlining in the early part of the decade, By 2006, ACDP fee revenue was insufficient to support adequate staffing levels and timeliness suffered. In 2007, the Legislature approved a fee increase, which restored staffing to acceptable levels. Two operational changes in recent years have also impacted timeliness. Since 2006, DEQ managers and staff have increased their focus on ensuring timeliness. Managers closely monitor staff workloads, regularly review permit timeliness and adjust workloads as needed. In addition, DEQ implemented a new permit tracking system, which reduced the amount of time staff spent on data management activities.

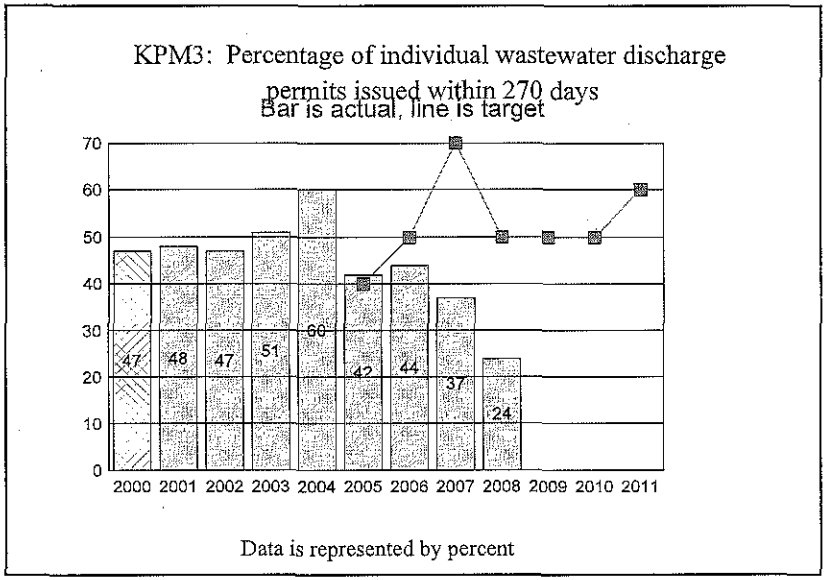
6. WHAT NEEDS TO BE DONE

While revenue is not an immediate concern, fees along with General Fund and federal funds that support the ACDP program must be sufficient to maintain adequate staffing levels. Also, DEQ managers must continue to regularly review staffing and permitting activity demands and consider shifts that will facilitate timely permitting.

7. ABOUT THE DATA

The reporting cycle is a calendar year. The strength of the data is that records exist on each of the ACDP permit actions taken by DEQ during the year. The primary weakness of the system is that the data's validity depends on accurate entry by multiple individuals.

KPM #3	PERMIT TIMELINESS: Percentage of individual wastewater discharge permits issued within 270 days.	1992
Goal	IMPROVE OREGONS AIR AND WATER.	
Oregon Context	KPM #3 is also Oregon Benchmark #10b. It links to: (1) Oregons Statewide Planning Goal 6: Air, water, and land resources quality (OAR 660-015-00 (06)); (2) Oregon Shines Goal 1: Quality jobs for all Oregonians, and (3) Oregon Shines Goal 3: Healthy, Sustainable surroundings (Oregon Benchmark 78, Stream Water Quality.)	
Data Source	Water Quality Program database.	
Owner	DEQ Water Quality Program. Chris Clipper, (503) 229-5656.	



1. OUR STRATEGY

To achieve this goal, DEQ continues to focus on timely issuance of permits and reducing the permit backlog. DEQ develops permit issuance plans based on a watershed approach, and continues to make improvements in the permitting program.

2. ABOUT THE TARGETS

The target sets a standard for issuing permits in a timely manner because businesses need quick turn-around times on permits to construct, expand or modify their operations. High percentages of permits issued in a timely manner indicate an efficient program. We are lowering the target from 70 percent of wastewater discharge permits issued in the target period to 50 percent for the next three years, and scaling back up again, for several reasons: 1) Staffing: DEQ has experienced significant staff turnover and has held positions vacant to meet budget needs; 2) ongoing litigation; and 3) backlog: our permit backlog has been increasing and DEQ does not have the resources to issue permits within the target period.

3. HOW WE ARE DOING

DEQ did not meet its 2008 target for timeliness. In 2004, DEQ was able to issue 60 percent of its individual wastewater permits within 270 days because we temporarily diverted staff from other important program activities, including permit compliance and enforcement, in order to focus on reducing the backlog of expired water quality permits. However, since 2005, DEQ needed to shift focus back onto other difficult permit issues, such as incorporating Total Maximum Daily Loads (TMDLs) into permits, transitioning to issuing permits on a watershed basis, and litigation. DEQ also experienced significant staff turnover. Timeliness has improved some each year since 2005 until 2007, but declined again in 2007and in 2008. To account for every permit applied for in a given year, each years data is available 270 days after December 31; final 2008 data is not available until the end of September 2009. The 27 percent permit timeliness shown in the chart reflects permit applications received from January 1 through November 26, 2008. DEQ cannot account for applications received from November 27 through December 31, 2008 until the end of September 2009.

4. HOW WE COMPARE

There are no formal public or private industry standards for permit issuance, although there is a clear expectation that permits be issued in a timely manner.

5. FACTORS AFFECTING RESULTS

DEQ has been working with a stakeholder group known as the Blue Ribbon Committee to identify long-term improvements to the wastewater permitting program. As a result, DEQ is moving to a watershed approach that will allow the agency to better plan for workload and resource needs in the Water Quality permit program. This approach will likely delay some permit renewals because they will be rescheduled to fit into a watershed cycle. The complexities of technical and legal issues encountered during permit development also affect permit timeliness. Similarly, permit actions are frequently subject to legal challenges that require the assistance of technical staff. These activities require resources to be pulled away from on-going permit renewal requirements causing delays. Funding - The Blue Ribbon Committee recommended that DEQ ensure stable, ongoing funding that improves fee predictability for rate payers and revenue for budget management. This is accomplished by maintaining a mix of fee and public funding and allowing for up to a 3 percent annual permit fee increase to help address increased permit program costs. The 2005 Legislature approved an 11 percent fee increase, adopted by the Environmental Quality Commission in 2006, to maintain funding for four existing permit staff and add 2.5 new positions. These new positions assisted DEQ in more efficiently assessing compliance. In 2007, the EQC approved the first annual fee increase of 3 percent, as authorized by the 2005 Legislature through Senate Bill 45, effective for the 2008 Fiscal Year (July 1, 2007 to June 30, 2008). The 2007 Legislature approved a 5 percent water quality permit fee increase, an 82 percent stormwater permit fee increase, and a surcharge to support toxic reduction work required by Senate Bill 737. In June 2008, the EQC approved the 5 percent and 82 percent fee increases, the SB 737 surcharge, and an annual 3 percent fee increase. These increases support 2.5 new positions to improve permit development and compliance for the water quality permit program, add 14 new positions to improve the stormwater program, help address increased permit program costs, and support 2 limited-duration positions to perform the work required by SB 737. Litigation - During 2007 and 2008 the DEQ

wastewater permit program was involved in 14 lawsuits affecting permit issuance. DEQ has postponed issuance of affected permits and diverted resources from permit development to litigation response. EPA objections regarding the state bacteria standard and permitting of Sanitary Sewer Overflows (SSOs) - EPA raised objections to the General Conditions section of the NPDES permits that DEQ has used since 2004 to incorporate the state water quality standard for bacteria into permits for municipal sewage treatment plants. Until this issue can be resolved, DEQ cannot continue processing these types of permits. EPA and DEQ are very close to resolving this issue. Compliance Schedules - Since November 2007, the wastewater permit program has withheld issuing permits that contain a compliance schedule as a result of litigation against the EPA. This litigation challenges EPA's approval process for Oregon's water quality rules pertaining to the use of compliance schedules. Reconsideration - During 2008, DEQ's wastewater permit program was petitioned to reconsider 3 recently issued permits. This legal action required DEQ to re-examine the technical aspects and policy basis supporting issuance of a specific permit. Staff turnover - Statewide, there were nine (out of 62) positions vacant for some or all of the year in the wastewater permit program during 2008. In cases when qualified staff have been hired, there is an impact on the availability of existing staff who work directly on permits and are re-directed to train new hires.

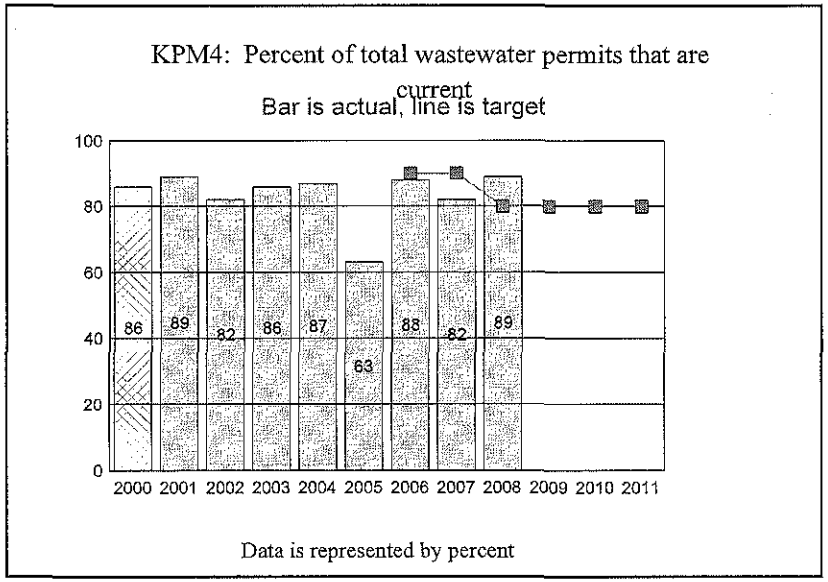
6. WHAT NEEDS TO BE DONE

To help meet the permit timeliness goal, DEQ needs to concentrate on hiring and retaining qualified staff, so that the necessary resources will be available to issue water quality permits. Additionally, DEQ needs to invest in training and tools for staff to ensure that they have the necessary information, data and skills to resolve the complex environmental and regulatory challenges. DEQ will continue to work on several Internal Management Directives as chapters in a new Permit Writers Manual and will be working to improve database systems used by permit writers. DEQ needs to continue working towards achieving better integration between the various Clean Water Act subprograms. Ensuring that all the pieces work together to achieve a common goal will assist with the timeliness of permits and with keeping permits current.

7. ABOUT THE DATA

The reporting cycle is the calendar year. Due to the 270-day target timeline, data for each calendar year is reported at the end of the 3rd quarter the following year.

KPM #4	UPDATED PERMITS: Percent of total wastewater permits that are current.	1999
Goal	IMPROVE OREGONS AIR AND WATER.	
Oregon Context	KPM #4 links to: (1) Oregons Statewide Planning Goal 6: Air, water, and land resources quality (OAR 660-015-00 (06)); (2) Oregon Shines Goal 1: Quality jobs for all Oregonians, and (3) Oregon Shines Goal 3: Healthy, Sustainable surroundings (Oregon Benchmark 78, Stream Water Quality.)	
Data Source	DEQ Water Quality Source Information System database for permit issuance data.	
Owner	DEQ Water Quality Program. Chris Clipper, (503) 229-5656.	



1. OUR STRATEGY

To achieve this goal, DEQ continues to focus on timely issuance of water quality permits and reducing the permit backlog.

2. ABOUT THE TARGETS

Higher percentages of current permits are desirable because renewed permits incorporate current water quality standards to better protect water quality in Oregon. To promote timely permit renewal, DEQ has a goal to have 80 percent of all general and individual permits current each year.

3. HOW WE ARE DOING

DEQ met its goal of having 80 percent of its individual and general permits current. DEQ worked with the Blue Ribbon Committee, a group of stakeholders who collaborated with DEQ to identify long-term improvements to the wastewater permitting program. Since 2005, DEQ has been implementing the Committees recommendations, including developing and implementing a five-year permit issuance plan that processes permits on a watershed basis and reducing the backlog of expired permits.

4. HOW WE COMPARE

The Environmental Protection Agency reports to Congress the percent of NPDES permits that are current. The federal national target is to have 90 percent of NPDES permits current. DEQ did not meet that target for 2008, with 89 percent of our permits being current.

5. FACTORS AFFECTING RESULTS

Though DEQ has exceeded the target during 2008, it is likely that we will not meet the target in the coming couple of years due to a number of factors. DEQ is transitioning to a watershed approach that will allow the agency to better plan for workload and resource needs in the water quality permit program. This effort will likely delay some permit renewals in order to match the watershed-based permit issuance cycle. The complexities of technical and legal issues encountered during permit development also affect this schedule. Permit actions are also frequently subject to legal challenges that require the assistance of technical staff. In addition, the number of requests for new permits or major modifications of existing permits that DEQ may receive are not predictable. All of these activities shift resources away from permit renewals, causing delays in renewal. DEQ is close to resolution on some of the legal and other challenges that have affected the water quality permit program, but it will likely take a couple of years to get back on track to meet or exceed the target in the future.

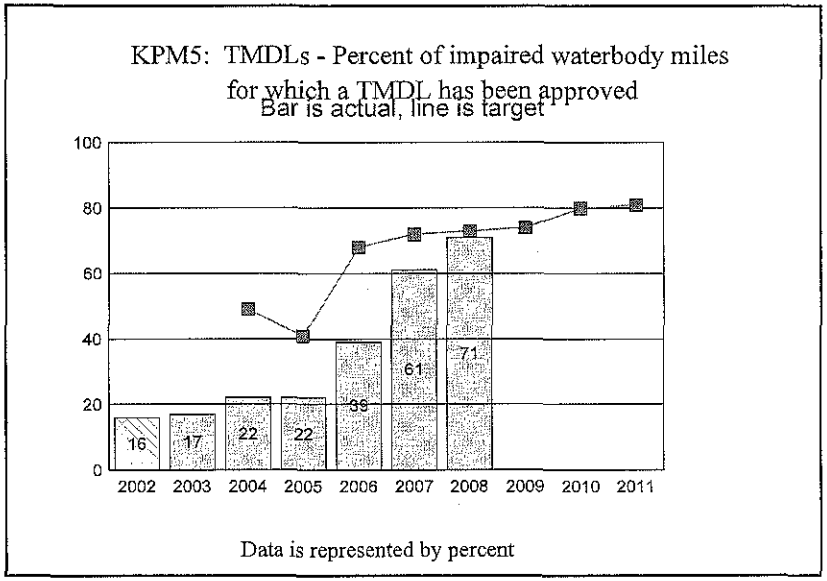
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To help meet the permit timeliness goal, DEQ needs to concentrate on hiring and retaining qualified staff, so that the necessary resources will be available to issue water quality permits. Additionally, DEQ needs to invest in training and tools for staff to ensure that they have the necessary information, data and skills to resolve the complex environmental and regulatory challenges. DEQ will be working on several Internal Management Directives as chapters in a new Permit Writers Manual and will be working to improve database systems used by permit writers. DEQ needs to continue working towards achieving better integration between the various Clean Water Act subprograms. Ensuring that all the pieces work together to achieve a common goal will assist with the timeliness of permits and with keeping permits current.

7. ABOUT THE DATA

The reporting cycle is the calendar year.

KPM #5	WATER QUALITY TMDLs: Percent of impaired waterbody miles for which a TMDL has been approved.	1999
Goal	IMPROVE OREGONS AIR AND WATER.	
Oregon Context	KPM #5 links to HLO #1: Percent of Oregon stream miles impaired Oregons 303d list, and Oregon Benchmark #78, which reports on water quality trends in monitored streams.	
Data Source	DEQ Water Quality Program files on TMDLs issued by Oregon DEQ and approved by EPA, and the 2004/2006-approved 303d list of impaired waterbodies.	
Owner	DEQ Water Quality Program. Gene Foster, (503)229-5325.	



1. OUR STRATEGY

DEQ implements the TMDL program based on a federal Consent Decree schedule and the federal Clean Water Act.

2. ABOUT THE TARGETS

The targets are based on the number of stream miles for which TMDLs have been developed, relative to the total number of stream miles that are designated as not meeting water quality standards for one or more pollutants on the 2004/2006 list of impaired waterbodies (Oregon's 303d list). The list of impaired waterbodies is updated regularly as water quality standards change and additional data is collected. The current 303d list contains 11,165 stream miles that are impaired and in need of a TMDL. Thus this measure tracks our progress in issuing TMDLs as a percentage of the total number of impaired waterbodies.

3. HOW WE ARE DOING

DEQ has made good progress in developing TMDLs around the state and has made siginficant improvement towards meeting the targets for 2008. This is becasue DEQ has recently completed a number of TMDLs in large watersheds including the Willamette, Umpqua and Rogue basins, which include many stream miles. DEQ expects to complete another large watershed, the John Day basin TMDL, among others, in 2010.

4. HOW WE COMPARE

EPA sets national goals for water quality improvements. The completion of TMDLs is an important step towards meeting these goals. Oregon has generally been in the forefront of TMDL development in the United States, and is often identified as a model for how TMDLs should be developed.

5. FACTORS AFFECTING RESULTS

DEQ has recently completed a number of TMDLs in large watersheds.

