

**ENVIRONMENTAL QUALITY, DEPARTMENT of**  
**Annual Performance Progress Report (APPR) for Fiscal Year (2010-2011)**  
**Proposed KPM's for Biennium (2011-2013)**

Original Submission Date: 2011

Finalize Date:

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
ANNUAL PERFORMANCE PROGRESS REPORT**

**Approved 2010-2011 Key Performance Measures (KPM's)**

<b>2010-11 KPM #</b>	2009-2010 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.
<b>1</b>	PERMIT TIMELINESS: Percentage of air contaminant discharge permits issued within the target period.
<b>2</b>	PERMIT TIMELINESS: Percentage of individual wastewater discharge permits issued within 270 days.
<b>3</b>	UPDATED PERMITS: Percent of total wastewater permits that are current.
<b>4</b>	WATER QUALITY TMDLs: Percent of impaired waterbody miles for which a TMDL has been approved.
<b>5</b>	UMATILLA: Cumulative percent of chemical agent destroyed at Umatilla Chemical Demilitarization Facility (UMCDF).
<b>6</b>	CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: overall.
<b>7a</b>	CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: tanks.
<b>7b</b>	CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: hazardous substances.
<b>7c</b>	TOXICS PREVENTION AND REDUCTION: Pounds of mercury removed from the environment through DEQ's efforts.
<b>8</b>	SOLID WASTE - Pounds of municipal solid waste landfilled or incinerated per capita.
<b>9</b>	WATER QUALITY CONDITIONS - Percent of monitored stream sites with significantly increasing trends in water quality.
<b>10a</b>	WATER QUALITY CONDITIONS - Percent of monitored stream sites with decreasing trends in water quality.
<b>10b</b>	WATER QUALITY CONDITIONS – Percent of monitored stream sites with water quality in good to excellent condition.
<b>11</b>	AIR QUALITY DIESEL EMISSIONS: Quantity of diesel particulate emissions.
<b>12a</b>	AIR QUALITY CONDITIONS - National Standards: Number of days when air is unhealthy for sensitive groups.
<b>12b</b>	AIR QUALITY CONDITIONS - National Standards: Number of days when air is unhealthy for all groups.
<b>13a</b>	AIR QUALITY - AIR TOXICS - Percent of Oregonians at risk from toxic air pollutants that contribute to cancer.

# **DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT**

<b>13b</b>	AIR QUALITY - AIR TOXICS - Percent of Oregonians at risk from toxic air pollutants that contribute to respiratory problems and other non-cancer health effects.
<b>14</b>	ERT: Percent of local participants who rank DEQ involvement in Economic Revitalization Team process as good to excellent.
<b>15</b>	PERMIT TIMELINESS: Percent of Title V operating permits issued with the target period.
<b>16</b>	BOARDS AND COMMISSIONS: Percent of total best practices met by the Environmental Quality Commission.

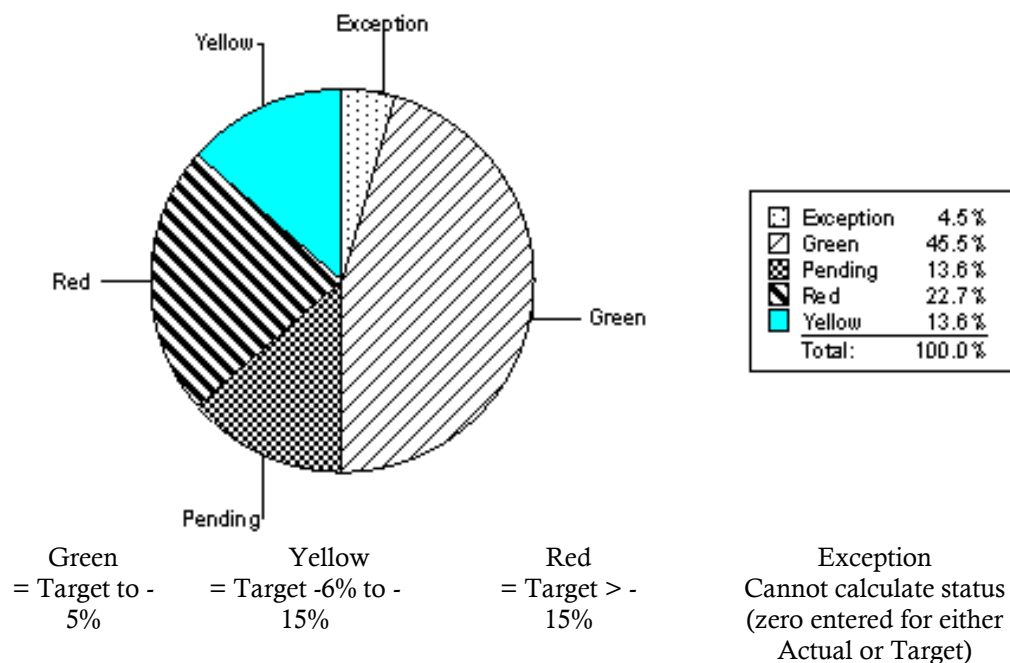
<b>New Delete</b>	Proposed Key Performance Measures (KPM's) for Biennium 2011-2013

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
ANNUAL PERFORMANCE PROGRESS REPORT**

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of	I. EXECUTIVE SUMMARY
<b>Agency Mission:</b> To be a leader in restoring, maintaining and enhancing the quality of Oregon's air, water and land.	
<b>Contact:</b> Gregory K. Aldrich	<b>Contact Phone:</b> (503) 229-6345
<b>Alternate:</b> Melissa Aerne	<b>Alternate Phone:</b> (503) 229-5155

## PERFORMANCE SUMMARY



## 1. SCOPE OF REPORT

This Annual Performance Progress Report for fiscal years 2009-2010 provides performance results related to each of the agency's primary environmental programs, land, air and water quality. Not all sub-programs are represented in Key Performance Measures, but the highest agency priorities are reflected in these measures. DEQ has no proposed changes to the KPMs for the 2011 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 in the area of air toxics. Where data is not available yet to support newly adopted measures, implementation and targets are described. The 2009 Legislature approved all the Key Performance

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

Measures and related targets without change. The Legislative Fiscal Office noted that “the Department’s ability to meet some of the measure targets will be seriously challenged given reduced funding levels.”

### 2. THE OREGON CONTEXT

The Department of Environmental Quality’s 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 negotiated between DEQ and EPA Region 10. 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- Air Toxics: 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](http://www.Oregon.gov/DEQ).

### 3. PERFORMANCE SUMMARY

DEQ is substantially meeting and/or exceeding targets for 10 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 having up-to-date wastewater permits. The specific Key Performance Measures for which 2009 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 5 (HLO 1) - WATER QUALITY TMDLs: Percent of impaired waterbody miles for which a TMDL has been approved.
- KPM 6 - UMATILLA: Cumulative percent of chemical agent destroyed at Umatilla Chemical Demilitarization Facility (UMCDF.)

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

- 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.

DEQ is not meeting targets for eight 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 2009 targets:

- 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.
- KPM 3 (OBM 10b) - PERMIT TIMELINESS: Percentage of individual wastewater discharge permits issued within 270 days.
- 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 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 15 - PERMIT TIMELINESS: Percent of Title V operating permits issued within the target period
- 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 2009. In 2009-10, revenue shortfalls and the resulting funding cuts affected all state agencies and this is continuing throughout 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, DEQ's overall performance results as reflected in the Performance Summary Table, are not solely within DEQ's control. Many of the outcomes are shared responsibilities with other state agencies. DEQ is unable to report results for three of our newest Key Performance Measures pending release of data from the Environmental Protection Agency. These measures are:

- KPM 11 - AIR QUALITY DIESEL EMISSIONS: Quantity of diesel particulate emissions.
- KPM 13a (OBM 76a) - AIR QUALITY - Air Toxics - Percent of Oregonians at risk from toxic air pollutants that contribute to cancer.
- KPM 13b (OBM 76b) - AIR QUALITY - Air Toxics - Percent of Oregonians at risk from toxic air pollutants that contribute to respiratory problems.

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

### 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

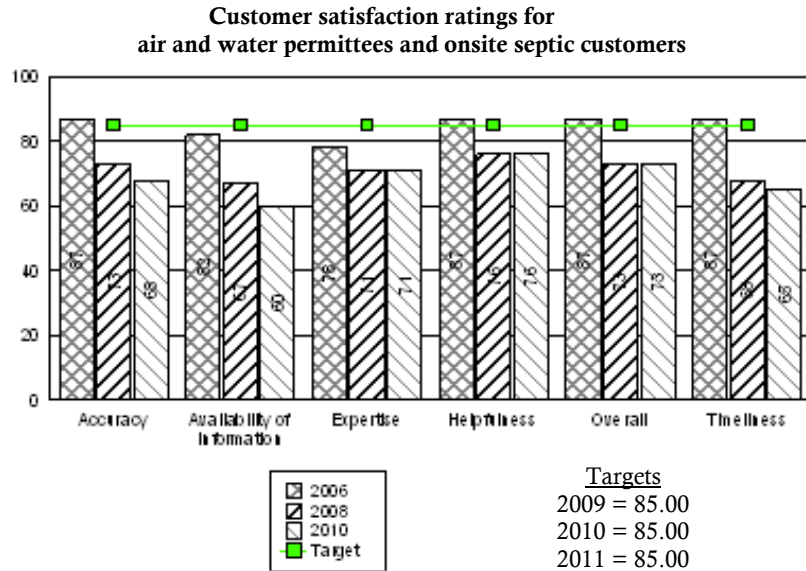
DEQ's legislatively adopted budget for FY 2009-11 is \$401,626,682. Of this \$206,763,581 makes up DEQs operating budget which funds DEQ operations. Local communities and partners receive the balance from DEQ to spend on local environmental projects, notably programs such as the Clean Water State Revolving Fund for Wastewater and Stormwater and federal stimulus funding. During this biennium, funding issues continue to affect DEQ as well as other state agencies. DEQ lost General Fund and Lottery Fund and fee revenues have been substantially lower than anticipated. This has affected DEQ's ability to provide the services that are measured by these Key Performance Measures.



# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

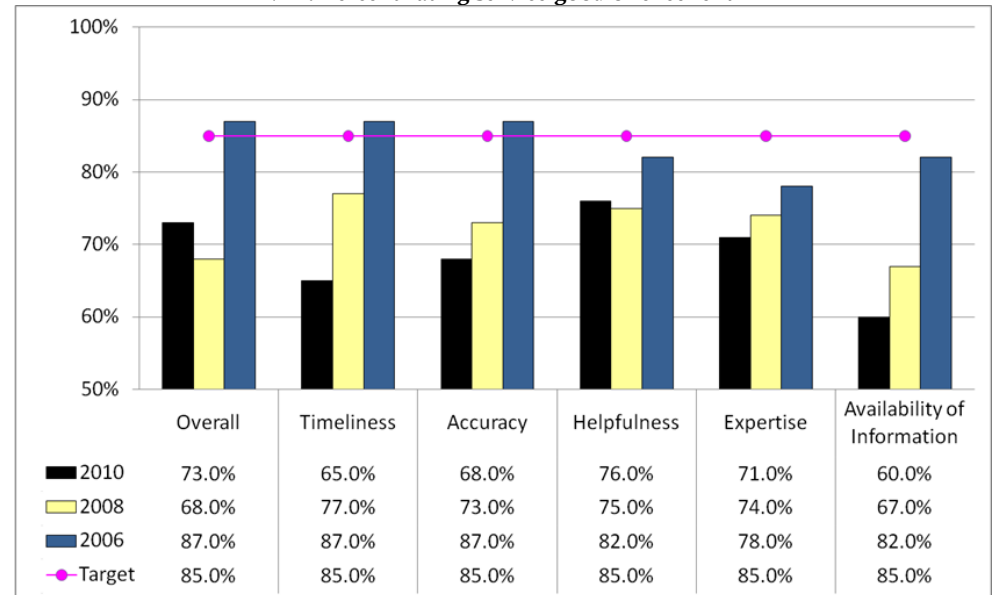
ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #1</b>	CUSTOMER SERVICE: Percent of customers rating their satisfaction with the agency's customer service as "good" or "excellent" overall; timeliness, accuracy, helpfulness, expertise, availability of information.	<b>2006</b>
<b>Goal</b>	EXCELLENCE: Delivering outstanding public service and continuously seeking customer feedback to improve our service.	
<b>Oregon Context</b>	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.	
<b>Data Source</b>	Biennial customer service survey of air and water quality permitted sources, onsite septic system home owners and vehicle inspection program customers.	
<b>Owner</b>	DEQ Office of Communications and Outreach: Joanie Stevens-Schwenger (503) 229-6585	

**KPM1: Customer Service**



*Data is represented by percent*

**VIP: Percent rating service good or excellent**



# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

## 1. OUR STRATEGY

DEQ's strategy is to continue to deliver the highest quality customer service possible. By gathering information directly from customers, we are better able to target resources to improve our service.