6. WHAT NEEDS TO BE DONE

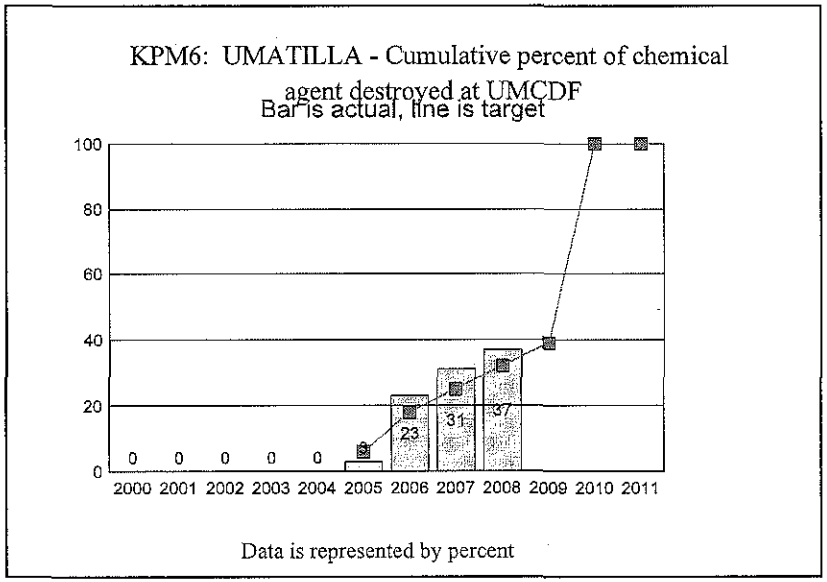
DEQ has developed a schedule for completion of TMDLs that meets the Consent Decree which will also help meet this measure. However, even after completion of the Consent Decree, additional TMDLs will need to be completed. This is a high priority for DEQ, and resource allocation will continue to reflect this priority. DEQ is assessing the best way to calculate this measure because the 303(d) list is updated regularly. This results in an ever-changing baseline reflecting the total number of impaired stream miles, making comparisons over time difficult.

7. ABOUT THE DATA

The data is reported as the number of TMDLs completed for each calendar year, although EPA sets its targets based on the federal fiscal year. The number of river miles is determined based on the most recently approved 303d, approved by EPA in 2004/2006.

ENVIRONMENTAL QUALITY, DEPARTMENT of	II. KEY MEASURE ANALYSIS

KPM #6	UMATILLA: Cumulative percent of chemical agent destroyed at Umatilla Chemical Demilitarization Facility (UMCDF).	2002
Goal	PROTECT PEOPLE & THE ENVIRONMENT FROM TOXICS.	
Oregon Context	There are no Oregon High Level Outcomes related to this measure.	
Data Source	DEQ Umatilla Chemical Demilitarization Program data.	
Owner	DEQ Eastern Region, Umatilla Chemical Demilitarization Program. Rich Duval, (541) 567-8297 x22	



1. OUR STRATEGY

DEQ provides oversight of the Army and its contractors to ensure the safe and timely destruction of all chemical agents at the Umatilla Chemical Agent Disposal Facility (UMCDF, or Depot). The Army and its contractor are responsible for the actual destruction of chemical agents. DEQ regulates the activity via permit and is actively engaged in the process to ensure protection of workers, the community and the environment.

2. ABOUT THE TARGETS

The Army set the original targets for completing chemical weapons destruction. The targets reflect consideration of the type of chemical agent being destroyed, the type of munitions that contain the chemical, and operational constraints, such as the capacity of the incinerator, as well as budget. The targets are intended to increase over time from commencement of chemical weapons destruction in 2004 until 100 percent chemical destruction is achieved.

3. HOW WE ARE DOING

Chemical weapons destruction continues to surpass projections. By the end of 2008 the Army had destroyed 37 percent of the chemical agents originally stored at the Depot. This exceeded the target of 34 percent and meets the projected goal of 2009. All configured munitions (rockets, bombs, artillery shells, and land mines) and all nerve agents have been destroyed. What remains at the Depot are 2635 bulk containers of sulfur mustard, a blister agent, scheduled to be destroyed by 2011. Weapons destruction to date has reduced the risk to local residents by 99 percent.

4. HOW WE COMPARE

There are no other chemical weapons facilities in Oregon. There are five other active facilities in the country some using incineration, some neutralization. Each facility is unique in its ability to destroy chemical agent. Each facility has different types and amounts of chemical agent, which negates meaningful comparison.

5. FACTORS AFFECTING RESULTS

There are numerous technical challenges associated with the processing of chemical weapons at the UMCDF that could extend the dates by which performance targets will be achieved. Some problems can be anticipated (e.g. the possibility of gelled chemical agent in some rockets, some elevated mercury levels in bulk containers of mustard agent), based upon experiences at other chemical agent disposal facilities. Other, unanticipated issues (e.g. the frequency of rocket fires that occurred at UMCDF), may also arise.

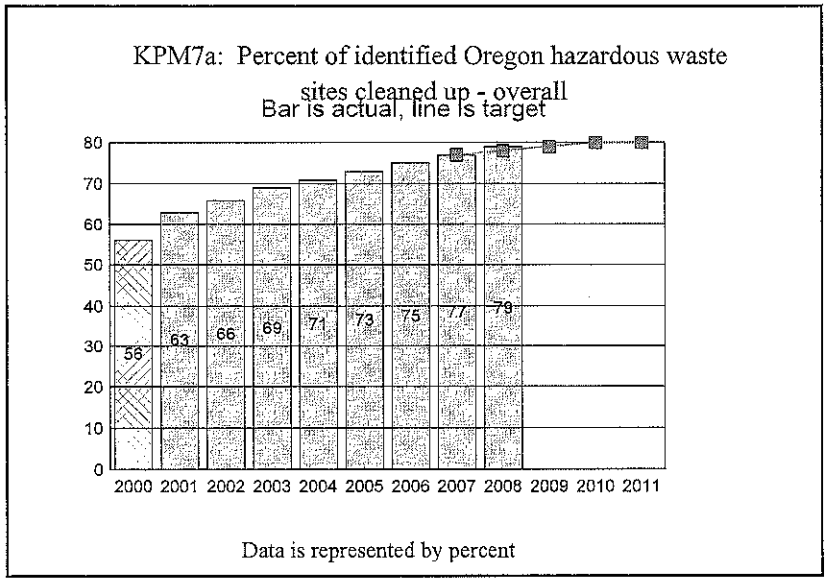
6. WHAT NEEDS TO BE DONE

DEQ needs to continue the oversight of the operation.

7. ABOUT THE DATA

Data are provided in reports to DEQ by the U.S. Army and is reported on a calendar year basis.

KPM #7a	CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: overall.	2007
Goal	PROTECT PEOPLE & THE ENVIRONMENT FROM TOXICS.	
Oregon Context	KPM #7 is also Oregon Benchmark #85. It links to (1) Oregon Statewide Planning Goal 6: Air, water and land resources quality (OAR 660-015-00 (06)); and (2) Oregon Shines Goal 3: Healthy, sustainable surroundings.	
Data Source	Environmental Cleanup Site Information (ECSI) database; Leaking Underground Storage Tank (LUST) database.	
Owner	DEQ Land Quality Program. Tom Roick, (503) 229-5502.	



1. OUR STRATEGY

DEQ's strategy has been to implement a number of program and process improvement projects over the past several years that have made it easier and cheaper for the regulated community to do business with DEQ, including cleaning up contaminated properties. For example, DEQ uses risk-based corrective action guidance that initially applied to petroleum cleanups but has been expanded to include other hazardous substances. DEQ works with staff from the Oregon Business Development Department to find funding for brownfields investigation and cleanup. Also, DEQ has a prospective purchaser program that is being applied to underground storage

tank sites, and a certification program for conducting heating oil tank cleanups. The performance measure combines tank sites (e.g., home heating oil and commercial gasoline service stations where releases of fuel from underground storage tanks have occurred) and hazardous substance sites (where releases of hazardous substances such as chlorinated solvents, heavy metals, or petroleum products have occurred). The great majority of sites counted in this overall measure are tank sites.

2. ABOUT THE TARGETS

This measure relates DEQ's performance as a percentage; that is, the number of sites cleaned up per the total universe of contaminated sites in DEQ's Cleanup and Tanks program databases combined. The higher the percentage of sites cleaned up, the better we are doing. This measure was modified in 2006 to align the Key Performance Measure and Oregon Benchmark by removing sites that are being cleaned up and measuring only those sites that have fully completed cleanup. Because of this modification, targets are not available for prior years.

3. HOW WE ARE DOING

As of 2008, DEQ's Cleanup and Tanks programs had overseen the cleanup of 79 percent of all sites identifed, which is just above the target of 78 percent. In calendar year 2008, the programs added 1,535 new sites needing attention, while completing cleanup at 1,747 sites. This measure shows that DEQ continues to increase the cumulative percentage of sites cleaned up. We believe the trend will continue upward toward the 90-92 percent achievement level.

4. HOW WE COMPARE

There are no comparisons available or relevant.

5. FACTORS AFFECTING RESULTS

Each year DEQ identifies additional sites that need cleanup, creating a moving target as the number of sites increases. Nevertheless, DEQ has consistently overseen more cleanups each year than are added to the databases. The result is an increase over time in the targeted percentage of sites completing cleanup.

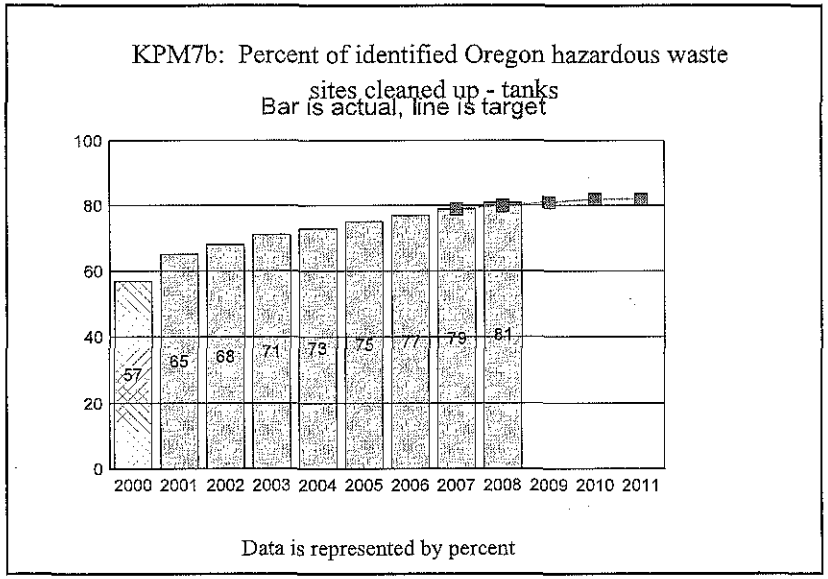
6. WHAT NEEDS TO BE DONE

DEQ needs to continue looking for ways to bring sites needing cleanup into the Cleanup and Tanks programs. DEQ continues to work on solving technical challenges that will help facilitate cleanup, such as evaluating the migration of hazardous substance vapors into buildings and establishing criteria for the management of contaminated sediments. Additionally, DEQ is participating in a national dialogue regarding "green remediation" with the goal of finding ways to conduct cleanups more sustainably by looking for efficiencies in energy and resource use on cleanup projects.

7. ABOUT THE DATA

Data is by calendar year, and derives from queries of: (1) DEQ's leaking underground storage tank (LUST) database, which includes both residential heating oil tank releases and commercial tank releases; and (2) DEQ's Environmental Cleanup Site Information (ECSI) database.

KPM #7b	CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: tanks.	2007
Goal	PROTECT PEOPLE & THE ENVIRONMENT FROM TOXICS.	
Oregon Context	KPM #7 is also Oregon Benchmark #85. It links to (1) Oregon Statewide Planning Goal 6: Air, water and land resources quality (OAR 660-015-00 (06)); and (2) Oregon Shines Goal 3: Healthy, sustainable surroundings.	
Data Source	Leaking Underground Storage Tank (LUST) database.	
Owner	DEQ Land Quality Program. Tom Roick, (503) 229-5502.	



1. OUR STRATEGY

DEQ's strategy has been to develop programs and guidance that facilitate tank cleanups. The sites counted in this measure are tank sites only (e.g., home heating oil and commercial gasoline service stations where releases of fuel from underground storage tanks have occurred). DEQ updates it's risk-based corrective action guidance for regulated tank owners to help expedite characterization and cleanup of petroleum releases, and has implemented a program that licenses third-party contractors to complete and certify tank cleanups. DEQ has also made the prospective purchaser program available to commercial tank cleanup sites for facilitating

investigation and cleanups involving prospective buyers of contaminated property.

2. ABOUT THE TARGETS

This measure relates DEQ's performance as a percentage; that is, the number of tank sites cleaned up per the total universe of tank release sites in DEQ's database. The higher the percentage, the better we are doing with the long-term goal of between 90 and 100 percent of tank sites cleaned up.

3. HOW WE ARE DOING

At the end of 2008, DEQ had overseen 81 percent of tank sites cleaned up, just over the target of 80 percent. The programs added 1,478 sites to the list of sites that need attention, while completing cleanup at 1,711 sites. Since DEQ started tracking tank statistics in 1996, the percentage of sites cleaned up has increased 2 to 3 percent each year, a consistent upward and positive trend.

4. HOW WE COMPARE

National data is available from the U.S. Environmental Protection Agency for regulated tank sites, which does not include heating oil tanks. As of 2008, Oregon was above the national average with 83 percent of regulated tanks sites cleaned up, compared to 80 percent nationally.

5. FACTORS AFFECTING RESULTS

Each year DEQ identifies more tank sites needing work, creating a moving target as the number of tank sites increases. Nevertheless, DEQ has consistently overseen more tank cleanups each year than are added to the database. The result is a consistent increase over time in the percentage of sites completing cleanup.

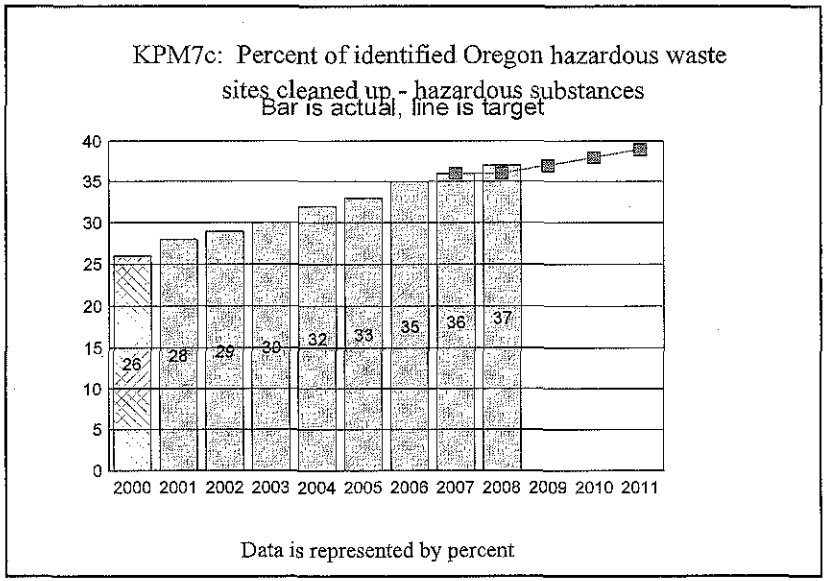
6. WHAT NEEDS TO BE DONE

DEQ needs to continue supporting tanks programs, use enforcement tools for regulated facilities that are out of compliance to help prevent future releases, and keep guidance up-to-date to facilitate tank site cleanups.

7. ABOUT THE DATA

Data is by calendar year, and derives from queries of DEQs leaking underground storage tank (LUST) database.

KPM #7c	CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: hazardous substances.	2007
Goal	PROTECT PEOPLE & THE ENVIRONMENT FROM TOXICS.	
Oregon Context	KPM #7 is also Oregon Benchmark #85. It links to (1) Oregon Statewide Planning Goal 6: Air, water and land resources quality (OAR 660-015-00 (06)); and (2) Oregon Shines Goal 3: Healthy, sustainable surroundings.	
Data Source	Environmental Cleanup Site Information (ECSI) database.	
Owner	DEQ Land Quality Program. Tom Roick, (503) 229-5502.	



1. OUR STRATEGY

DEQ's Cleanup Program strategy is to prioritize work on sites that pose the highest risk to human health and the environment, and encourage responsible parties to investigate and cleanup sites through voluntary programs. New strategies include focusing on specific geographic areas, and partnering with other DEQ programs such as Water Quality to coordinate on the reduction of toxic substances in the environment.

2. ABOUT THE TARGETS

This measure relates DEQ's performance as a percentage; that is, the number of sites cleaned up per the total universe of contaminated sites in DEQ's database. The higher the percentage, the better we are doing.

3. HOW WE ARE DOING

As of 2008, DEQ had completed cleanup at 37 percent of all hazardous substance sites, just over the target of 36 percent. During the year, the Cleanup Program added 57 sites to the list of sites that need attention, while completing cleanup at 36 sites. Since DEQ started tracking these statistics in 1996, the percentage of sites cleaned up has increased 1 to 2 percent each year, a consistent upward and positive trend.

4. HOW WE COMPARE

There are no comparisons available.

5. FACTORS AFFECTING RESULTS

DEQ's continuing identification of additional sites creates a moving target in which the universe of sites increases each year as DEQ identifies more sites needing work. Nevertheless, DEQ consistently cleans up more sites over time than are identified in any one year. The result is an increase over time in the targeted percentage of sites completing cleanup.

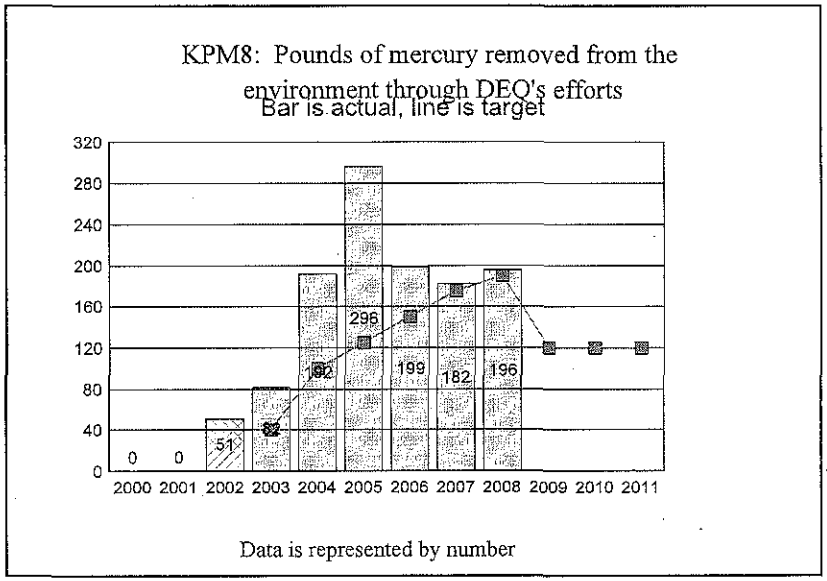
6. WHAT NEEDS TO BE DONE

DEQ's Cleanup Program priorities for the 2009 to 2011 biennium are to: 1) Identify, initiate, and complete investigation and cleanup at high priority sites that threaten human health and the environment, 2) Improve responsiveness to community brownfield and economic development needs, 3) Identify and implement sustainable practices on cleanup projects, 4) Develop and maintain technical guidance, policy, and other tools needed to support the program, and 5) Maintain financial stability of the program.

7. ABOUT THE DATA

Data is by calendar year, and derives from queries of DEQs Environmental Cleanup Site Information (ECSI) database.

KPM #8	TOXICS PREVENTION AND REDUCTION: Pounds of mercury removed from the environment through DEQ's efforts.	2002
Goal	PROTECT PEOPLE & THE ENVIRONMENT FROM TOXICS. This is one of DEQ's identified sustainability measures.	
Oregon Context	KPM #8 does not directly link to a High Level Outcome, but supports Oregon Shines Goal 3: Healthy, sustainable surroundings.	
Data Source	Annual project reports.	
Owner	Land Quality Program. Tom Roick, (503) 229-5502.	



1. OUR STRATEGY

DEQ's strategy is to partner with other organizations to remove mercury from the environment. We have partnered with PGE and the Product Stewardship Institute for the recovery of mercury thermostats, with the National Vehicle Mercury Switch Recovery Program for free collection and recycling of mercury switches removed from vehicles, and with the Oregon Dental Association and the Oregon Association of Clean Water Agencies for mercury dental waste collection and assistance with implementation of a mercury separator requirement passed by the 2007 legislature. DEQ collects elemental mercury, mercury-containing waste, and mercury-containing products free of charge from homeowners at DEQ-sponsored Household Hazardous Waste events. DEQ also collects this waste free of charge

from conditionally exempt generators at Household Hazardous Waste facilities in Portland, Salem and Eugene. In the past few years mercury has been highlighted as a persistent toxic of particular concern, but mercury is just one of numerous toxics that have the potential to cause adverse impacts to people and the environment. DEQ is currently working to develop an agency-wide toxics reduction strategy with an intergrated approach across programs to help prioritize our work and focus resources on those toxics of most concern.

2. ABOUT THE TARGETS

Higher mercury recovery is better, as reflected in the targets dating back to 2003. Nevertheless, some mercury recovery initiatives are one-time events that replace mercury-containing materials with non-mercury containing alternatives. These are not reproduceable recoveries from year to year. Furthermore, DEQ provides grants and technical assistance to local governments to establish locally sponsored programs for mercury collections. As these programs achieve success, the amount of mercury available for collection by DEQ will decline over time, resulting in future targets that are actually lower.

3. HOW WE ARE DOING

In 2008 DEQ supported programs that resulted in the collection of 196 pounds of mercury, just over the target of 190 pounds. The last three years have shown a fairly consistent trend in recovery between 180 and 200 pounds of mercury. DEQ anticpates that the amount of mercury collected annually will level off and begin to decline over time as locally sponsored programs mature.

4. HOW WE COMPARE

It is difficult to compare mercury collection programs due to a large number of variables.

5. FACTORS AFFECTING RESULTS

The increased amount of mercury collected in 2008 is likely a result of DEQ's increased outreach efforts in Portland, Salem and Eugene. The amount of mercury reported is elemental mercury collected. The amount of non-elemental mercury collected, such as that found in some pesticides, cannot be estimated and reported with any accuracy. In addition, many mercury collection opportunities are voluntary. DEQ makes the programs available, publicizes them, and relies on Oregon residents to turn in mercury-containing products. As locally-sponsored mercury collection programs are established, the amount of mercury collected by DEQ may drop.

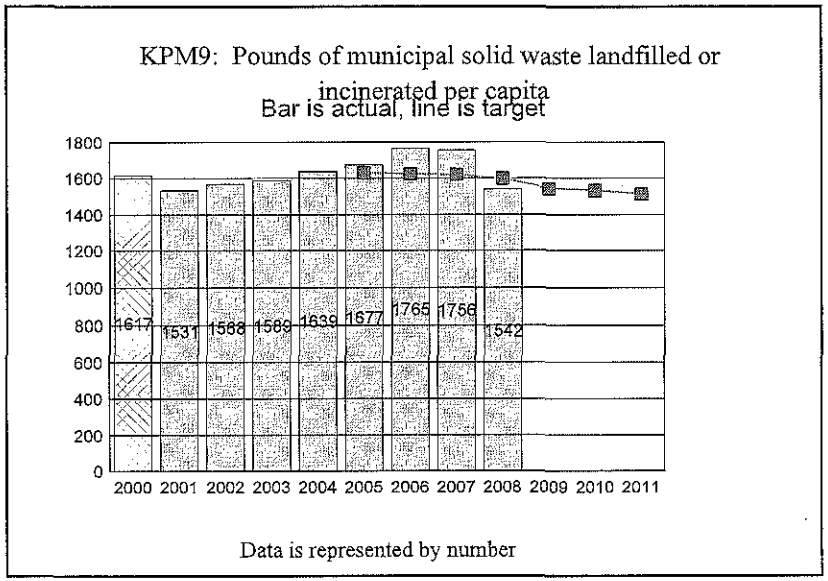
6. WHAT NEEDS TO BE DONE

DEQ needs to increase outreach and promotion to stimulate public participation in removing mercury from the environment. DEQ will continue to work with the Dental and Clean Water Associations in order to ensure best management of mercury in wastes generated by dentists. DEQ also is starting a pilot program in Lane County, Marion County, and Metro to clean up waste chemicals, including mercury, from school science laboratories.

7. ABOUT THE DATA

Data is collected from DEQ's household hazardous waste contractor and compiled annually by DEQ staff. Mercury data is only included in this report if DEQ contributed to the cost of managing the waste mercury.

KPM #9	SOLID WASTE - Pounds of municipal solid waste landfilled or incinerated per capita.	2006
Goal	INVOLVE OREGONIANS IN SOLVING ENVIRONMENTAL PROBLEMS.	
Oregon Context	As an Oregon Benchmark, this measure is also linked to: (1) Oregon Statewide Planning Goal 6: Air, water and land resources quality (OAR 660-015-00 (06)); and (2) Oregon Shines Goal 3: Healthy, sustainable surroundings.	
Data Source	Landfill disposal tonnage reports.	
Owner	DEQ Land Quality Program. Tom Roick, (503) 229-5502.	



1. OUR STRATEGY

DEQ's strategy for this measure is to encourage individuals and businesses to reduce the amount of waste generated and to increase the amount that is recovered through recycling, composting or energy recovery. Oregonian's involvement is crucial and depends on environmentally-conscious choices in purchasing, use, and end-of-life management of products.

2. ABOUT THE TARGETS

The targets help us track how well Oregonians are doing in reducing the amount of waste generated and increasing the amount recycled. The lower the values of this measure, the better. Our statewide goals for waste generation are: no increase in per capita generation by 2005, and no increase in total generation by 2009.

3. HOW WE ARE DOING

In 2008 the per capita waste disposed or incinerated was 1542 pounds, compared to the 2008 target of 1599 pounds. For the first time in four years, Oregon's per capita disposal rate was below the target, marking a change for the better. In 2008 total waste generation, the amount recycled, and the amount disposed all decreased significantly from 2007.

4. HOW WE COMPARE

Comparing Oregon's disposal rates to other states or to the national average is difficult because states define and measure their waste streams differently. However, Oregon's per capita waste disposal rate is substantially below the national average.

5. FACTORS AFFECTING RESULTS

Although strong recycling programs in Oregon have had a large influence in reducing disposal, many other factors can also affect year-to-year changes. This last year especially, the state of the economy resulted in large reductions. The decline in construction activity, beginning in July 2007, led to decreases in both recovery and disposal of materials, such as wood waste and scrap metal, which contribute sizeable tonnages to this measure.

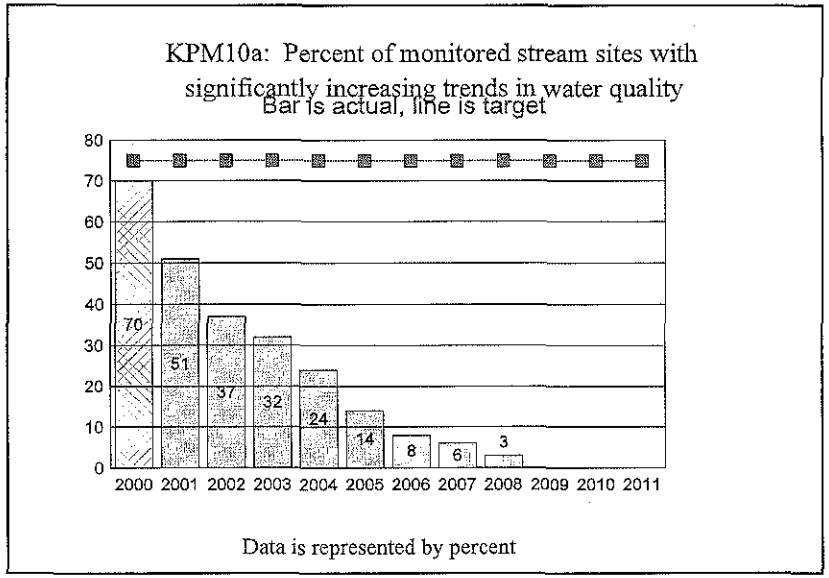
6. WHAT NEEDS TO BE DONE

We need to continue tracking the data and looking at programs that may assist with Oregonians' understanding of steps they can take to reduce per capita disposal. Actions by DEQ to reduce waste disposal include the adoption of new compost rules, implementation of a very successful electronic waste recycling program (Oregon E-Cycles), implementation of DEQ's waste prevention strategy, and other ongoing recycling program efforts.

7. ABOUT THE DATA

All landfills and incinerators report the tons of waste they dispose to DEQ each quarter, except for very small facilities that report to DEQ annually by calendar year. DEQ has occasionally audited disposal data from selected facilities. All of the larger landfills use certified scales and computerized recordkeeping to record and report disposal tonnage. Per capita disposal for 1999 and earlier years have been adjusted based on revised statewide 2000 census population figures, which improved the data. Additionally, the results reported here are slightly higher than those used for our annual recovery survey report. A 2001 change in state law directed DEQ to increase that survey amount by excluding from the disposal number the amount of materials burned as fuel at the waste-to-energy facility in Marion County. For reporting and analysis consistency, the data used for this measure does not include the Marion County adjustment.

KPM #10a	WATER QUALITY CONDITIONS - Percent of monitored stream sites with significantly increasing trends in water quality.	1992
Goal	PROTECT AND IMPROVE OREGON'S WATER AND AIR: IMPROVE ENVIRONMENTAL HEALTH.	
Oregon Context	KPM 10 (a,b,c) are high-level environmental indicator measures which report on status and trends in Oregons surface water quality. As an Oregon Benchmark, this measure is also linked to: 1) Oregons Statewide Planning Goal 6: air, water, and land resources quality (OAR 660- 015- 00 (06)); and 2) Oregon Shines goal 3: Healthy, sustainable surroundings.	
Data Source	DEQ water quality monitoring data.	
Owner	DEQ Laboratory. Steve Mrazik, Project Manager (503) 693-5781.	



1. OUR STRATEGY

All water quality programs at DEQ implement management strategies which are intended to maintain and improve overall water quality. This includes developing and implementing water quality standards and clean water plans, regulating sewage treatment systems and industrial discharges, collecting and evaluating water quality data, providing grants and technical assistance to reduce non-point pollution sources, and providing loans to communities to build treatment facilities.

2. ABOUT THE TARGETS

Targets were established in cooperation with the Oregon Progress Board. The performance measure incorporates three components related to stream water quality: increasing trends, decreasing trends, and streams in good to excellent condition. Greater numbers of streams with increasing water quality than declining water quality indicate progress towards the goal of protecting Oregons water. In addition, maintaining or increasing the percentage of stream sites with good to excellent water quality also indicates progress towards the goal.

3. HOW WE ARE DOING

In 2008, the percentage of monitored stream sites with significantly increasing trends was 3 percent (4 of 127 stream sites). The new data continues a downward trend since 2000. Measure 10a. has been below the target for the last several years.

4. HOW WE COMPARE

No industry standards exist. The performance is based primarily on the Oregon Water Quality Index (OWQI). The OWQI is used to describe general stream water quality status and trends. The OWQI also shows the general effectiveness of water quality management activities.

5. FACTORS AFFECTING RESULTS

Targets were met between 1996 and 1998. Targets were changed in 1999 to reflect substantial increases in water quality that were occurring due to progress on developing and implementing Total Maximum Daily Loads (TMDLs) and associated water quality management plans. The failure to meet the target for increasing trends in water quality is at least partially a statistical function in that earlier positive trends have resulted in some streams attaining good to excellent condition and stabilizing at that level. DEQ recognizes we need to re-evaluate current targets for the trends measures as they are probably not realistic over the long term as more streams reach stable condition. DEQ is in the process of proposing ambitious but realistic targets.

6. WHAT NEEDS TO BE DONE

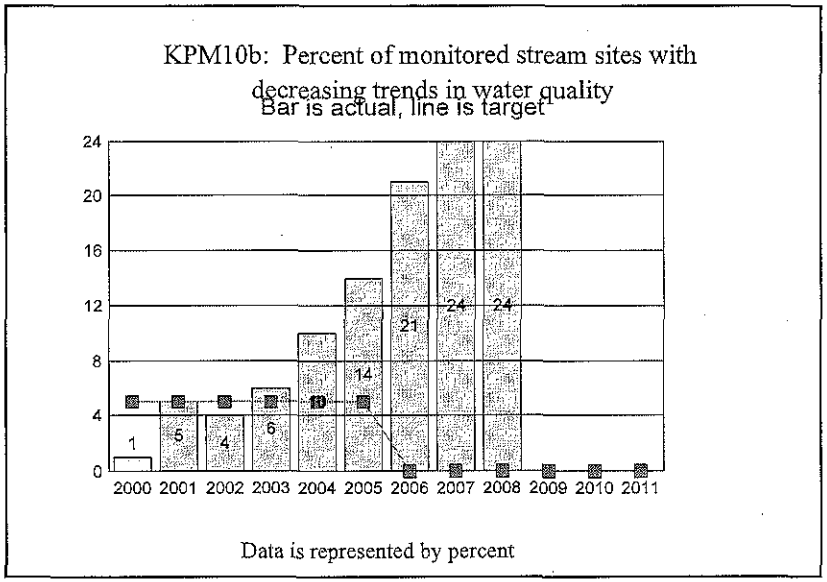
The data for this benchmark are developed from a network of 127 ambient monitoring sites on the states major rivers and streams. The Oregon Progress Board has recommended supplementing this with additional benchmarks on aquatic biological integrity (indices of biological integrity for macroinvertebrates and fish) and OWQI based on data collected from a statewide probabilistic sampling network representing all stream miles. The addition of such benchmarks would provide a more robust measure of the quality of Oregon's surface water. There is also a need, as indicated above, to revisit the current targets for the trending measures. In addition, a more detailed analysis is needed to determine what is causing declining trends.

7. ABOUT THE DATA

Long term ambient water quality monitoring data is collected in accordance with the Ambient Water Quality Monitoring Network Quality Assurance Project Plan. Monitoring data are stored in DEQ's Laboratory Analytical Storage and Retrieval Database (LASAR) and analyzed annually based on the hydrologic water year. All

DEQ monitoring data is accessible online at http://deq12.deq.state.or.us/lasar2/.

KPM #10b	WATER QUALITY CONDITIONS - Percent of monitored stream sites with decreasing trends in water quality.	1992
Goal	PROTECT AND IMPROVE OREGON'S WATER AND AIR: IMPROVE ENVIRONMENTAL HEALTH.	
Oregon Context	KPM 10 (a,b,c) are high-level environmental indicator measures which report on status and trends in Oregons surface water quality. As an Oregon Benchmark, this measure is also linked to: 1) Oregons Statewide Planning Goal 6: air, water, and land resources quality (OAR 660- 015- 00 (06)); and 2) Oregon Shines goal 3: Healthy, sustainable surroundings.	
Data Source	DEQ water quality monitoring data.	
Owner	DEQ Laboratory. Steve Mrazik, Project Manager (503) 693-5781.	



1. OUR STRATEGY

All water quality programs at DEQ implement management strategies which are intended to maintain and improve overall water quality. This includes developing and implementing water quality standards and clean water plans, regulating sewage treatment systems and industrial discharges, collecting and evaluating water quality data, providing grants and technical assistance to reduce non-point pollution sources, and providing loans to communities to build treatment facilities.

2. ABOUT THE TARGETS

Targets were established in cooperation with the Oregon Progress Board. The performance measure incorporates three components related to stream water quality: increasing trends, decreasing trends, and streams in good to excellent condition. Greater numbers of streams with increasing water quality than declining water quality indicate progress towards the goal of protecting Oregons water. In addition, maintaining or increasing the percentage of stream sites with good to excellent water quality also indicates progress towards the goal.