## 2. ABOUT THE TARGETS

DEQ established targets of 85 percent customer service ratings of very good to excellent for all categories of surveyed customers" – a category still well above the 85 percent target.

## 3. HOW WE ARE DOING

The 2010 survey showed that ratings remain above target for the vehicle inspection program and remain steady for other surveyed programs showing some slippage in DEQ's availability of information.

## 4. HOW WE COMPARE

Customer service ratings in all categories except vehicle inspection have fallen between 10 and 20 percentage points since the 2006 survey. Customer service ratings for the vehicle inspection program remain above target.

## 5. FACTORS AFFECTING RESULTS

For the vehicle inspection program, streamlined processes, on online web cam to show lines at the inspection stations and credit card payments have contributed to the high customer satisfaction ratings. Slower service and correlating customer ratings reflect permitting delays due to lawsuits and staff reductions particularly in the water quality program.

## 6. WHAT NEEDS TO BE DONE

DEQ is using the LEAN/Kaizen approach to process improvement to streamline operations and increase capacity of staff to carry out activities more effectively. The agency intends to examine permitting processes during the next biennium to make them more efficient, customer oriented and effective, and to make permitting information and application available on the Web. For the Vehicle Inspection Program DEQ is examining and testing time and cost savings processes, such as off-site electronic testing that will make it even easier, faster and more convenient for customers.

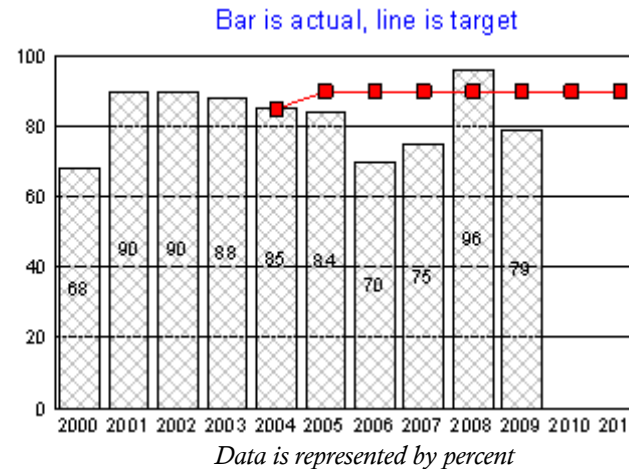
## 7. ABOUT THE DATA

The Portland State University Survey Research Lab conducted the survey during May and June 2010. PSU used a telephone survey to statistically sample the targeted populations. The survey was administered to a representative sample of DEQ customers statewide including 500 permit holders and 1800 vehicle inspection customers. The ranges of sampling variability were computed at the 95 percent confidence level. DEQ established the baseline for these survey questions with these groups in 2006. Our next scheduled survey is in 2012.

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #2</b>	PERMIT TIMELINESS: Percentage of air contaminant discharge permits issued within the target period.	<b>1992</b>
<b>Goal</b>	IMPROVE OREGON'S AIR AND WATER.	
<b>Oregon Context</b>	KPM #2 is also Oregon Benchmark #10a. It links to: (1) Oregon's 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.	
<b>Data Source</b>	DEQ Air Quality Permit Tracking database.	
<b>Owner</b>	DEQ Air Quality Program. Margaret Oliphant, (503) 229-5687	

**KPM2:**  
**Air Quality Permit Timeliness: ACDP Permits issued within Target**



### 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.

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

### 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 change 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, DEQ's 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. In 2009, 79 percent of ACDP permits were timely, continuing to miss the 90 percent 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. Recently, EPA has initiated federal regulations for new air pollution sources, and DEQ has actively implemented those regulations. The result is a large increase in the number of permitted sources. While DEQ issues simplified general permits to most of the new sources, many are small businesses new to regulation and DEQ has spent a considerable amount of time providing technical assistance and leaving less time to meet permit timeliness goals.

While the 90% timeliness goals are not being met, DEQ prioritizes work and makes sure that critical permitting gets done. For example, permits that must be issued before a source can proceed with a construction project receive high priority and get processed before more routine work, resulting in more routine work not meeting timeliness targets. As noted above, this key performance measure is also an Oregon economic benchmark and DEQ's prioritization efforts address the intent of the benchmark.

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

### 6. WHAT NEEDS TO BE DONE

Maintaining adequate staffing and continuous improvement to permit processing are the key actions for attaining and sustaining the permit timeliness goal. The ACDP program is supported by fees along with small amounts of General Fund and federal funds. It will be important to retain General Fund to maintain adequate staffing. Over the next few years, EPA will be adding even more new industries to the regulated community, and DEQ must continue to develop new general permits and add procedural improvements to streamline permit processing. However, DEQ must also continue to emphasize technical assistance to newly regulated industries as an investment in future efficiency.