3. HOW WE ARE DOING

In 2008, the percentage of monitored stream sites with significantly decreasing trends was 24 percent (30 of 127 stream sites). The result is unchanged from the 2007 data. From 2003 to 2008, measure 10b. has been above the target.

4. HOW WE COMPARE

No industry standards exist. The performance is based primarily on the Oregon Water Quality Index (OWQI). The OWQI is used to describe general stream water quality status and trends. The OWQI also shows the general effectiveness of water quality management activities.

5. FACTORS AFFECTING RESULTS

Although the target for stream sites with good to excellent water quality condition is exceeded (KPM 10c), the failure to meet the target for declining trends is more of a concern. A small number of sites with decreasing trends may be due to changing management practices. DEQ is working with management agencies through TMDL implementation to ensure water quality is protected and the trends reverse. In addition, many of the stream sites with declining water quality are at stream locations without significant point source impacts. Current water quality management plans are mostly on streams where non-point sources are the primary concern.

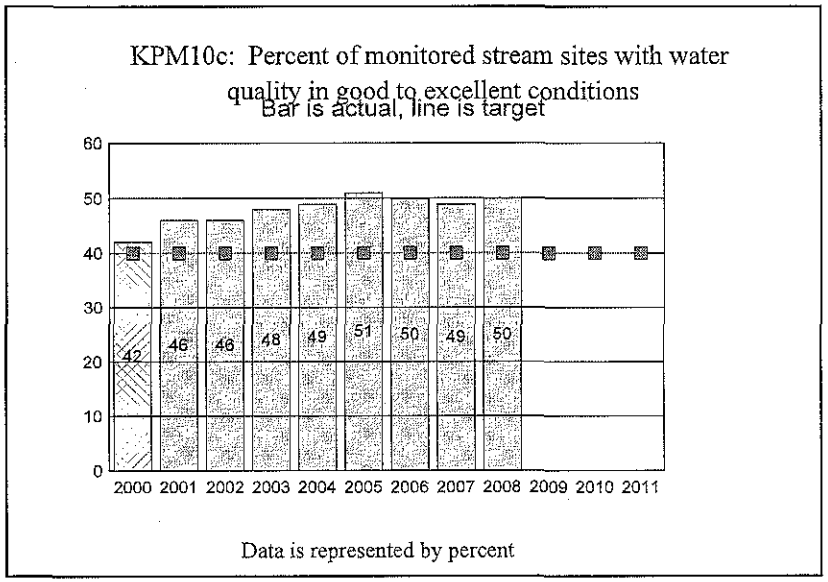
6. WHAT NEEDS TO BE DONE

The data for this benchmark is developed from a network of 127 ambient monitoring sites on the states major rivers and streams. The Oregon Progress Board has recommended supplementing this with additional benchmarks on aquatic biological integrity (indices of biological integrity for macroinvertebrates and fish) and OWQI based on data collected from a statewide probabilistic sampling network representing all stream miles. The addition of such benchmarks would provide a more robust measure of the quality of Oregon's surface water. There is also a need, as indicated above, to revisit the current targets for the trending measures. In addition, a more detailed analysis is needed to determine what is causing declining trends.

7. ABOUT THE DATA

Long term ambient water quality monitoring data are collected in accordance with the Ambient Water Quality Monitoring Network Quality Assurance Project Plan. Monitoring data are stored in DEQ's Laboratory Analytical Storage and Retrieval Database (LASAR) and analyzed annually based on the hydrologic water year. All DEQ monitoring data is accessible online at http://deq12.deq.state.or.us/lasar2/.

KPM #10c	WATER QUALITY CONDITIONS – Percent of monitored stream sites with water quality in good to excellent condition.	1992
Goal	PROTECT AND IMPROVE OREGON'S WATER AND AIR: IMPROVE ENVIRONMENTAL HEALTH.	
Oregon Context	KPM 10 (a,b,c) are high-level environmental indicator measures which report on status and trends in Oregons surface water quality. As an Oregon Benchmark, this measure is also linked to: 1) Oregons Statewide Planning Goal 6: air, water, and land resources quality (OAR 660- 015- 00 (06)); and 2) Oregon Shines goal 3: Healthy, sustainable surroundings.	
Data Source	DEQ water quality monitoring data.	
Owner	DEQ Laboratory. Steve Mrazik, Project Manager (503) 693-5781.	



1. OUR STRATEGY

All water quality programs at DEQ implement management strategies which are intended to maintain and improve overall water quality. This includes developing and implementing water quality standards and clean water plans, regulating sewage treatment systems and industrial discharges, collecting and evaluating water quality data, providing grants and technical assistance to reduce non-point pollution sources, and providing loans to communities to build treatment facilities.

2. ABOUT THE TARGETS

Targets were established in cooperation with the Oregon Progress Board. The performance measure incorporates three components related to stream water quality: increasing trends, decreasing trends, and streams in good to excellent condition. Greater numbers of streams with increasing water quality than declining water quality indicate progress towards the goal of protecting Oregon's water. In addition, maintaining or increasing the percentage of stream sites with good to excellent water quality also indicates progress towards the goal.

3. HOW WE ARE DOING

In 2008, the percentage of monitored stream sites with good to excellent water quality condition was 50 percent (66 of 131 stream sites). For the last 10 years, measure 10c. has exceeded the target.

4. HOW WE COMPARE

No industry standards exist. The performance is based primarily on the Oregon Water Quality Index (OWQI). The OWQI is used to describe general stream water quality status and trends. The OWQI also shows the general effectiveness of water quality management activities.

5. FACTORS AFFECTING RESULTS

Developing and implementing Total Maximum Daily Loads (TMDLs) and associated water quality management plans have helped increase the number of stream sites with good to excellent water quality condition. Current water quality management plans are mostly on streams where non-point sources are the primary concern.

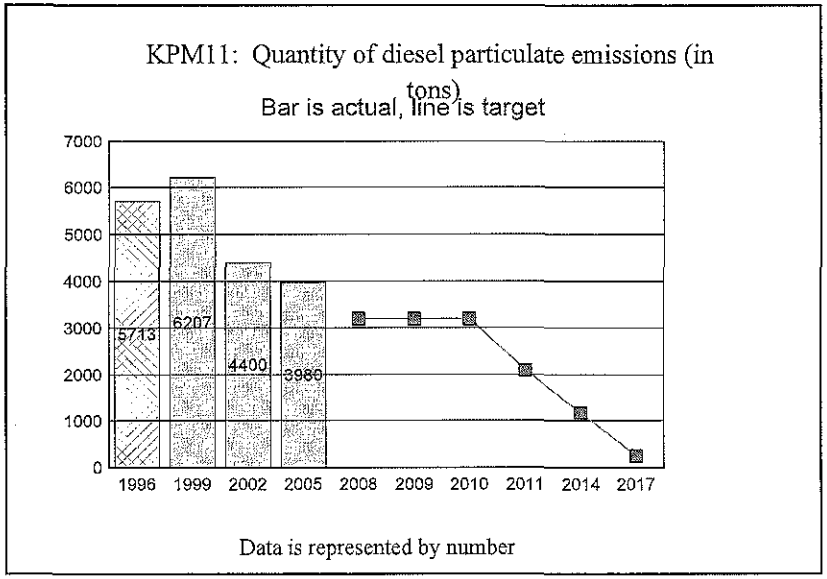
6. WHAT NEEDS TO BE DONE

The data for this benchmark is developed from a network of 131 ambient monitoring sites on the states major rivers and streams. The Oregon Progress Board has recommended supplementing this with additional benchmarks on aquatic biological integrity (indices of biological integrity for macroinvertebrates and fish) and OWQI based on data collected from a statewide probabilistic sampling network representing all stream miles. The addition of such benchmarks would provide a more robust measure of the quality of Oregon's surface water. There is also a need, as indicated above, to revisit the current targets for the trending measures. In addition, a more detailed analysis is needed to determine what is causing declining trends.

7. ABOUT THE DATA

Long term ambient water quality monitoring data is collected in accordance with the Ambient Water Quality Monitoring Network Quality Assurance Project Plan. Monitoring data is stored in DEQs Laboratory Analytical Storage and Retrieval Database (LASAR) and analyzed annually based on the hydrologic water year. All DEQ monitoring data is accessible online at http://deq12.deq.state.or.us/lasar2/.

KPM #11	AIR QUALITY DIESEL EMISSIONS: Quantity of diesel particulate emissions.	2007
Goal	IMPROVE OREGON'S AIR AND WATER.	
Oregon Context	KPM # 11 (air quality diesel emissions) is also linked to: (1) Oregon Progress Board Benchmark #75a; (2) Oregon Progress Board Benchmark #12a; (3) Oregon Statewide Planning Goal 6: Protecting air, water and land resources; and (4) Oregon Shines Goal 3: Provide healthy, sustainable surroundings.	
Data Source	DEQ air quality emission inventory database. The inventory is resource intensive to compile and validate. It is updated every three years on a schedule that meets EPA reporting requirements. The 2008 inventory will be published by spring 2010, following the completion of data collection, quality assurance and quality checking procedures.	
Owner	Air Quality Division, Margaret Oliphant, (503) 229-5687.	



1. OUR STRATEGY

There are approximately 300,000 diesel engines that operate in Oregon each year that will continue to pollute for around 30 years before being subject to strict federal

emission standards for new vehicles. The focus of the strategy is fleet outreach to identify specific operational efficiencies and equipment to reduce fuel consumption and diesel pollution. Fleets are encouraged to use cleaner fuels, including biofuels, install advanced exhaust controls and scrap old engines. As incentives, fleets are offered tax credits and grants and are encouraged to participate in DEQ's Clean Fleet recognition program. DEQ is also working to encourage diesel reduction projects which leverage private funds, such as the Clean Diesel Zone project where area hospitals agree to use vendors who operate cleaner fleets.

2. ABOUT THE TARGETS

The 2007 Oregon Legislature adopted a goal (ORS 468A.793) to reduce the cancer risk from exposure to diesel particulate to 1 in a million by 2017, meaning emissions less than 250 tons per year. This is also the target for this Key Performance Measure. Achieving this goal would result in fewer deaths per year in Oregon and reduced incidence of other health effects besides cancer including cardiovascular disease, asthma, bronchitis, chronic obstructive pulmonary disorder and other diseases.

3. HOW WE ARE DOING

The measure illustrates that diesel emissions remain at unhealthy levels in Oregon, however, progress has been made. Several fleets have installed advanced exhaust controls on existing vehicles and other projects are underway, including school buses, construction equipment, garbage trucks, transit buses, delivery vehicles and over the road trucks. With federal grants and Oregon tax credits, 40-year old engines have been replaced on three Columbia River towboats substantially lowering emissions and fuel consumption. Six truck stops have electrified parking spaces where overnight truckers can enjoy comfortable cabs without idling overnight and one railroad has installed idle reduction controls on their locomotives, saving significant amounts of fuel and lowering emissions (these engines typically run continuously even when not in use). With assistance from the Oregon Departments of Energy, Transportation and Environmental Quality, an Oregon non-profit organization operates showrooms in Oreogn, and now Washington and California, that showcase a variety of emission-reduction technologies to over-the-road truckers that operate along the I-5 corridor. They also lease auxiliary power units and offer low-cost financing for equipment and engine upgrades. At the current rate of progress, however, Oregon will not meet the diesel emissions target without additional funding or regulatory measures.

4. HOW WE COMPARE

The EPA maintains a national database of toxic air pollutants, the National Air Toxics Assessment, that includes diesel particulate and reports exposure concentrations by county for every state. The assessment is updated every three years with the latest results available for 2002. Uncertainties associated with the assessment, based on inventories provided by each of the states, limit the data quality for comparison purposes. That said, comparing the percentage of population exposed to diesel exhaust based on the Oregon Ambient Benchmark Concentration for elevated cancer risk, shows Oregon with 95.5 percent of the population above benchmark, California at 99.5 percent, Washington at 97.7 percent, Nevada at 90.7 percent and Idaho at 71 percent. In particular, Multnomah County ranks 15th out of 3,322 counties across the country for high exposure concentrations to diesel particulate.

5. FACTORS AFFECTING RESULTS

The rising cost of diesel fuel has stimulated interest among fleets to improve their fuel economy, and for others, environmental credibility is important. However, these factors alone are not likely to achieve the overall public health benchmark. Aside from using less fuel, installing advanced exhaust controls is the most cost effective approach to reduce diesel emissions. However, it is a challenge to convince businesses to invest up to $10,000 per device, per vehicle, when the primary benefit of the

investment is environmental. This is why financial assistance is crucial to making inroads to offer the best, and most cost effective solution to reduce diesel particulate matter.The economic downturn placed extraordinary pressures on the state budget, resulting in a recision of about 20 percent of the General Fund appropriated for clean diesel grants in the 2007-2009 biennium and a complete loss of General Fund support in the 2009-2011 biennium.The federal economic recovery act included clean diesel project funding directly to the states and regional competitive funding. DEQ is managing Oregon's share of state funding ($1.7 million) for clean diesel upgrade projects in municipal, school bus and transit fleets in the Portland area and Klamath and Lane counties. DEQ assisted 13 entities with grant requests for regional competitive funding. Of those requests, one project totaling $1.6 million for exhaust controls on municipal vehicles was successful.

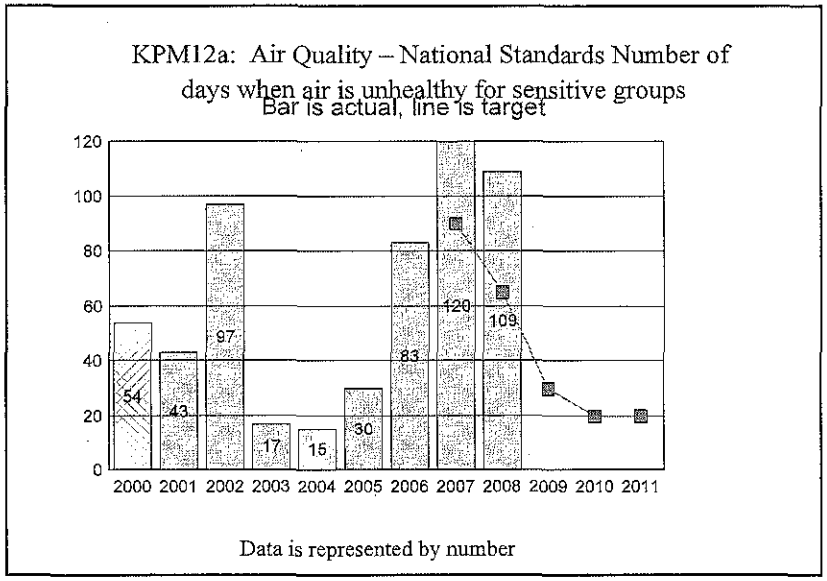
6. WHAT NEEDS TO BE DONE

Meeting the target will require collaboration among DEQ, other state agencies, local governments, health agencies and private partners throughout the state. Although emissions will be reduced over time as a result of fleet turnover and complying with federal standards for new vehicles and equipment, our projections show that even by 2026 the estimated cancer risk will still be five times over the health benchmark. To meet the one in a million cancer risk target in 2017 requires a reduction of about 140 tons of diesel particulate per year over the next ten years in addition to the declines that will occur from normal fleet turnover. Preliminary estimates of reductions from the current level of activity is around 10 tons per year. Additional funding is required to achieve the target if we rely solely on voluntary measures. To incorporate regulatory measures into the strategy, the Environmental Quality Commission would need authority to set emission limits for in-use diesel engines like non-road construction equipment and proportionally registered heavy duty trucks. DEQ is convening a study workgroup to consider strategies to improve the efficiency of over the road heavy and medium duty trucks and to reduce unnecessary long-duration idling. The result of this effort could produce recommendations for legislative proposals for the 2011 Oregon Legislature. These strategies will result in emission reductions for ambient respirable pollutants like diesel particulate as well as greenhouse gases. DEQ will continue to aggressively search for opportunities to establish partnerships to advance projects that can be supported with available federal funds and state tax credits.

7. ABOUT THE DATA

This data is derived from an assessment of all air pollutants from all sources in the state that is compiled every three years. The 2005 calendar year is used for this report. The inventory is made according to methods determined by EPA and used by state and local air quality agencies nationwide. Extensive quality assurance procedures ensure data quality.

KPM #12a	AIR QUALITY CONDITIONS - Number of days when air is unhealthy for sensitive groups.	2006
Goal	IMPROVE OREGON'S AIR AND WATER.	
Oregon Context	KPM # 12a (air quality conditions) is also linked to: (1) Oregon Progress Board Benchmark #75a; (2) Oregon Statewide Planning Goal 6: Protecting air, water and land resources; and (3) Oregon Shines Goal 3: Provide healthy, sustainable surroundings.	
Data Source	DEQ air quality monitoring database.	
Owner	Air Quality Division. Margaret Oliphant, (503) 229-5687.	



1. OUR STRATEGY

There are four elements in DEQ's strategy to improve and protect Oregon's air quality.1) In communities where air pollution levels do not meet the health-based national air standards (non-attainment areas), DEQ analyzes the air quality and works with the local citizens through advisory committees to find ways to reduce air pollution sources and achieve the federal standards. Non-attainment areas require a formal plan to reduce pollution and may require new local ordinances and a halt to industrial growth. 2) In other communities where the levels are close to exceeding the national standards, DEQ works with the community to reduce existing sources

of air pollution, generally through voluntary initiatives. 3) DEQ develops and implements science-based, statewide air quality improvement initiatives focused on specific source categories (e.g. old polluting residential wood stoves, diesel engines, and open burning) that will improve air quality for all Oregonians. 4) DEQ implements federal air pollution emissions standards for mobile and stationary sources that will also improve air quality statewide.

2. ABOUT THE TARGETS

DEQ strives to fully protect public health from outdoor air pollution. Oregon Benchmark #75 has been the primary measure of air quality in Oregon for many years, tracking the percent of time Oregon's air quality meets federal health-based standards. Thanks to a variety of federal, state and local emission reduction measures, all areas of the state were meeting federal standards by the mid-1990s. However, there were still numerous individual days when the air was unhealthy to breathe. Then, in 2006, EPA tightened the standards for fine particulate matter based on the most recent health studies. Two communities in Oregon violate the new standards and many more are at risk of future violations. The measure was revised in 2006 to enable DEQ to track progress toward our goal. KPM 12 a indicates whether the outdoor air that sensitive groups of Oregonians (e.g. children and asthmatics) breathe meets the federal health-based air quality standards for particulate matter, ozone (smog) and four other air pollutants. The targets for unhealthy air days from 2007 through 2009 reflect the recent tightening of EPAs fine particulate standard. DEQ's target for the longer term is to eliminate unhealthy air days and, in the process, return Oregon to compliance with federal standards.

3. HOW WE ARE DOING

This measure illustrates that the air is unhealthy for sensitive groups to breathe in many Oregon cities on many individual days. The majority of the unhealthy air days are caused by elevated fine particulate levels resulting from woodstoves and other combustion sources. The increase in unhealthy days that occurred in 2006 and continuing into 2008 is partially a result of the new lower federal standard for fine particulate. Beginning in 2006, air quality was judged unhealthy at a lower pollution level than in previous years. Previous years have not been restated for this report. In each of the last three years, wildfires have been the cause of some unhealthy air days; eleven in 2006, nine in 2007 and nineteen in 2008. However, wintertime inversions coupled with woodstove smoke caused the majority of the unhealthy days. In total, twenty-two Oregon communities experienced a total of 109 days in 2008 when air was unhealthy for sensitive groups.

4. HOW WE COMPARE

The U.S. Environmental Protection Agency maintains a national database that allows comparison of Oregon data to Washington and Idaho for unhealthy air days. In 2005, Oregon experienced 30 days of unhealthy air in 6 different cities, Washington experienced 11 unhealthy days in six cities, and Idaho had 49 unhealthy air days in 12 cities. Oregon data for 2006 through 2008 cannot be compared to other states because it includes unhealthy days based on the new federal standard while other states have not changed their calculation method (see ABOUT THE DATA below.)

5. FACTORS AFFECTING RESULTS

As scientific understanding of the relationship between air quality and people's health has improved, EPA has been re-evaluating several of the national health-based air quality standards. New standards for smog and for other pollutants have recently been revised or are in the process of being reconsidered. These new standards may indicate that additional people are at risk. In Oregon, our reliance on burning for heat and for waste disposal, along with increasing motor vehicle use, are the primary sources of unhealthy air. Weather patterns, especially poor ventilation days in winter, and natural events, such as wildfires, can be significant factors resulting in poor air quality.

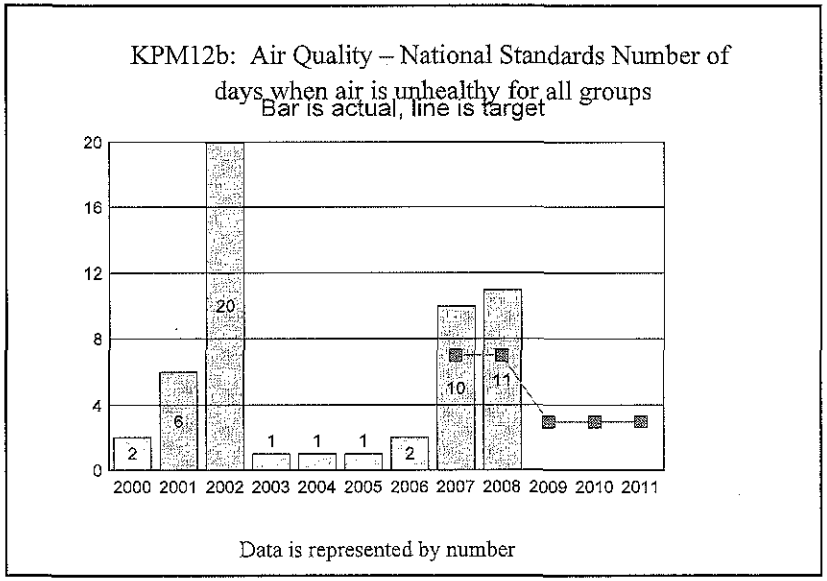
6. WHAT NEEDS TO BE DONE

Meeting the targets will require collaboration among DEQ, other state agencies, local governments, health agencies, the public, and other partners. Implementing the new Heat Smart legislation, which requires removal of old, polluting woodstoves upon sale of home, will reduce smoke (particulate matter) from woodstoves. DEQ will leverage this new authority by seeking federal grant funding to help low income individuals comply with the requirements. New federal and state standards for cars, trucks, construction equipment, and their fuels will reduce emissions. Further reductions from gasoline engines (e.g. cars, lawn equipment), fuel distribution, and commercial processes are also needed. By identifying local problems through air monitoring, and by developing localized emission reduction strategies (e.g. the Klamath Falls Attainment Plan) DEQ can provide the best air quality improvements for Oregonians.

7. ABOUT THE DATA

This data is collected from monitoring sites throughout the state and is available through the DEQ website for whatever timeframe is desired. The calendar year is used for this report. Measurements are made according to methods determined by EPA and used by state and local air quality agencies nationwide. Extensive quality assurance procedures ensure data quality. However, a significant limitation on this database is the number and location of monitoring sites. EPA revised the particulate matter (PM) standard in the fall of 2006 but has not adjusted the Air Quality Index that provides the basis for the unhealthy days designation. I n this report, DEQ has included in the count of days unhealthy for sensitive groups any days over the new PM standard. EPA will revise the AQI to be in line with the 2006 standard sometime in the next few years.

KPM #12b	AIR QUALITY CONDITIONS - Number of days when air is unhealthy for all groups.	2006
Goal	IMPROVE OREGON'S AIR AND WATER.	
Oregon Context	KPM # 12b (air quality conditions) is also linked to: (1) Oregon Progress Board Benchmark #75b (2) Oregon Statewide Planning Goal 6: Protecting air, water and land resources; and (3) Oregon Shines Goal 3: Provide healthy, sustainable surroundings.	
Data Source	DEQ air quality monitoring database.	
Owner	Air Quality Division. Margaret Oliphant, (503) 229-5687.	



1. OUR STRATEGY

There are four elements in DEQ's strategy to improve and protect Oregon's air quality.1) In communities where air pollution levels do not meet the health-based national air standards (non-attainment areas), DEQ analyzes the air quality and works with the local citizens through advisory committees to find ways to reduce air pollution sources and achieve the federal standards. Non-attainment areas require a formal plan to reduce pollution and may require new local ordinances and a halt to industrial growth. 2) In other communities where the levels are close to exceeding the national standards, DEQ works with the community to reduce existing sources

of air pollution, generally through voluntary initiatives. 3) DEQ develops and implements science-based, statewide air quality improvement initiatives focused on specific source categories (e.g. old polluting residential wood stoves, diesel engines, and open burning) that will improve air quality for all Oregonians. 4) DEQ implements federal air pollution emissions standards for mobile and stationary sources that will also improve air quality statewide.

2. ABOUT THE TARGETS

DEQ strives to fully protect public health from outdoor air pollution. Oregon Benchmark #75 has been the primary measure of air quality in Oregon for many years, tracking the percent of time Oregon's air quality met federal health standards. Thanks to a variety of federal, state and local emission reduction measures, all areas of the state were meeting federal standards by the mid-1990s. However, there were still individual days when the air was unhealthy to breathe. Then, in 2006, EPA tightened the standards for fine particulate matter based on the most recent health studies. Two communities in Oregon violate the new standards and many more are at risk of future violations. The measure was revised in 2006 to enable DEQ to track progress toward our goal. KPM 12b measures whether the outdoor air meets the federal health-based air quality standards for particulate matter, ozone (smog), and four other widespread air pollutants called criteria pollutants - carbon monoxide, lead, sulfur dioxide, nitrogen dioxide - for all groups meaning the general population. DEQ's target for the longer term is to eliminate unhealthy air days and, in the process, return Oregon to compliance with federal standards.

3. HOW WE ARE DOING

This measure indicates that air quality is unhealthy for the general population on some days in some places. Most of the unhealthy air days are caused by elevated fine particulate levels resulting from woodstove use and other combustion sources. The increase in unhealthy days that occurred in 2007 is partially a result of the new, lower federal standard for fine particulate. Beginning in 2006, air quality was judged unhealthy at a lower pollution level than in previous years. Previous years have not been restated for this report. In 2008, six cities experienced a total of 11 days there were unhealthy for every citizen. The majority of unhealthy days occurred in the winter because of woodstove smoke, although there was one unhealthy air day during the summer because of smoke from the northern California forest fires.

4. HOW WE COMPARE

The U.S. Environmental Protection Agency maintains a national database that allows comparison of Oregon data to Washington and Idaho for unhealthy air days. I n 2005, Oregon experienced one day of unhealthy air in one city, Washington experienced two unhealthy days in two cities, and Idaho had eight unhealthy air days in four cities. Oregon data since then cannot be compared to other states because it includes unhealthy days based on the new federal standard while other states have not changed their calculation method. (see ABOUT THE DATA below.)

5. FACTORS AFFECTING RESULTS

As scientific understanding of the relationship between air quality and people's health has improved, EPA has been re-evaluating several of the national health-based air quality standards. New standards for smog and for other pollutants have recently been revised or are in the process of being reconsdered. These new standards may indicate that additional people are at risk. In Oregon, our reliance on burning for heat and for waste disposal, along with increasing motor vehicle use are the primary sources of unhealthy air. Weather patterns, especially poor ventilation days in winter, and natural events, such as wildfires, can be significant factors resulting in poor air quality.

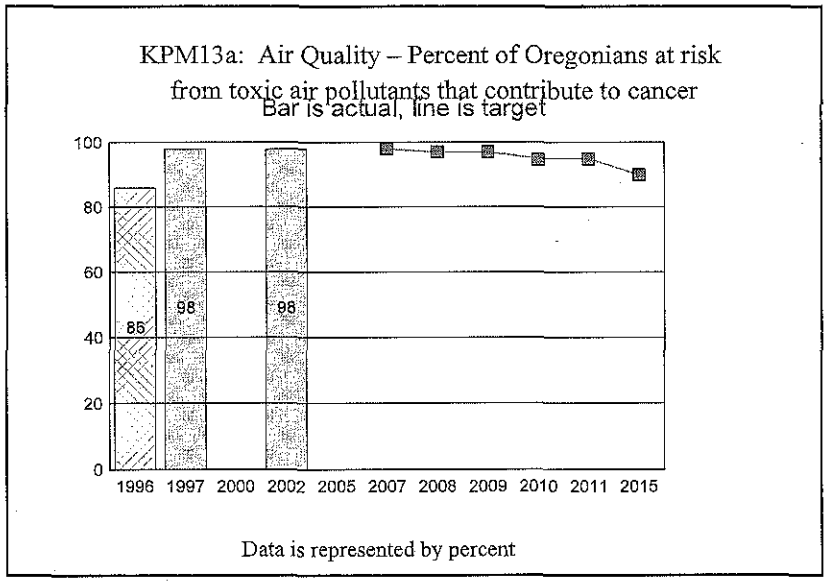
6. WHAT NEEDS TO BE DONE

Meeting the targets will require collaboration among DEQ, other state agencies, local governments, health agencies, the public, and other partners. Implementing the new Heat Smart legislation, which requires removal of old, polluting woodstoves upon sale of home, will reduce smoke (particulate matter) from woodstoves. DEQ will leverage this new authority by seeking federal grant funding to help low income individuals comply with the requirements. New federal and state standards for cars, trucks, construction equipment, and their fuels will reduce emissions. Further reductions from gasoline engines (e.g. cars, lawn equipment), fuel distribution, and commercial processes are also needed. By identifying local problems through air monitoring, and by developing localized emission reduction strategies (e.g. the Klamath Falls Attainment Plan) DEQ can provide the best air quality improvements for Oregonians.

7. ABOUT THE DATA

This data is collected from monitoring sites throughout the state and is available through the DEQ website for whatever time frame is desired. The calendar year is used for this report. Measurements are made according to methods determined by the EPA and used by state and local air quality agencies nationwide. Extensive quality assurance procedures ensure data quality. However, a significant limitation on this database is the number and location of monitoring sites. EPA revised the particulate matter (PM) standard in the fall of 2006 but has not adjusted the Air Quality Index that provides the basis for the unhealthy days designation. EPA will revise the PM2.5 AQI to reflect the 2006 standard sometime in the next few years.

KPM #13a	AIR QUALITY - NEW SCIENCE - Percent of Oregonians at risk from toxic air pollutants that contribute to cancer.	2007
Goal	PROTECT PEOPLE AND THE ENVIRONMENT FROM TOXICS.	
Oregon Context	OBM # 76a (air quality conditions) is also linked to: (1) Oregon Progress Board Benchmark #76b; (2) Oregon Statewide Planning Goal 6: Protecting air, water and land resources; and (3) Oregon Shines Goal 3: Provide healthy, sustainable surroundings.	
Data Source	DEQ air pollution inventory and EPA National-scale Air Toxics Assessment.	
Owner	Air Quality Division. Margaret Oliphant, (503) 229-5687.	



1. OUR STRATEGY

DEQ's strategy to reduce Oregonians' exposure to toxic air pollutants utilizes several approaches that complement federal mobile (Mobile Source Air Toxics) and stationary source standards (National Emissions Standards for Hazardous Air Pollutants). State initiatives focus on specific source categories. For example, the recently-adopted Heat Smart legislation will reduce pollution from old residential wood stoves by requiring removal upon sale of home. The Clean Diesel program, which provides grants and tax credits for exhaust emission control technologies, is reducing emissions from diesel engines, one of the most significant air toxics. The

Portland Air Toxics Solutions project is a unique attempt to look at region-wide air toxics and work with local citizens to craft a comprehensive emissions reductions strategy that will be health protective.

2. ABOUT THE TARGETS

DEQ strives to fully protect public health from outdoor air pollution. Further reductions in a variety of air pollution sources are needed to reach the targets. This measure shows the number of Oregonians breathing air that has toxic air pollutant concentrations high enough to cause significant long-term health risks. It provides an indication of overall risk from toxic air pollution by tracking a representative group of pollutants, polycyclic aromatic hydrocarbons (PAHs), which cause cancer. Currently, these pollutants are causing significant health risks for 98 percent of Oregonians, and DEQ has established an interim target to reduce the percentage of Oregonians at significant risk of health impacts to 95 percent by 2010.

3. HOW WE ARE DOING

EPA's recently released 2002 National-scale Air Toxics Assessment results have not changed from the previous 1999 analysis and continue to show serious cancer risk from polycyclic aromatic hydrocarbons. This measure shows that toxic air pollutants pose a threat of serious disease to almost all Oregonians but can be considered positive since it indicates that despite population growth, and the potential for increased pollution, no increase in risk was estimated.

4. HOW WE COMPARE

It is not possible to directly compare health risk from air toxics in Oregon to that of other states. Each state produces its own inventory of emissions based on methods unique to that state. Subsequent analysis by EPA attempts to harmonize the data and develop a national estimate of health risk by state but it lacks reliability for comparison purposes.

5. FACTORS AFFECTING RESULTS

The data supporting this measure originates with a comprehensive inventory of air pollution sources conducted by DEQ every three years. EPA uses DEQ's inventory to predict toxic air pollutant concetrations and associated health threats. The results from one year cannot be definitively compared to a previous year since inventory and calculation methods are continuing to improve and a difference could be a result simply of a change in method. The risk assessment can also change from one analysis to the next because it relies on constantly improving information about pollutant toxicity. In Oregon, our reliance on burning for heat and for waste disposal, along with increasing motor vehicle use are the primary sources of toxic air pollution. Forestry and agricultural burning in rural areas also contribute. Weather patterns, such as winter time stagnation and natural events, such as wildfires, can be significant factors resulting in poor air quality.

6. WHAT NEEDS TO BE DONE

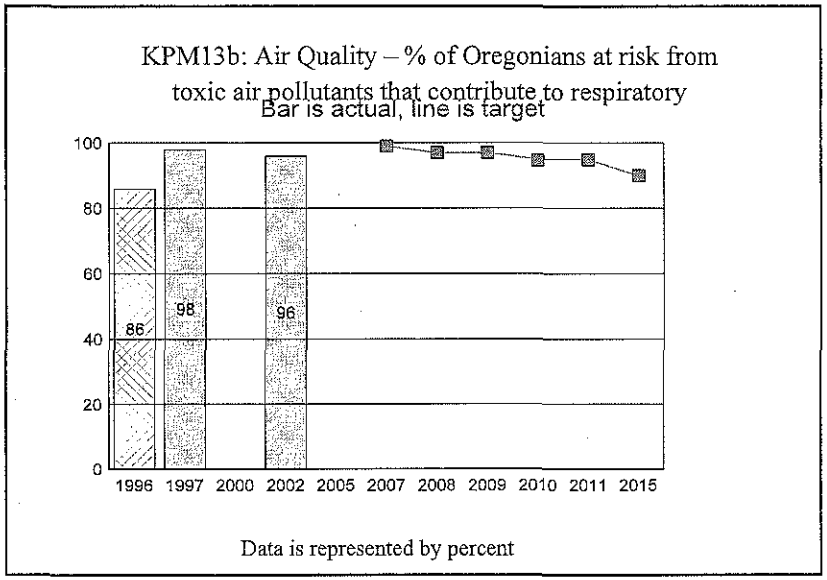
A number of new federal and state standards are being adopted and implemented for categories of small businesses releasing air toxics which will improve air quality statewide. However, meeting the targets will require collaboration among DEQ, other state agencies, local governments, health agencies, the public, and other partners. The Portland Air Toxics Solutions project is a unique attempt to look at region-wide air toxics and work with local citizens to craft a comprehensive emissions reductions strategy that will be health protective. Possible strategies to reduce region-wide air toxics risk could include reducing emissions from industrial

sources, woodstoves, open burning, diesel engines (e.g. trucks, construction equipment, trains, vessels) and other sources of combustion. Focused strategies in some localized areas of Portland may also be needed to address a localized problem. This geographic approach should be applied to other areas of the state where air toxics are shown to be a problem.