### 7. ABOUT THE DATA

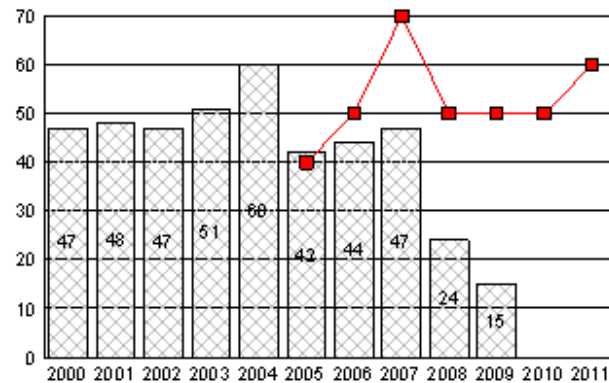
The reporting cycle is a calendar year. The strength of the data is that records exist on each of the ACDP permit actions taken by DEQ during the year. The primary weakness of the system is that the data's validity depends on accurate entry by multiple individuals. A secondary weakness of the data is the non-weighted value of a permit action; complex permit actions require significantly more resources than simple ones but impact the reported data in the same way.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #3</b>	PERMIT TIMELINESS: Percentage of individual wastewater discharge permits issued within 270 days.	<b>1992</b>
<b>Goal</b>	IMPROVE OREGON'S AIR AND WATER.	
<b>Oregon Context</b>	KPM #3 is also Oregon Benchmark #10b. It links to: (1) Oregon's 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.)	
<b>Data Source</b>	Water Quality Program database.	
<b>Owner</b>	DEQ Water Quality Program. Chris Clipper, (503) 229-5656.	

**KPM3:**  
Percentage of individual wastewater discharge permits  
issued within 270 days

Bar is actual, line is target



*Data is represented by percent.*

## 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.

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

### 2. ABOUT THE TARGETS

The target sets a standard for issuing permits in a timely manner because businesses need quick turnaround times on permits to construct, expand or modify their operations. High percentages of permits issued in a timely manner indicate an efficient program. DEQ lowered the target from 70 percent in 2007 to 50 percent for 2008-2010 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. DEQ intends to evaluate whether to keep this performance measure during the upcoming biennium.

### 3. HOW WE ARE DOING

DEQ did not meet its 2009 target for timeliness. During 2009, 15 percent of individual wastewater discharge permits were issued within 270 days. 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 since 2005.

### 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 three 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 three percent, as authorized by the 2005 Legislature through Senate Bill 45, effective for the 2008 Fiscal Year (July 1, 2007 – June 30, 2008). The 2007 Legislature approved a five 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 five percent and 82 percent fee increases, the SB 737 surcharge, and an annual three 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. In 2009, DEQ

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

withdrew the proposed up-to-three percent annual permit fee increase because anticipated program costs declined due to mandatory furlough days and salary freezes.

**Litigation** - During 2009, the DEQ wastewater permit program was involved in a great deal of litigation. Some of the litigation has required the permit program to postpone issuance of permits and divert resources from permit development to litigation response. Specifically, the TMDL lawsuits for the Willamette by several major permit holders held up issuance of seven major permits. Due to litigation against EPA, DEQ agreed not to issue any permits with compliance schedules beginning in November 2007. This was resolved in June 2010. DEQ was an intervenor in the litigation and is a participant in the settlement agreement signed in June, 2010. DEQ has performed the tasks required of the agency at this time and has resumed issuing permits that require compliance schedules.

**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. This issue was resolved in late 2009 and DEQ resumed processing municipal permits after two years of negotiations.

**Reconsideration** - During 2009, DEQ's wastewater permit program was involved in three petitions to reconsider 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 six (out of 62) positions vacant for some or all of the year in the wastewater permit program during 2009. In cases when qualified staff have been hired, there is an impact on the availability of existing staff who are re-directed to train new hires instead of working directly on permits.

### 6. WHAT NEEDS TO BE DONE

To help meet the permit timeliness goal, DEQ needs to concentrate on retaining qualified staff, so that the necessary resources will be available to issue water quality permits. Additionally, DEQ needs to continue to invest in training and tools for staff to ensure that they have the necessary information, data and skills to resolve complex environmental and regulatory challenges. DEQ will update key guidance documents and will continue to offer topic specific training as well as biannual workshops for permit writers. 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. Due to the 270-day target timeline, data for each calendar year is reported at the end of September the following year.

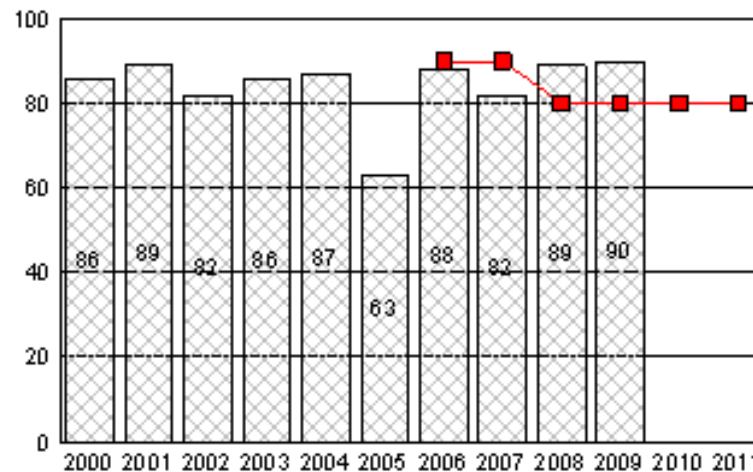


# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #4</b>	UPDATED PERMITS: Percent of total wastewater permits that are current.	<b>1999</b>
<b>Goal</b>	IMPROVE OREGON'S AIR AND WATER.	
<b>Oregon Context</b>	KPM #4 links to: (1) Oregon's 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.)	
<b>Data Source</b>	DEQ Water Quality Source Information System database.	
<b>Owner</b>	DEQ Water Quality Program. Chris Clipper, (503) 229-5656.	

**KPM4:**  
**Percent of total wastewater permits that are current**

Bar is actual, line is target



*Data is represented by percent*

## 1. OUR STRATEGY

To achieve this goal, DEQ continues to focus on timely issuance of water quality permits and reducing the permit backlog.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

## 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 met that target for 2009, with 90 percent of our permits being current.

## 5. FACTORS AFFECTING RESULTS

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. DEQ has worked hard to resolve many of the lawsuits it was facing in the past 5 years and to provide valuable tools to permit writers to assist in the development and issuance of permits. 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.

## 6. WHAT NEEDS TO BE DONE

To help meet the permit timeliness goal, DEQ needs to concentrate on 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.