7. ABOUT THE DATA

This data originates with a comprehensive inventory of air pollution sources done by DEQ every three years. These inventories are done on a calendar year basis; the last one was in 2005. DEQs inventory data is used by EPA to predict toxic air pollutant concentrations and the associated health threat using sophisticated modeling techniques. These methods are well-documented, include substantial quality control but take time to produce results. T he last published analysis by EPA was for the 2002 calendar year and released in 2009; the 2005 analysis may be available next year.

KPM #13b	AIR QUALITY - NEW SCIENCE - Percent of Oregonians at risk from toxic air pollutants that contribute to respiratory problems.	2007
Goal	PROTECT PEOPLE AND THE ENVIRONMENT FROM TOXICS.	
Oregon Context	KPM # 13b (air quality conditions) is also linked to: (1) Oregon Progress Board Benchmark #76b; (2) Oregon Statewide Planning Goal 6: Protecting air, water and land resources; and (3) Oregon Shines Goal 3: Provide healthy, sustainable surroundings.	
Data Source	DEQ air pollution inventory and EPA National-scale Air Toxics Assessment.	
Owner	Air Quality Division. Margaret Oliphant, (503) 229-5687.	



1. OUR STRATEGY

DEQ's strategy to reduce Oregonians' exposure to toxic air pollutants utilizes several approaches that complement federal mobile (Mobile Source Air Toxics) and stationary source standards (National Emissions Standards for Hazardous Air Pollutants). State initiatives focus on specific source categories. For example, the recently-adopted Heat Smart legislation, which requires removal of woodstoves upon sale of home, will reduce pollution from old residential woodstoes. The Clean Diesel program, which provides grants and tax credits for exhaust emission control technologies, is reducing emissions from diesel engines, one of the most significant

air toxics. The Portland Air Toxics Solutions project is a unique attempt to look at region-wide air toxics and work with local citizens to craft a comprehensive emissions reductions strategy that will be health protective.

2. ABOUT THE TARGETS

DEQ strives to fully protect public health from outdoor air pollution. Further reductions in a variety of air pollution sources are needed to reach the targets. This measure shows the number of people breathing air that has toxic air pollutant concentrations high enough in Oregon to cause significant long-term health risks. It provides an indication of overall risk from toxic air pollution by tracking a representative pollutant, acrolein, which causes serious respiratory effects. As of 2002, this pollutant was causing significant health risks for 96 percent of Oregonians, and DEQ has established an interim target to reduce the percentage of Oregonians at significant rish of health impacts to 95 percent by 2010.

3. HOW WE ARE DOING

EPA's 2002 National-scale Air Toxics Assessment results show some improvement, but this measure shows that toxic air pollutants continue to pose a threat of serious respiratory disease to almost all Oregonians. If these numbers continue to go down, it would be reasonable to reconsider the 2010 goal and perhaps lower it.

4. HOW WE COMPARE

It is not possible to directly compare health risk from air toxics in Oregon to that of other states. Each state produces its own inventory of emissions based on methods unique to that state. Subsequent analysis by EPA attempts to harmonize the data and develop a national estimate of health risk by state but it lacks reliability for comparison purposes.

5. FACTORS AFFECTING RESULTS

The data supporting this measure originates with a comprehensive inventory of air pollution sources conducted by DEQ every three years. EPA uses DEQ's inventory to predict toxic air pollutant concentrations and the associated health threat using sophisticated modeling techniques. The results from one year cannot be definitively compared to a previous year since inventory and calculation methods are continuing to improve and a difference could be a result simply of a change in method. The risk assessment can also change from one analysis to the next because it relies on constantly improving information about pollutant toxicity. In Oregon, our reliance on burning for heat and for waste disposal, along with increasing motor vehicle use are the primary sources of toxic air pollution. Forestry and agricultural burning in rural areas also contribute. Weather patterns, such as winter time stagnation and natural events, such as wildfires, can be significant factors resulting in poor air quality.

6. WHAT NEEDS TO BE DONE

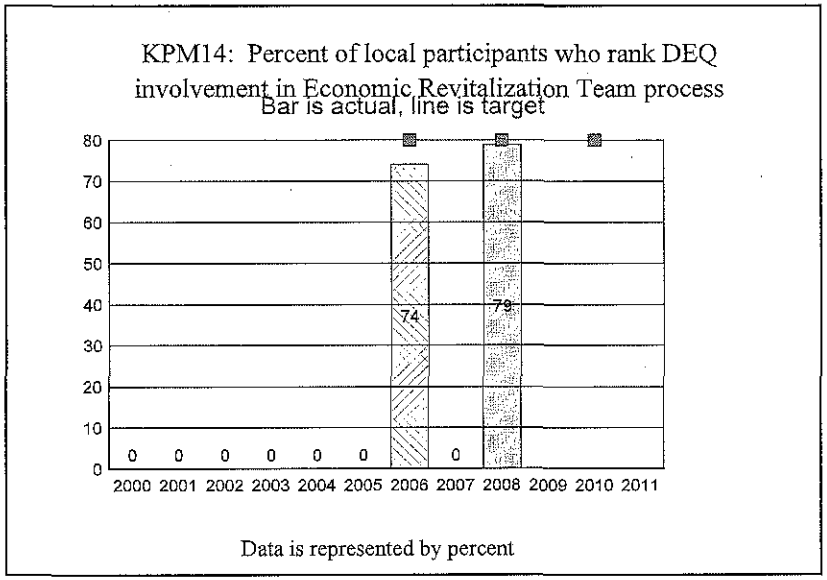
A number of new federal and state standards are being adopted and implemented for categories of small businesses releasing air toxics, which will improve air quality statewide. However, meeting the targets will require collaboration among DEQ, other state agencies, local governments, health agencies, the public, and other partners. The Portland Air Toxics Solutions project is a unique attempt to look at region-wide air toxics and work with local citizens to craft a comprehensive emissions reductions strategy that will be health protective. Possible strategies to reduce region-wide air toxics risk could include reducing emissions from industrial

sources, woodstoves, open burning, diesel engines (e.g. trucks, construction equipment, trains, vessels) and other sources of combustion. Focused strategies in some localized areas may also be needed. This geographic approach should be applied to other areas of the state where air toxics are shown to be a problem.

7. ABOUT THE DATA

This data originates with a comprehensive inventory of air pollution sources done by DEQ every three years. These inventories are done on a calendar year basis; the last one was in 2005. DEQ's inventory data is used by EPA to predict toxic air pollutant concentrations and the associated health threat using sophisticated modeling techniques. These methods are well-documented, include substantial quality control but take time to produce results. The last published analysis by EPA was for the 2002 calendar year, released in 2009; the 2005 analysis may be available next year.

KPM #14	ERT: Percent of local participants who rank DEQ involvement in Economic Revitalization Team process as good to excellent.	2006
Goal	PROVIDE EXCELLENCE.	
Oregon Context	There are no Oregon Benchmarks or High Level Outcomes related to this measure, but participating in ERT is a priority for DEQ.	
Data Source	Customer service survey results provided by Economic Revitalization Team (ERT), 2008 Oregon Joint CSAT Survey.	
Owner	DEQ ERT Representative, Mikell O'Mealy, (503) 229-6590	



1. OUR STRATEGY

The Governors Economic Revitalization Team (ERT) conducts a survey to measure customer satisfaction with ERT service once every two years (the first survey was conducted in 2006). Survey questions measure ERT participants' perception of the involvement of five partner ERT agencies DEQ, Oregon Department of State Lands (DSL), Oregon Department of Land Conservation and Development (DLCD), Oregon Department of Transportation (ODOT) and Oregon Business Development Department (OBDD) in six elements of customer service: timeliness, ability to provide services correctly, helpfulness, knowledge and expertise, availability of information, and quality of service. The highest percentage of responses rating DEQ as good to excellent is the desired outcome.

2. ABOUT THE TARGETS

DEQ's target is 80 percent of the respondents rating our involvement in ERT projects as good to excellent.

3. HOW WE ARE DOING

In 2008 we received a ranking of 78.9 percent which is slightly lower, but substantially meeting our target goal of 80 percent and about a 5 percent increase in the performance ranking from 2006. The next ERT survey will be conducted in 2010.

4. HOW WE COMPARE

DEQ received the third-highest ranking amongst the five partner agencies. The rankings ranged from 88 percent to 64.9 percent.

5. FACTORS AFFECTING RESULTS

ERT projects represent some of the most complex and challenging issues involving the state, often requiring coordination of competing program goals across several state agencies. Elected officials, stakeholders and community members are usually involved in these projects, and state agency performance is critical to success. In addition, the sample size is small (37.5 percent of the 273 respondents worked with DEQ) and may impact survey results and conclusions drawn from those results.

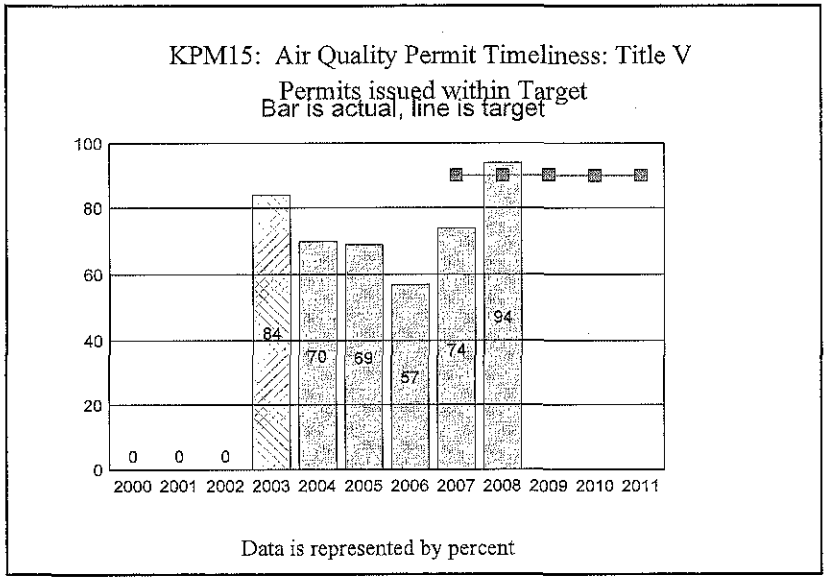
6. WHAT NEEDS TO BE DONE

The ERT agencies need to continue working together with local communities to solve problems and help them achieve goals. The ERT model has proven effective in doing this, and local leaders are supportive and appreciative of the states coordination. The survey results will help DEQ refine our involvement in the ERT in striving for even higher service results in the future.

7. ABOUT THE DATA

This data is reported in the 2008 Economic Revitalization Team Customer Satisfaction Study, completed August 4, 2008, and available from the Governor's ERT office.

KPM #15	PERMIT TIMELINESS: Percent of Title V operating permits issued with the target period.	2007
Goal	IMPROVE OREGONS AIR AND WATER.	
Oregon Context	KPM #15 links to: (1) Oregons Statewide Planning Goal 6: Air, water and land resources quality (OAR 660-015-00 (06)), (2) Oregon Shines Goal 1: Quality jobs for all Oregonians, and (3) Oregon Shines Goal 3: Healthy, sustainable surroundings.	
Data Source	DEQ Air Quality Permit Tracking database.	
Owner	DEQ Air Quality Program. Margaret Oliphant, (503) 229-5687.	



1. OUR STRATEGY

DEQ issues air quality operating permits to Oregon's largest industrial facilities that are regulated under federal permit requirements contained in Title V of the federal Clean Air Act. DEQ prioritizes its Title V permitting resources based on the applicable target period for several categories of Title V applications to ensure that permits are issued in a timely manner.

2. ABOUT THE TARGETS

DEQs goal is to issue 90 percent of Title V permits within the applicable target periods set by the agency. This sets a high standard for issuing permits in a timely manner. All new permits, renewals and significant permit modifications must have a public notice period during which citizens can comment on the permit and request a public hearing. It is important that the public has this opportunity to review processes and emissions in a timely manner to protect public health. Also, a high percentage of timely permits issued is one indicator of an efficient permitting program.

3. HOW WE ARE DOING

Although Title V permit timeliness is a Key Performance Measure added in 2007, DEQ has provided permit timeliness data from 2003 onward to illustrate recent performance. DEQ's issuance of timely permits declined each year from 2003 through 2006. DEQ's percentage of timely permits issued in 2007 improved 17 percentage points from 2006. In 2008, timeliness increased by an additional 20 percentage points and now exceeds targets. However, these timeliness numbers are artificially inflated by the issuance of an unusually large number of similar permit modifications, making it easier to complete them within designated timeliness limits. Specifically 68 percent of all permit actions were these similar permit modifications. Excluding this extraordinary event, Title V timeliness would have been 82 percent. While this is an improvement over 2007, it falls short of the 90 percent target.

4. HOW WE COMPARE

DEQ has set target periods for permit issuance at six to twelve months below the 18-month period required by state and federal laws.

5. FACTORS AFFECTING RESULTS

Revenue shortfalls followed by staff reductions lead to a drop-off in timeliness between 2003 and 2006. In 2007, the Legislature approved a fee increase, which added back staffing over three years and will bring it back to acceptable levels. Two other factors have contributed to the increase in permit timeliness since 2006. During the past two years, DEQ managers have focused on more frequent review of permit timeliness measures. Managers have intensified their efforts to closely manage workload and shift resources when needed to ensure timely issuance of permits. In addition, DEQ implemented a new permit tracking system in 2007. Permitting staff spent a significant amount of time in prior years helping with development and testing, and training on the new software, leaving less time for permit work. The new software has now reduced the amount of time staff spend on data management activities.

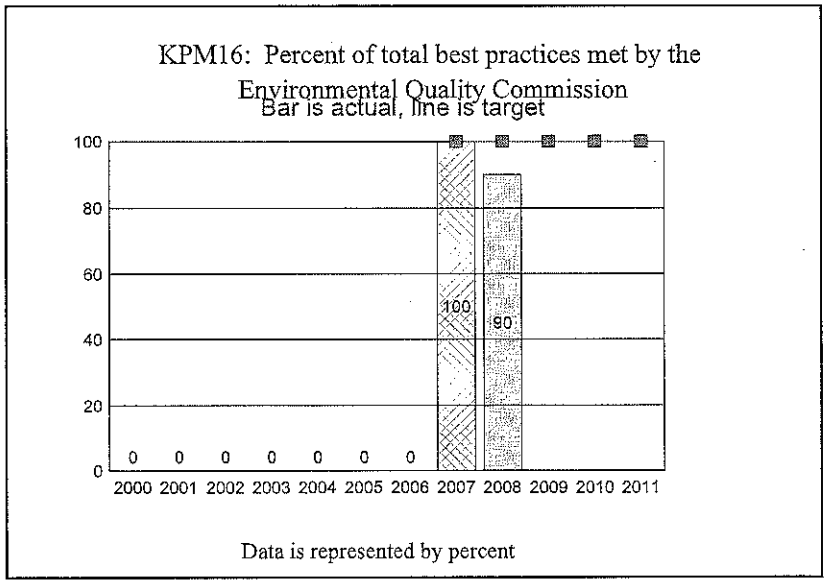
6. WHAT NEEDS TO BE DONE

Recently, members of the public have shown increased interest in Tile V permits and permit renewals. They are concerned about toxic air pollutants that Title V sources emit in their neighborhoods and near their schools. The public is also concerned about environmental justice and the possible disproportionate impact of Title V source emissions on minority neighborhoods. These issues will take more DEQ staff time in the permitting process and timeliness may suffer. To offset the impact, DEQ managers must closely monitor staff workloads, regularly review permit timeliness and adjust workloads as needed.

7. ABOUT THE DATA

The reporting cycle is a calendar year. The strength of the data is that records exist on each of the Title V permit actions taken by DEQ during the year. The primary weakness of the system is that the data's validity depends on accurate entry by multiple individuals.

KPM #16	BOARDS AND COMMISSIONS: Percent of total best practices met by the Environmental Quality Commission.	2007
Goal	Effective governance oversight of DEQ by the Environmental Quality Commission.	
Oregon Context	The Environmental Quality Commission is a five-member citizen panel appointed by the governor for four-year terms to serve as DEQ's policy and rulemaking board. In addition to adopting rules, the EQC also establishes policies, approves the DEQ budget, issues orders, judges appeals of fines or other department actions, and appoints the DEQ director.	
Data Source	Self-evaluation by EQC members.	
Owner	Management Services Division. Joanie Stevens-Schwenger, 503-229-6585.	



1. OUR STRATEGY

Support the EQC in completing their annual self-evaluation and in making performance improvements identified by their self-evaluation.