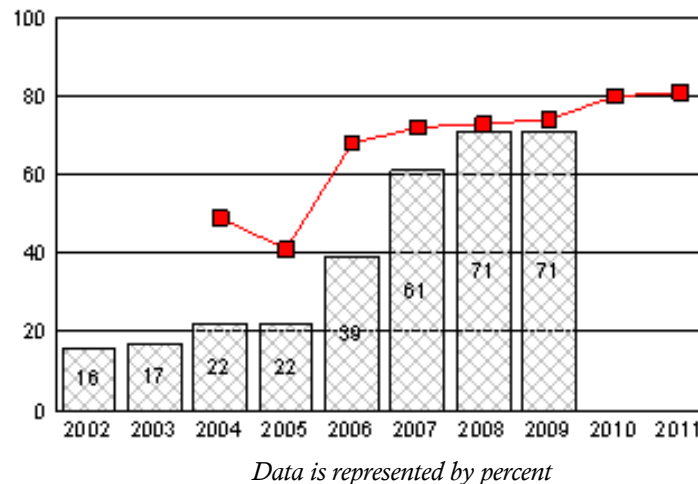
## 7. ABOUT THE DATA

The reporting cycle is the calendar year.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #5</b>	WATER QUALITY TMDLs: Percent of impaired waterbody miles for which a TMDL has been approved.	<b>1999</b>
<b>Goal</b>	IMPROVE OREGON'S AIR AND WATER.	
<b>Oregon Context</b>	KPM #5 links to HLO #1: Percent of Oregon stream miles impaired – Oregon's 303d list, and Oregon Benchmark #78, which reports on water quality trends in monitored streams.	
<b>Data Source</b>	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.	
<b>Owner</b>	DEQ Water Quality Program. Gene Foster, (503) 229-5325	

**KPM5:**  
**TMDLs - Percent of impaired waterbody miles**  
**for which a TMDL has been approved**  
*Bar is actual, line is target*



## 1. OUR STRATEGY

DEQ implements the Total Maximum Daily Load (TMDL or clean water plan) program based on a federal Consent Decree schedule and Water Quality Program High Priority Outcomes.

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

### 2. ABOUT THE TARGETS

The targets are based on the number of stream miles for which TMDLs have been developed to address all designated pollutant impairments, 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 303d list of impaired waterbodies. The list of impaired waterbodies (Oregon's 303d list) is updated approximately every two years 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 significant improvement towards meeting the targets for 2009 as compared to past years. However, DEQ did not meet the 2009 target. There were no TMDLs scheduled to be completed during 2009. This was because the focus of the TMDL program was on technical and monitoring work needed for development of complex TMDLs in large basins that are scheduled to be completed and issued in 2010. We expect to surpass the 2009 target by the end of 2010 and meet the Consent Decree of having 1,153 TMDLs approved by the US Environmental Protection Agency by the end of 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, and has often been called out as a model for how TMDLs should be developed.

### 5. FACTORS AFFECTING RESULTS

The rate of TMDL completion was slowed in recent years due to staffing cuts and longer-than-expected timeframes for completing TMDLs in some very large basins. DEQ is on track to meet the Consent Decree of having 1,153 TMDLs approved by the end of 2010.

### 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 because there are many waterways in Oregon that have water quality pollution problems that do not have TMDLs. This is a high priority for the Water Quality Program, 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 approximately every two years. This results in an ever-changing baseline reflecting the total number of impaired stream miles, making comparisons over time unclear. DEQ expects to recommend changes to this Key Performance Measure in the near future to better reflect the water quality improvements resulting from TMDLs.

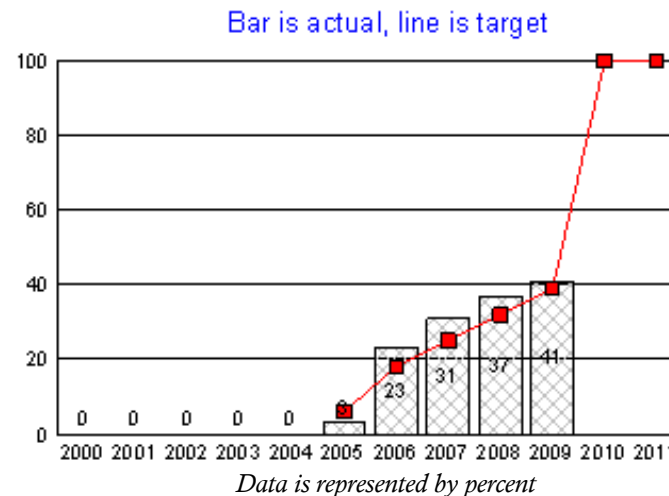
### 7. ABOUT THE DATA

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 list of impaired waterbodies, approved by EPA in 2004/2006.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #6</b>	UMATILLA: Cumulative percent of chemical agent destroyed at Umatilla Chemical Demilitarization Facility (UMCDF).	<b>2002</b>
<b>Goal</b>	PROTECT PEOPLE AND THE ENVIRONMENT FROM TOXICS.	
<b>Oregon Context</b>	There are no Oregon High Level Outcomes related to this measure.	
<b>Data Source</b>	DEQ Umatilla Chemical Demilitarization Program data.	
<b>Owner</b>	DEQ Eastern Region, Umatilla Chemical Demilitarization Program. Steve Potts, (541) 567-8297 x227	

**KPM6:**  
**UMATILLA - Cumulative percent of chemical agent destroyed at UMCDF**



## 1. OUR STRATEGY

DEQ provides oversight of the US Army and its contractors to ensure the safe and timely destruction of all chemical agents at the Umatilla Chemical Agent Disposal Facility. The Army and its contractors 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.

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

### 2. ABOUT THE TARGETS

The US 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

By the end of 2009, the Army had destroyed 41 percent of the chemical agents originally stored at the Depot, exceeding the target of 39 percent. Weapons destruction to date has reduced the risk to local residents by 99 percent. Chemical weapons destruction continues with the only remaining bulk item, mustard agent, in ton containers. There are approximately 2,100 of the original 2,635 ton containers remaining. These are currently projected to be 57 percent destroyed in 2010, 86 percent destroyed in 2011, and 100 percent destroyed in 2012. While we will not meet the original US Army target of 100 percent destruction by 2010, we are making steady progress and DEQ expects destruction to be complete in 2012.

### 4. HOW WE COMPARE

There are no other chemical weapons facilities in Oregon. There are five other active facilities in the country, some destroy chemical weapons through incineration and some through neutralization. Each facility is unique in its ability to destroy chemical agent and 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 Umatilla Chemical Agent Disposal Facility that could extend the dates by which performance targets will be achieved. Some problems have been encountered in processing mustard agent ton containers due to solid heels (undrainable agent that remains in the container after the liquid portion is drained). Other unanticipated issues have occurred affecting the schedule and processing.

### 6. WHAT NEEDS TO BE DONE

DEQ needs to continue oversight of the operation.

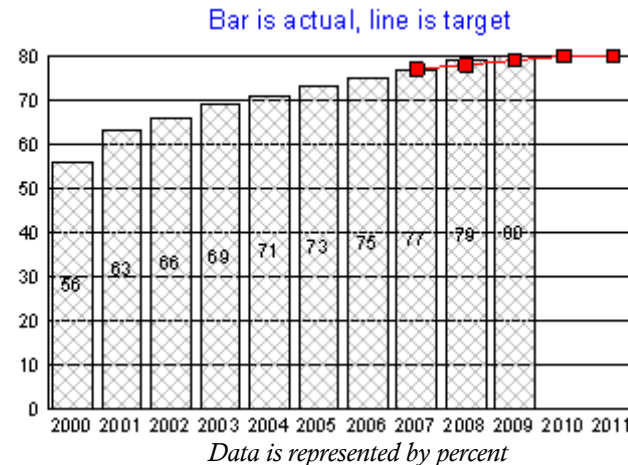
### 7. ABOUT THE DATA

Data are provided in reports to DEQ by the U.S. Army and is reported on a calendar year basis.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #7a</b>	CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: overall.	<b>2007</b>
<b>Goal</b>	PROTECT PEOPLE AND THE ENVIRONMENT FROM TOXICS.	
<b>Oregon Context</b>	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.	
<b>Data Source</b>	Environmental Cleanup Site Information (ECSI) database; Leaking Underground Storage Tank database.	
<b>Owner</b>	DEQ Land Quality Program. Tom Roick, (503) 229-5502.	

**KPM7a:**  
**Percent of identified Oregon hazardous waste sites cleaned up - overall**



## 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

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

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 heavy metals, chlorinated solvents or PCBs 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 2009, DEQ's Cleanup and Tanks programs had overseen the cleanup of 80 percent of all sites identified, which is just above the target of 79 percent. This involved the cleanup in 2009 of an additional 1,343 sites for a total of 29,698 that have been addressed out of 37,285 in the database. We believe the trend in cleaning up sites 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 total number of sites increases. Nevertheless, DEQ has consistently overseen cleanup at enough sites each year to increase the percentage of sites completing cleanup compared to the total number of sites in the database.

### 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

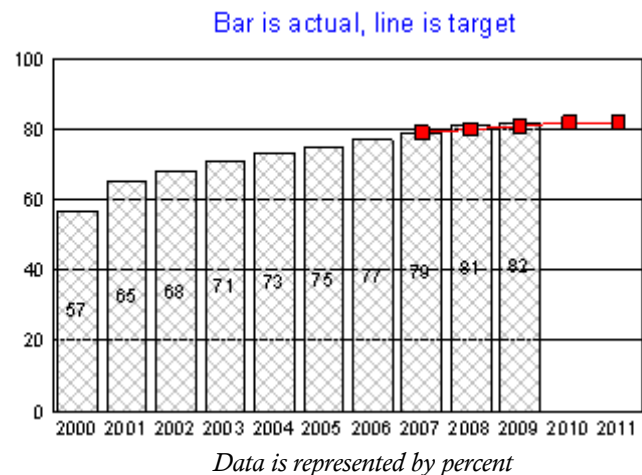
Data is by calendar year, and derives from queries of: (1) DEQ's leaking underground storage tank database, which includes both residential heating oil tank releases and commercial tank releases; and (2) DEQ's Environmental Cleanup Site Information database.



# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #7b</b>	CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: tanks.	<b>2007</b>
<b>Goal</b>	PROTECT PEOPLE and THE ENVIRONMENT FROM TOXICS.	
<b>Oregon Context</b>	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.	
<b>Data Source</b>	Leaking Underground Storage Tank (LUST) database.	
<b>Owner</b>	DEQ Land Quality Program. Tom Roick, (503) 229-5502.	

**KPM7b:**  
**Percent of identified Oregon hazardous waste sites cleaned up - tanks**



## 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 its 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.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

## 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 2009, DEQ had overseen 82 percent of tank sites cleaned up, just over the target of 81 percent. This involved the cleanup in 2009 of 1,302 additional sites for a total of 29,085 tanks sites that have been addressed out of 35,688 in the database. Since DEQ started tracking tank statistics in 1996, the percentage of sites cleaned up has increased about 2 percent each year, a consistent upward and positive trend.

## 4. HOW WE COMPARE

National data is available from the US Environmental Protection Agency for regulated tank sites, which does not include heating oil tanks. As of 2009, Oregon was above the national average with 82 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.

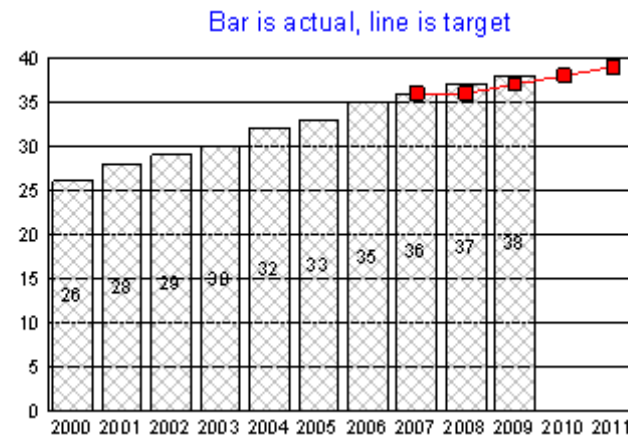
## 7. ABOUT THE DATA

Data is by calendar year, and derives from queries of DEQ's leaking underground storage tank database.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #7c</b>	CLEANUP: Percent of identified Oregon hazardous waste sites cleaned up: hazardous substances.	<b>2007</b>
<b>Goal</b>	PROTECT PEOPLE and THE ENVIRONMENT FROM TOXICS.	
<b>Oregon Context</b>	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.	
<b>Data Source</b>	Environmental Cleanup Site Information (ECSI) database.	
<b>Owner</b>	DEQ Land Quality Program. Tom Roick, (503) 229-5502.	