2. ABOUT THE TARGETS

The 2005 legislature directed the Department of Administrative Services and the Legislative Fiscal Office to develop a measure for boards and commissions having governance oversight to use in evaluating their own performance. Because the EQC is included in DEQ's budget and because it hires DEQ's executive director, DAS and LFO deemed the EQC to have governance oversight and identified it as one of the boards and commissions that should have a performance measure. On December 14, 2006, the EQC adopted the percent of total best practices met by the commission as the performance standard. The measure is an annual self-assessment against 15 best practices for boards and commissions, as laid out by DAS and customized to the EQC. The commissioners completed, by electronic or postal mail, this survey during September 2009. The EQC members will hold a discussion at their October meeting to review their survey findings, evaluate factors affecting performance, and assess what the commission needs to do to improve future performance. This is the second annual self-evaluation by the EQC, so only the data from 2007 is available for comparison.and customized to the EQC.

3. HOW WE ARE DOING

The EQC rated itself an average of 90 percent across 15 survey questions. This is under the performance target, which is set for 100 percent of the 15 best practices. One commissioner expressed a lack of knowledge around financial controls at DEQ. Several commissioners identified a need for increased collaboration between relevant state agencies boards, opportunities for more training for commission members and a need to review the EQC's best management practices to ensure proper implementation.

4. HOW WE COMPARE

The 2007 results had a 100 percent rate of success, with five of five commissioners replying to the survey. These 2008 results have a 90 percent rate of success, with five of five commissioners replying to the survey. The commission is 10 percent below the performance target of 100 percent rate of success.

5. FACTORS AFFECTING RESULTS

The EQC builds into its yearly calendar agenda items that ensure they perform best practices for commissions. For example, the EQC regularly reviews the agency's budget and strategic plans. The 2008 survey allowed more response options than the 2007 survey, which resulted in a broader range of answers. A new commissioner joined the EQC in 2008, and some of this commissioner's answers illustrate a need for greater orientation and training for new board members on the issues of DEQ's financial operations.

6. WHAT NEEDS TO BE DONE

The EQC needs to continue its approach of annual self-evaluations, with an emphasis on identifying areas of potential improvement. Questions 14 and 15 of the survey showed the greatest drop from 2007s report, from 100 percent to 68 and 60 percent, respectively. Question 14 asks if the commission members identify and attend appropriate training sessions. Question 15 asks if the commission reviews its management practices to ensure best practices are utilized. Because the results indicate that the commission only achieves these best practices an average of 68 and 60 percent, respectively, it is imperative for DEQ to further assess the training needs of the commission and engage in discussion and review of the EQCs best management practices. These two considerations are part of a proposed commission retreat in winter 2010 that would allow the EQC significant planning and discussion time.

7. ABOUT THE DATA

Individual EQC members rate the EQC's performance as a board having governance oversight on several criteria. The 2008 results are from information submitted by all five commissioners as electronic or postal mail replies to a standardized survey. The survey is the same as the 2007 survey, with one change of responses allowed. In 2007, the commissioners were asked to respond to the questions with either a yes or no response, indicating either 100 or zero percent success rates. For 2008, and in an attempt to gather more meaningful data, the commissioners were asked to respond to a scale of choices: do not know, none of the time (zero percent), some of the time (40 percent), most of the time (80 percent) or all of the time (100 percent).

ENVIRONMENTAL QUALITY, DEPARTMENT of	III. USING PERFORMANCE DATA
Agency Mission: To be a leader in restoring, maintaining and enhancing the quality of Oregons air, water and land.	

Contact:	Gregory K. Aldrich	**Contact Phone:**	503-229-6345
Alternate:	Melissa Aerne	**Alternate Phone:**	503-229-5155

The following questions indicate how performance measures and data are used for management and accountability purposes.

1. INCLUSIVITY	* **Staff :** DEQs measures coordinator facilitates internal and external reporting, as well as reviews and develops the agencys high level performance measures. DEQs executive management team develops the agencys strategic plan, and measures are reviewed and considered during these executive-level discussions and at EQC meetings. Staff responsible for implementing programs are consulted for their expertise in determining what can be measured in a meaningful and efficient way. The agency is working to better communicate and coordinate staff participation into the development and refinement of our executive performance measures, which include the Key Performance Measures described in this report. * **Elected Officials:** The Oregon legislature reviews and adopts DEQs proposed measures during the budget approval process. * **Stakeholders:** DEQ involves various stakeholders in the development of performance measures. For example, a stakeholder group called the Blue Ribbon Committee worked with DEQ to establish measures related to water quality permit timeliness. The Environmental Quality Commission has also weighed in on agency performance measures, in particular those that are adopted to measure performance with our Strategic Directions. * **Citizens:** DEQ invites citizen input on our strategic priorities through the agencys strategic planning process outlined in DEQs Strategic Directions 2006-2011. The agency also invites and encourages citizen participation on committees and advisory groups, and the EQC and DEQ invite feedback and participation at EQC and town hall meetings held in communities across the state.
2 MANAGING FOR RESULTS	For several years, DEQ has worked towards developing and refining meaningful performance measures and to use performance measures both as a tool for evaluating our progress in achieving the agencys Strategic Directions and in decision-making regarding policies and strategies to achieve results. During 2006, DEQ and the EQC revised our Strategic Directions, including the development of executive measures that will be used to evaluate our progress for the agencys 2006-2011 priorities. DEQ also proposed modifications to several Key Performance Measures in the agencys FY 2007-09 requested budget which were adopted by the Oregon Legislature in 2007. Performance measures are one tool DEQs senior managers use to gauge agency performance and to make course corrections designed to continue progress towards meeting our goals. Increasingly, agency and the EQC performance measures are being incorporated as goals in staff and section work agreements to increase accountability for achieving performance results. For example, workplans for permit and compliance staff incorporate expectations for permit issuance and inspections. Regional workplans incorporate measures related to core program requirements in geographic based implementation plans.

3 STAFF TRAINING	DEQs measures coordinator provides training on the agencys performance measurement system, and the context of state performance measures tracking and reporting, to staff newly assigned responsibilities in performance measurement. The measures coordinator also works with individual programs to continually improve and enhance the meaning and use of DEQ performance measures, and keeps executive management informed on state and federal performance measurement requirements.
4 COMMUNICATING RESULTS	* **Staff :** Performance is measured at many levels within DEQ, including program performance measures, such as those incorporated into the agencys Performance Partnership Agreement with EPA Region X, regional implementation measures, executive measures that support DEQs Strategic Directions as well as the Key Performance Measures included in this report. Staff is informed of performance measurement results. Performance data is increasingly used as a basis for developing environmental strategies and policies to continuously improve on environmental and organizational results. * **Elected Officials:** This Annual Performance Progress Report is provided to the Oregon legislature and posted on both the Progress Board and DEQ web sites, to provide accountability, document challenges and constraints and share successes in achieving environmental and organizational results. * **Stakeholders:** DEQs Annual Performance Progress Report is posted on the agencys website to inform stakeholders of agency performance and environmental results. DEQ also presents this report on our external performance measures, as well as a report on our internal executive measures to the Environmental Quality Commission on an annual basis. Various stakeholder groups, such as the previously mentioned Water Quality Blue Ribbon Committee, are regularly informed about performance progress. * **Citizens:** DEQs Annual Performance Progress Report is posted on the agencys website to inform Oregonians of agency performance and environmental results.

State of Oregon
Department of Environmental Quality Memorandum

Date: September 29, 2009

To: Environmental Quality Commission

From: Dick Pedersen, Director

Subject: Agenda Item P, Discussion Item: DEQ's Strategic Directions and EQC Retreat October 22-23, 2009 EQC Meeting

Purpose of Item

The EQC meets periodically for focused work sessions or retreats around agency priorities, strategic directions and long-range planning. This discussion item is an opportunity for the commission to talk about an approach, topics and timeline for a retreat to check in on the agency's Strategic Directions and other areas emerging concern.

Background

The EQC last discussed DEQ's Strategic Directions for 2006-11 in October 2007. The directions, which include improving air and water quality, protecting people and the environment from toxics, involving Oregonians in solving problems and promoting sustainable practices, have helped guide the agency and its legislative agenda. In 2007, the EQC decided not to modify the directions. A focused discussion and retreat in 2010 would allow the commission and agency to check in on current progress and begin the discussion on evaluating and updating the directions for coming years.

Retreat goals

DEQ would like to discuss with the commission current environmental challenges, the planning processes necessary to address these challenges, outreach and involvement, and a process to review and update DEQ's strategic directions.

Possible retreat sessions and topics

The following are some ideas for structuring a retreat discussion

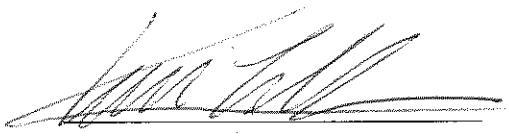
- **Where are we now**
  - Brief presentations from headquarters' and regional programs on current challenges and projects, with a focus on the future
- **Strategic directions**
  - What they are, how they've been developed and changed, evaluation of their relevancy with discussion on potential plans to amend (we are now in year four of six in the planning cycle) with a full update anticipated in 2011/2012.

- **EQC meetings: format, content and type**
  - What kinds of meetings are most successful and relevant? What kind of information, format or other issues would the commission like to see?
- **Two-year planning process**
  - Review of rulemakings, the legislature's timeline, locations for meetings outside of Portland, and possible joint meetings with other boards and commissions.
- **Outreach and involvement**
  - How to strengthen the outreach work at DEQ and make messages heard and understood with a focus on human health and the environment and their intersections for messaging.
- **Twenty-years from now: what are DEQ's long-range goals and what will Oregon's environmental priorities be in 2030?**
  - Highlight current projects with long-term (10 or more years) scopes or commitments and their intended outcomes.

Next steps

Discuss with the commission today their ideas and proposals for moving ahead with a planning session and retreat plan and return to the commission at the December 2009 meeting with an agenda for a retreat possibly in spring.

Approved:

Division: 

Report Prepared By: Joan Stevens-Schwenger
Phone: (503) 229-6585

State of Oregon
Department of Environmental Quality Memorandum

Date: September 29, 2009

To: Environmental Quality Commission

From: Joni Hammond, Deputy Director

Subject: Agenda Item Q, Informational Item: Director's annual performance evaluation
October 22-23, 2009 EQC Meeting

Purpose of Item

The purpose of this agenda item is to update the Environmental Quality Commission on the proposed timeline and process for the annual performance evaluation for DEQ's director.

Background and Proposed Survey Process

The Oregon Legislature passed a bill in 2007 to require annual reports on key performance measures from all state agencies. DEQ's key performance measures include fifteen performance measures for the EQC, which included conducting a review of the director. Director Pedersen started June 2008, and the commission agreed to evaluate him after at least one year in the position. The proposed evaluation timeline will allow for full review by internal and external stakeholders, and a final report will be issued in early January 2010.

The proposed survey questions and definitions are based on Director Pedersen's work plan, statements of directions and goals for DEQ, DEQ's Strategic Directions and past director's evaluations and goals. The survey will be online, and confidential to the level allowed under Oregon state law. The commission's assistant will send an email to all identified internal and external stakeholders, and ask for surveys to be completed during the month of November. Once the survey is closed, the commission will receive a draft version of the report, compiled from the results. The commission will review the draft report for the December 10-11, 2009 EQC meeting, and will discuss the draft report and the director's self-evaluation in executive session. With the commission's approval, or approval with changes, the final report of the director's annual performance evaluation will be completed and filed in January 2010.

EQC Involvement

The commission will be actively involved in the process and reporting of the evaluation. The commission members will have the opportunity to complete the evaluation survey in November; will meet with Director Pedersen regarding his self-evaluation in December; and review and approve, or approve with changes, a draft report of the survey results in December 2009 and then issue the final report in January 2010. The final report will be retained in DEQ, EQC and state files. The commission's

assistant is responsible for the implementation of the survey tools for the evaluation and will be the main point of contact for all internal and external stakeholders throughout the evaluation process.

Attachments

A. Proposed timeline for the evaluation process
B. Draft list of internal and external stakeholders to answer the proposed survey
C. Proposed survey questions and definitions

Approved:

Division:

Report Prepared By: Joan Stevens-Schwenger
Phone: (503) 229-6585

Proposed timeline for the 2009 annual review of DEQ's Director Pedersen

- **October 23, 2009** – Commission hears an informational update on the proposed process, timeline and survey questions and measures for the evaluation
- **November 2, 2009** – The online survey is available for all internal and external stakeholders. The commission's assistant sends an email to identified stakeholders for their call to complete the survey. Paper copies, telephone conversations or in-person interviews are available in alternative formats if requested.
- **November 20, 2009** – The online survey closes.
- **November 23-30, 2009** – The commission's assistant compiles the responses into a draft summary report. All responses are kept confidential to the fullest extent allowed under Oregon law.
- **December 1, 2009** – The commissioners are sent a copy of the draft summary report and the director's self-evaluation.
- **December 10-11, 2009** – The commissioners discuss, approve, approve with changes or reject the draft summary report. The commissioners discuss Director Pedersen's self-evaluation in executive session in two parts: a discussion of his report when he is absent, and then a discussion with him present.
- **January 2010** – Based on the commission's actions at the December 10-11, 2009 EQC meeting, the commission's assistant prepares a final evaluation document. The commission chair signs on behalf of the commission and the document is entered in EQC, DEQ and state files as necessary.

Attachment B
Informational Item: Director's annual performance evaluation
October 22-23, 2009 EQC Meeting

Draft list of internal and external stakeholder groups for the 2009 annual review of DEQ's Director Pedersen

Internal

- All members of the Executive Management Team
- All managers and staff, statewide
- All commissioners of the Environmental Quality Commission
- AFSCME union representatives

External

- League of Women Voters
- American Lung Association
- Oregon Business Association
- Oregon Association of Counties
- Sierra Club (Oregon)
- Columbia Riverkeeper
- Portland General Electric
- Oregon Farm Bureau
- Governor's Natural Resources Policy Advisor
- Governor's Community Solutions Office Director
- Associated Oregon Industries
- League of Oregon Cities
- Association of Clean Water Agencies
- Oregon Environmental Council
- Willamette Riverkeepers
- Oregon Toxics Alliance
- Environment Oregon
- Pacific Rivers Council
- Northwest Pulp and Paper Association
- Northwest Environmental Advocates
- Northwest Environmental Defense Council
- American Electronics Association
- Oregon Concrete and Aggregate Producers Association
- Northwest Food Processors
- Oregon Refuse and Recycling Association
- Schnitzer Steel
- City of Portland Commissioner

- Metro Councilor
- Oregon Food Processors Council
- Oregon Soft Drink Association
- Oregon Petroleum Marketers
- Oregon Beer and Wine Distributors Association
- Oregon Auto Dealers Association
- Port of Portland
- Burns Paiute Tribe
- Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians
- Confederated Tribes of Grand Ronde
- Confederated Tribes of Siletz
- Confederated Tribes of Warm Springs
- Cow Creek Band of Umpqua Indians
- Klamath Tribes
- Coquille Tribe
- Confederated Tribes of the Umatilla Indian Reservation
- Oregon Department of Administrative Services
- Oregon Water Resources Department
- Oregon Department of Agriculture
- Oregon Department of Forestry
- Oregon Department of Fish and Wildlife
- Oregon Department of State Lands
- Oregon Department of Land Conservation and Development
- Environmental Protection Agency Region 10
- Legislative Fiscal Office
- Environmental Council of the States
- Senator Dingfelder, Chair of the Senate Environment and Natural Resources Committee
- Representative Cannon, Chair of the House Environment and Water Committee

Attachment C
Informational Item: Director's annual performance evaluation
October 22-23, 2009 EQC Meeting

Proposed survey questions and definitions for the 2009 annual review of DEQ's Director Pedersen

The survey will be approximately 40 questions long, and be reflective of the director's work plan, DEQ's Strategic Directions, the director's stated goals and objectives and past directors' evaluations. All survey responses will be kept confidential to the extent allowed by law, and respondents are not required to disclose their specific identity when completing the survey. Technological verification methods will be used to increase the validity and reliability of the survey, but in no way are meant to preclude the honest and good faith efforts of stakeholders to complete the survey. Each section will have a field for open comments, and allow respondents to submit additional information that may not be captured by the survey questions and available responses.

Please evaluate Director Pedersen's performance from July 1, 2008 to July 1, 2009 using the following categories and qualifying statements.

Example:

Sustainability	***Rating***
• Promotes and models sustainability at DEQ.	*(enter rating here)*
• Communicates expectations and sustainability policies to staff in a timely and appropriate manner	*(enter rating here)*

Performance Ratings:

1: Outstanding - Performance at this level far surpasses expected performance and is among the top 10% of state agency managers
2: Exceeds Expectation - Performance at this level meets expectations and in some cases exceeds expectations
3: Fully Meets Expectations - Performance at this level meets expectations
4: Improvement Needed - Performance at this level is partially met but requires some improvement
5: Unsatisfactory - Performance at this level is unacceptable and requires a development plan
N/A: Do not know – Lacks the information or knowledge to rate the director's level of performance for this question

Leadership	***Rating***
• Establishes a high-performance climate by using techniques of coaching, leadership and mentoring.	
• Increases a group's energy and creative potential.	
• Maintains group cohesiveness and cooperation.	