**KPM7c:**  
**Percent of identified Oregon hazardous waste sites cleaned up**  
**- hazardous substances**



*Data is represented by percent*

## 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 clean up 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.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

## 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. The 37 percent target of this measure for hazardous substance sites is significantly lower than the 79 and 81 percent targets for measures 7a and 7b, which include tank sites. The main difference is that hazardous substance investigations and cleanups may include a range of contaminants such as heavy metals, chlorinated solvents, and PCBs, and are often much more complex than petroleum tank investigations and cleanups. Additionally, state law requires property owners to decommission unused underground tanks, investigate and cleanup leaking tanks, and disclose information about heating oil tanks during a property sale. Therefore, the majority of tank sites are cleaned up fairly quickly compared to more complex hazardous substance sites.

## 3. HOW WE ARE DOING

As of 2009, DEQ had completed cleanup at 38 percent of all hazardous substance sites, just over the target of 37 percent. This involved the clean up in 2009 of 41 additional sites for a total of 613 sites that have been addressed out of 1,597 in the database. 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 enough sites each year that there continues to be an increase in the overall percentage of sites completing cleanup.

## 6. WHAT NEEDS TO BE DONE

DEQ's Cleanup program priorities for the 2009 to 2011 biennium are to:

- Identify, initiate investigation and complete cleanup at high priority sites that threaten human health or sensitive environments
- Continue to respond to community brownfield and economic development needs
- Identify and promote the use of green technologies to improve the overall sustainability of cleanup projects
- Develop and maintain technical guidance, policy, and other tools and resource capabilities needed to support Clean up
- Maintain financial stability of the Cleanup program

## 7. ABOUT THE DATA

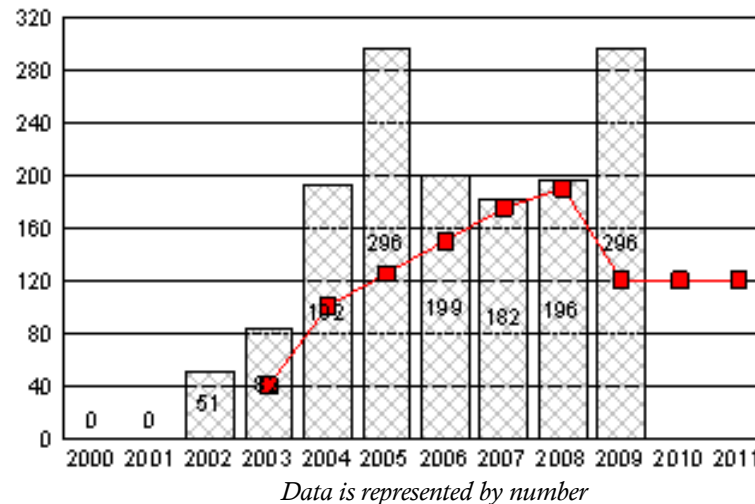
Data is by calendar year, and derives from queries of DEQ's Environmental Cleanup Site Information database.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #8</b>	TOXICS PREVENTION AND REDUCTION: Pounds of mercury removed from the environment through DEQ's efforts.	<b>2002</b>
<b>Goal</b>	PROTECT PEOPLE and THE ENVIRONMENT FROM TOXICS. This is one of DEQ's identified sustainability measures.	
<b>Oregon Context</b>	KPM #8 does not directly link to a High Level Outcome, but supports Oregon Shines Goal 3: Healthy, sustainable surroundings.	
<b>Data Source</b>	Annual project reports.	
<b>Owner</b>	DEQ Land Quality Program. Maggie Conley, (503) 229-5106.	

**KPM8:**  
**Pounds of mercury removed from the environment through DEQ's efforts**

Bar is actual, line is target



## 1. OUR STRATEGY

DEQ's strategy is to partner with other organizations to remove mercury from the environment, such as with Thermostat Recycling Corporation and the Product Stewardship Institute for the recovery of mercury thermostats, the National Vehicle Mercury Switch Recovery Program for free collection and recycling of mercury switches removed from vehicles, and the Oregon Dental Association and the Oregon Association of Clean Water Agencies for

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

mercury dental waste collection. In 2009 DEQ collected elemental mercury, mercury-containing waste and mercury-containing products from homeowners at DEQ-sponsored Household Hazardous Waste events under its Free Mercury program. Under DEQ's thermometer exchange program, free digital thermometers are offered as incentives for individuals who bring in mercury-containing thermometers. DEQ also started a pilot program in the Portland Metro area and Lane County to clean up waste chemicals including mercury from school science laboratories. 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 recently developed an agency-wide toxics reduction strategy with an integrated approach across programs to help prioritize our work and focus resources on 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 reproducible 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. All of the mercury collection reported by DEQ's measure is recycled. This does not keep it from being re-released into the environment from new products, but does keep it from going to landfills and waste incinerators, and reduces the amount that is newly mined. Mercury disposal is an issue nationally because there are no mercury repositories to safely and permanently remove it from the environment.

### 3. HOW WE ARE DOING

In 2009 DEQ supported programs that resulted in the collection of 296 pounds of mercury, well over the target of 120 pounds. The school science laboratory cleanout program resulted in a spike in recovery for 2009. DEQ anticipates that the amount of mercury collected annually will decline over time as locally sponsored programs mature and temporary DEQ programs such as the school laboratory cleanouts end.

### 4. HOW WE COMPARE

It is difficult to compare mercury collection programs due to the large number of variables.

### 5. FACTORS AFFECTING RESULTS

The amount of mercury collected in 2009 is likely a result of DEQ's increased outreach efforts in Portland, Salem and Eugene, and the new DEQ school science laboratory cleanout program. 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. In the near term, DEQ will

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
ANNUAL PERFORMANCE PROGRESS REPORT**

focus on programs that involve collection of elemental mercury and devices containing elemental mercury.