• Demonstrates working knowledge of staffing, compensation, performance management and employee relations processes.
• Demonstrates high ethical standards and fiscal accountability in managing public resources.
(extra space for write-in comments)
Strategic Thinking
• Decisions and actions reflect a high level of understanding of Oregon state government and the political environment in which the agency must function.
• Recognizes the environmental context in which the organization operates.
• Identifies challenges, opportunities and problems clearly and aids DEQ in the analysis of possible actions or responses as necessary.
• Understands current and future problems and challenges faced by the organization.
• Demonstrates ability to apply strategic objectives to departmental operations.
• Demonstrates progress toward accomplishing priorities, objectives and strategies as approved by the commission and expressed through DEQ's Strategic Directions.
(extra space for write-in comments)
Communications
• Speaks clearly and expresses self well in groups and in conversations with individuals.
• Demonstrates strong listening and writing skills, including grammar, organization and structure.
• Shares appropriate information on a timely basis.
(extra space for write-in comments)
Teamwork
• Works cooperatively.
• Contributes to the team by supporting and encouraging team members.
• Supports consensus decision-making by the team.
(extra space for write-in comments)
Customer or Constituent Service and Focus
• Identifies customers and constituents, both internally and externally.
• Anticipates and understands customer needs.
• Acts to meet customer needs.
• Continues to search for ways to increase customer satisfaction.
(extra space for write-in comments)
Personal Responsibility and Accountability
• Inspires self and others to set and maintain high standards of excellence.
• Works with high energy, focus and persistence.
(extra space for write-in comments)
Recruitment, Retention and Diversity

• Appoints, re-appoints, assigns and reassigns as necessary all subordinate offices and employees of the department, clearly prescribes their duties and fixes their compensation, subject to State Personnel Relations Law ORS 179.090.
• DEQ staff are highly qualified and responsive to DEQ's entire customer base, including EQC.
• Promotes internal understanding and awareness of diversity, recruitment and retention principles for all managers and administrative staff.
(extra space for write-in comments)
Partner and Stakeholder Relationships
• Effectively represents the agency and the State within the state, federal and local government organizational structures.
• Effectively builds, manages and maintains relationships with external stakeholders and partner organizations.
• Actively pursues or investigates new partnerships with external partners when appropriate.
(extra space for write-in comments)
Policy and Directives
• Understands and fairly implements DEQ policy for internal applications
• Understands and fairly implements DEQ policy for external applications
• Gives give clear direction to staff to ensure implementation of commission policy in a timely manner.
• Ensures, through subordinates, that staff field decisions are based on existing statutes, goals, executive orders, commission rules and DEQ policies.
(extra space for write-in comments)
Services and Relations to the Commission
• Ensures effective services to and relations with the commission through appropriate clerical and administrative support.
• Meeting materials are provided in an efficient, timely and relevant manner.
• The commission is kept informed of significant actions and events, so as to not be surprised by significant issues related to DEQ.
• Provides timely and relevant information on DEQ issues. Such information may include explanation of the State's interest when amending and adopting goals, rules, policies or guidelines. The Director also communicates opportunities within State government for training and educational experiences to enhance high-quality board service
(extra space for write-in comments)

Metrics to support ratings

1. Outstanding

Performance/Goal Results

- ☐ Significantly exceeds goals.
- ☐ Always produces more than required.

- Project plans and actions serve as a model for effective staff and resource activities.
- Provides exceptional presentations that inform and educate.
- Resolves controversial and complex decisions.
- Implements creative solutions to long-standing or especially troublesome problems.

Supporting Skills

- Serves as a model for working productively.
- Always performs special assignments and projects or unanticipated activities and completes them ahead of deadlines.
- Works with an unusually high degree of energy, focus and persistence.
- Produces work at the highest level of accuracy.
- Works independently with broad direction and little, or no, follow-up.
- Develops highest quality products or services.
- Gives life to the agency.
- Motivates employees to exceed departmental goals while focusing on organization wide issues.
- Frequently helps others within DEQ, even when it is "not in the job description."
- Can always be relied upon to serve as the source of accurate information.
- Serves as a leader in team discussions, yet does not monopolize team discussions.
- Contributes constructive ideas and suggestions that have major impact.
- Significantly improves work area by leading collaboration and cooperation.
- Always assists coworkers in completing assignments, with the only goal of improving organization effectiveness.
- Displays exceptional skill at organizing and responding to complex project issues.
- Serves as a model for outstanding customer service.
- Is highly respected by peers and colleagues

2. Exceeds Expectations

Performance/Goal Results

- Often exceeds goals.
- Frequently produces more than required
- Handles controversial or complex decisions.

Supporting Skills

- Self-motivated and sets high productivity levels.
- Anticipates developments or delays and makes adjustments.
- Goes the extra mile to ensure that goals and objectives are met.
- Serves as a facilitator in ensuring clear and effective communication among involved parties.
- Meets targets, timetables and deadlines, and is often prepared ahead of schedule.

- Frequently handles difficult pressure situations and distractions.
- Motivates employees to exceed departmental goals and objectives.
- Can always be counted on to add something new or innovative to each project.
- Exhibits excellent oral and written communication to all levels of staff.
- Frequently performs special assignments and projects or unanticipated activities and appears to be positively challenged by them.
- Puts success of team above own interests.
- Takes great initiative to ensure that customer needs are exceeded.
- Serves as the ideal standard for collaboration and cooperation.
- Consistently analyzes all problems and crafts workable, creative solutions.
- Views problems as an opportunity to use new technology or implement better methods.

3. Fully Meets Expectations

Performance/Goal Results

- Meets all goals.
- Completes all regularly assigned duties.
- Performs all assignments regardless of distractions or pressure situations.
- Completes work with acceptable level of accuracy and professionalism.
- Is prompt and prepared for meetings and other scheduled events.
- Responds quickly and appropriately to unanticipated delays or developments.

Supporting Skills

- Recognizes and analyzes complex problems and takes action or recommends effective, creative solutions.
- Adjusts priorities as needed.
- Provides follow-up directives and continually communicates a shared vision.
- Recognizes, responds, and supports employees with changing conditions.
- Assists other management in communicating difficult issues.
- Develops project plans that are creative and innovative and makes good use of staff and organization resources.
- Actively participates in group discussions.
- Contributes constructive activities and suggestions that are implemented.
- Frequently helps others achieve their goals through support and/or assistance.
- Recognizes and analyzes problems and takes appropriate action.
- Researches and efficiently prepares products and activities at acceptable standards.
- Handles routine pressure situations and distractions of the job while maintaining normal workload.
- Demonstrates reliable and predictable attendance and/or punctuality.
- Rarely is gone due to unscheduled absences.

- ❑ Meets targets, timetables and deadlines.
- ❑ Works quickly and strives to increase productivity.
- ❑ Is prompt and prepared for meetings and other scheduled events.
- ❑ Responds to routine developments appropriately.
- ❑ Motivates employees to meet departmental goals and objectives.
- ❑ Provides direction to employees by clearly communicating a shared vision.
- ❑ Is flexible when dealing with changing conditions.
- ❑ Helps the team accomplish its goals.
- ❑ Assesses individuals' strengths and weaknesses and suggests methods for improvement.
- ❑ Proactively changes and communicates progress to all.
- ❑ Successfully manages project team activities.
- ❑ Follows policies, procedures and regulations.
- ❑ Ensures customer satisfaction through consistent or special effort in response to customer need.
- ❑ Provides requested assistance and information to others in a prompt and courteous manner.
- ❑ Works to enable understanding and obtains clarification when needed.
- ❑ Responds appropriately to questions.
- ❑ Demonstrates good presentation skills.
- ❑ Participates in team discussions.
- ❑ Performs special assignments and projects or unanticipated activities.
- ❑ Contributes ideas and suggestions.
- ❑ Volunteers to serve for special projects
- ❑ Takes initiative to understand new or more complex equipment, software or changes in operational procedures.
- ❑ Exhibits positive attitudes, especially during times of change and disruption.
- ❑ Recognizes and provides support and/or assistance to coworkers.
- ❑ Works actively to resolve conflicts.
- ❑ Demonstrates strong problem solving skills to ensure smooth operations.
- ❑ Consistently analyzes problems and applies logical solutions.
- ❑ Makes effective decisions on a timely basis.

4. Improvement Needed

Performance/Goal Results

- ❑ Assignments occasionally are not completed on time.

Supporting Skills

- ❑ Does not understand some basic functions or activities of the unit.
- ❑ Inconsistently organizes activities and information.
- ❑ Occasionally fails to make proficient use of technology.

- Inconsistently uses correct practices or procedures
- Is inconsistent in meeting targets, timetables or deadlines.
- Is inconsistent in promptness or preparation for meetings or other scheduled events.
- Some routine assignments and duties require supervisory guidance.
- Is inconsistent in completing assigned work.
- Recognizes problems, but requires some assistance to develop workable solutions.
- Occasionally unable to meet an acceptable standard of quality
- Is inconsistent in organization or maintaining operations.
- Occasionally communicates in an inappropriate manner.
- Occasionally and reluctantly performs special assignments and projects or unanticipated activities.
- Is inconsistent in making decisions on a timely basis.
- Is inconsistent in analysis of problems or application of logical solutions.
- Marginally courteous; may provide requested assistance and information to others in a less than prompt or courteous manner.

5. Unsatisfactory

Performance/Goal Results

- Assignments often not completed on time.

Supporting Skills

- Rarely performs special assignments and projects or unanticipated activities.
- Is often not at work due to unscheduled absences.
- Attendance and/or punctuality habits cause hardship for colleagues.
- Frequent errors.
- Low tolerance to pressure situations or distractions.
- Rarely motivates employees.
- Rarely available to staff.
- Rarely manages changing conditions.
- Project activities often need to be redone.
- Budget and staff time are not used in an effective manner.
- Rarely communicates.
- Rarely participates in team discussion.
- Rarely contributes ideas and suggestions.
- Reluctantly cooperates with others to achieve agency goals.
- Reluctantly accepts direction from supervisor.
- Minimally supports team leader.
- Rarely develops and maintains cooperative relationships with team or with others outside the work unit.

- Often the source of negative conflict.
- Unit and individual productivity is significantly disrupted by unreliable attendance and/or punctuality.
- Often does not meet requirements.
- Frequently does not meet targets, timetables or deadlines.
- Frequently lacks promptness or preparation for meeting or other scheduled events.
- Routine developments require supervision.
- Rarely recognizes problems or unable to recommend effective solutions.
- Frequent errors that have negative impact.
- Must be reminded about customer service standards.
- Rarely able to work under pressure situations or handle distractions.
- Rarely effective in organizing or maintain operations.
- Occasionally does not provide assistance and information to others in a prompt or courteous manner.

EQC town hall meeting - October

KLAMATH FALLS

- come have a meeting in Lakeview! (pro

- Onsite: 22 cantles w/DEQ oversight, 14 w

  'Concerns over fee increases (60%)

- October 22, 2009

review! (probably in summer)

ersight, 14 without

s (609)

joining up to co-operate the program

- Concerns over fee increases (609)
- Lake Co. and Harney Co. joining up to co
  (not DEQ) → following up on letter/requ
  - Connect w/ building services operation
    citizens and can improve turn-arou
  - disjointed process for construction, is c
    LAKEVIEW → BEND → LAKEVIEW (in
- Customers in Lake Co. deserve same service, want a

creases (60%)

Co. joining up to co-operate the program

ing up on letter/request

ling services operations, keep costs down for

can improve turn-around time

ess for construction, is a service issue.

BEND → LAKEVIEW (in permit process)

ne same service, want a one-stop shop

as west. ✓

Reply - Onsite is a statewide DEQ program, some
to run their programs. Lake and Harney ar
· DEQ has asked for a proposal for consideration of

DEQ program, some counties are contracted

Lake and Harney are not contract.

al for consideration of the issue

Lake Co. - county is the agency who directly deals with customers

DEQ - EQC will hear proposed fee increase for onsite

- $60 surcharge for any program (DEQ or contract), co assess their fees

?- HOW MANY INSPECTIONS IN LAKE CO. EACH YEAR

cy who directly deals with local

se increase for onsite at Dec. 2009 nty.

m (DEQ or contract), contracts counties then

U LAKE CO. EACH YEAR?

- Steady growth over time, higher development dollars fl
- County is stable - can manage in long-term

BB: No desire for the state to do this program if the cou
to partner w/other counties?

- Harney Co. is on board for collaboration, did discuss w/Deschutes
(intergov't agreement w/Des. Co. if backup is needed)

(F)

- DEQ is communicating w/Lake Co. on the process and w/ga
advisory committee.

? when is the DEQ Commissioner projected to happe

- development dollars this year than ever.
e in long-term

this program if the county wants it - does it make sense

tion, did discuss w/ Deschutes and Klamath Co.
if backup is needed)

. on the process and w/good recommendations from an

? when is the DEQ fee increase projected to happ
- want to preserve current fees and then transition to county if possible
- Plan to bring for EQC consideration in December

MITCH - Statute may require a sanitarian to do the inspection
- AWAPE - working on that for letter/application

- projected to happen?
then transition to county operation / reduced fees

ection in December

ian to do the inspection.

tter / application

Lakeview - extend appreciation for air quality programs
(attainment for PM2.5 as local issue)

- good effort to address the issue is through
  working w/ Dept. of Energy to do geo. heating
  in Lakeview → application pending, if EGC could

Klamath Falls - issue of TMDCs → slide handouts

- been under a permit for some time, looking forward
- Two OPTIONS: stay in river (discharge from plant)

r air quality programs and staff
as local issue)

the issue is through geothermal heating and
(5)
gy to do geo. heating for several large sources
tion pending. if EGC could put in a good word!

→ slide handouts

some time. looking forward w/a facilities plan
er (discharge from plant) w/upgrades - $87 m.

- By 2012: $60/mo. costs for a single-family dwelling
  - → in-river costs lower than out-of-river (up to $
  - not sure city can meet arsenic sampling standard/
- is working with DEQ, but any option will be costly to the co
  consideration would be a great help.
- DEQ is working w/ city for best solutions, community
  issue across Oregon.
  - Over $700 million in applications came in
    $45 million available stimulus funds

[illegible] would require rate increases
a single-family dwelling w/no discharge
than out-of-river (up to $160)
arsenic sampling standard/requirements (background too high)
on will be costly to the community, any financial
eat help.

st solutions, community infrastructure is a huge

applications came in to compete for
stimulus funds

- DEQ is working w/ city for best solutions, community issue across Oregon.
  - Over $700 million in applications came in
    $45 million available stimulus funds

- TMDL issue is mostly nutrients
- City of Klamath Falls has an excellent recycle
  → have people consider the treated effluent as a

st solutions, community infrastructure is a huge

applications came in to compete for
stimulus funds

ts

s an excellent recycled water program

treated effluent as a resource.

- Upper Klamath Lake TMDL - had major issues, DEQ
  later. Did not. The TMDL did not account for
  and had some data that was incorrect.

  - phosphorus: lots in basin as background (anthropogenic s
  - eutrophic lake - can't be fixed.
  - draft paper (using one sample core) is basis for TMD
    - major sampling issues

→

had major issues, DEQ agreed to revisit

DL did not account for background information

was incorrect.

background (anthropogenic sources are minimal), volcanic uplands

ed.

core) is basis for TMDL - never printed, not peer-reviewed

→ NEEDS TO BE RE-STUDIED AND FIXED, include Ba

- ~~Ecol~~ looking to impose $360 mil. to mitigate an issue that
- 300 tons of phosphorus leaves the area in the form of cattle each yr.

Note: overall budget did go up as federal stimulus money (pas
in Clean Water State Revolving Fund

DP: almost every TMDL is an ongoing review process.

Eric Nigg (DEQ) - ↑ phosphorus load in Kl. TMDL could lea
for cities. Is accepted as appropriate as boundary

?- How does a community this size get $360 mil

) AND FIXED, include Boise-Cascade + Franklin and Marshall in fo

1. to mitigate an issue that can't be fixed
once in the form of cattle and doesn't return
each yr.

federal stimulus money (pass-through), as infrastructure improvements
ving Fund

going review process.

d in Kl. TMDC could lead to tighter loading requirements

l as appropriate as boundary for Kl. River TMDL (development)

for cities. Is accepted as appropriate as boundary

?. How does a community this size support $180 mil. in w

- TMDL is pushed, commission requested to evaluate this

population centers.

- After 60 yrs. here - water use is a major issue, so us

and not just DEQ's responsibility.

as appropriate as boundary for Kl. River TMDL (development)
size support $/20 mil. in repairs - would bankrupt this place
equested to evaluate this as an issue of depopulating rural
e is a major issue, & use/rights are a concern
nsibility.

City of Kl. Falls - ~~arse~~ arsenic is background (point of clarifi

- Big kill forests: large beg. kill forest near Kl. Falls, (stock acre) mare
  dawed + rotting material after a forest fire (not
  · young forests sequester, mature forests are equal
- Some young forest is coming up, so that will be destroyed

? - What's happening at Alkali Lake?

rand (point of clarification from earlier)

st near Kl. Falls, more GHG released from
ter a forest fire (not released during burn)
ture forests are equal emit/sink
at will be destroyed too (and burn 50-1, 30 yrs.)

ali Lake?

DEQ: Alkali Lake is an abandoned pesticide dump site - Stat
the property, DEQ is part of cleanup assessment.
- will continue to monitor, do no further action
- Bayer Corp. bought ~~facility~~ company that originally dumped.
for Bayer to pay some costs
- lots of comments, will hold public mtgs. to
- have asked EPA to check no further action is h
- Sen.: Constituents being charged for discussions
- $120 for an hour discussion

DP: Enviro cleanup is cost-recovery program, bills for h

pesticide dump site - State now manages
leanup assessment.
urther action
ng that originally dumped it. DEQ working w/ Dept. of Justice
:
ill hold public mtgs. to discuss
ck no further action is best decision
arged for discussions of DEQ
ion

program, bills for hours worked

DP: enviro cleanup is cost-recovery program, bills for hours w

is one of a call not strictly related to site costs (did

- operate several kinds of cleanups based on type of f

→ happened to a site in Lake Co., can that source get a

⊕ Sen.: support idea of a written policy for these sites

service)

⊕ INFRASTRUCTURE - how do we address these thing

y program, bills for hours worked on a site. This example
y related to site costs (did fix the issue here)
leanups based on type of site
., can that saver get a refund? (= Send a letter to Mitch)

ken policy for these situations (contract language/fee for

do we address these things as a society?