**7. ABOUT THE DATA**

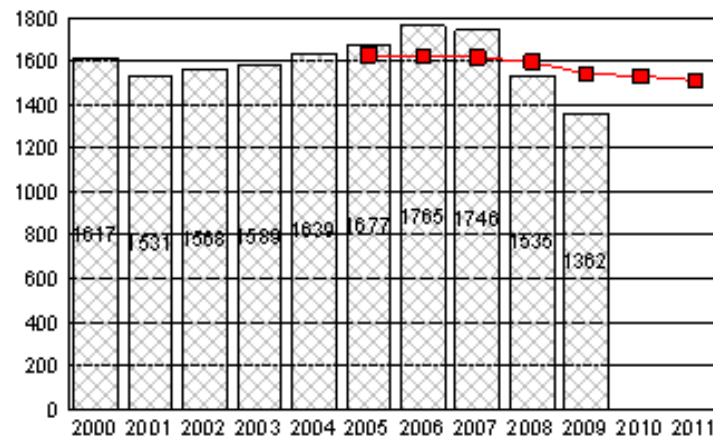
Data is collected from DEQ's household hazardous waste contractor and compiled annually by DEQ staff. Mercury data is only included in this report if DEQ contributed to the cost of managing the waste mercury. Mercury collected from households at locally sponsored household hazardous waste collection facilities and events, including those in the Portland Metro area, is not included.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #9</b>	SOLID WASTE - Pounds of municipal solid waste landfilled or incinerated per capita.	<b>2006</b>
<b>Goal</b>	INVOLVE OREGONIANS IN SOLVING ENVIRONMENTAL PROBLEMS.	
<b>Oregon Context</b>	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.	
<b>Data Source</b>	Landfill disposal tonnage reports.	
<b>Owner</b>	DEQ Land Quality Program. Mary Lou Perry, (503) 229-5502.	

**KPM9:**  
**Pounds of municipal solid waste landfilled or incinerated per capita**

Bar is actual, line is target



*Data is represented by number*

## 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 requires environmentally-conscious choices in purchasing, use, and end-of-life management of products.



## **DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT**

### **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 recovered. The lower the values of this measure, the better. Our statewide goals for waste generation were: no increase in per capita generation by 2005, and no increase in total generation by 2009.

### **3. HOW WE ARE DOING**

Oregon's per capita disposal rate was below the target, which shows improvement. In 2009 the per capita waste disposed or incinerated was 1,362 pounds, which is better than the 2009 target of 1,544 pounds. Total waste generation, the amount recovered, and the amount disposed have all continued to decrease significantly since 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. Over the last two years, the depressed economy has resulted in large waste 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**

DEQ needs to continue tracking the data and looking at programs that may assist 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, the adoption of beneficial use of solid waste rules, implementation of a very successful electronic waste recycling program (Oregon E-Cycles), paint product stewardship, implementation of DEQ's waste prevention strategy and other ongoing waste recovery program efforts.

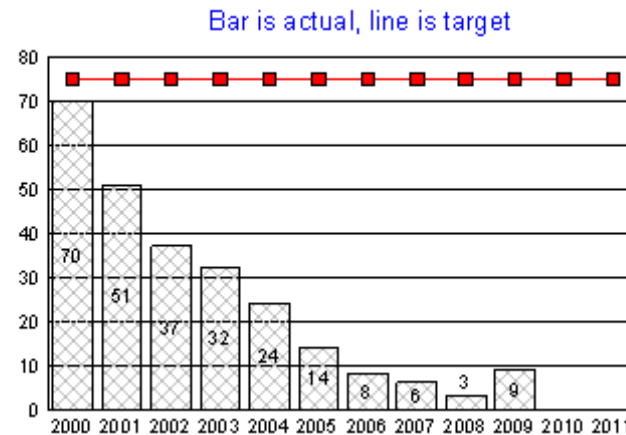
### **7. ABOUT THE DATA**

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. 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. As more accurate tonnages are reported, past annual tonnages are updated. 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.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #10a</b>	WATER QUALITY CONDITIONS - Percent of monitored stream sites with significantly increasing trends in water quality	<b>1992</b>
<b>Goal</b>	PROTECT AND IMPROVE OREGON'S WATER AND AIR: IMPROVE ENVIRONMENTAL HEALTH.	
<b>Oregon Context</b>	As an Oregon Benchmark, this measure is also linked to: 1) Oregon's Statewide Planning Goal 6: air, water, and land resources quality (OAR 660-015- 00 (06)); and 2) Oregon Shines goal 3: Healthy, sustainable surroundings.	
<b>Data Source</b>	DEQ water quality monitoring data.	
<b>Owner</b>	DEQ Laboratory. Aaron Borisenko, Watershed Assessment Manager (503) 693-5273.	

**KPM10a:**  
Percent of monitored stream sites with significantly increasing trends in water quality



*Data is represented by percent*

## 1. OUR STRATEGY

All Water Quality programs at DEQ implement strategies which are intended to maintain and improve overall water quality. This performance measure is linked to two goals: 1) DEQ's strategic direction to Protect Oregon's Water and 2) Oregon's statewide planning goal # 6: To maintain and improve the

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

quality of the air, water and land resources of the state.

The protection of Oregon's water quality is a component of both goals. KPM10 is an important indicator of Oregon's overall water quality conditions and trends. This performance measure is a very high level environmental outcome indicator. Many factors influence overall water quality, and some, such as population growth, land use changes and climate change effects, are beyond the immediate scope of DEQ jurisdiction. Also, the protection of water quality is shared by a number of agencies including the Oregon Department of Forestry, Oregon Department of Agriculture, and federal land managers like the US Forest Service and the Bureau of Land Management.

KPM 10 (a,b,c) is based on the Oregon Water Quality Index (OWQI). The OWQI combines eight important water quality measurements into a single number that tell us about the general surface water quality. It is based on readily available conventional water quality indicators including level of nutrients, fecal bacteria, pH and dissolved oxygen. It does not include toxic chemicals primarily because such data is limited. DEQ annually analyzes data from a network of approximately 130 ambient river monitoring sites and determines trends in water quality based on the most recent ten-year period, known as a ten-year rolling average. DEQ then summarizes data for the entire state. The term "significantly," as used in benchmarks 10a and 10b, refers to statistically significant change at the 80 percent confidence interval. This is a conservative definition which highlights real changes in water quality over time. DEQ further analyzes data from individual monitoring sites with the greatest changes in water quality to determine which of the water quality measurements are driving the change in water quality. The agency further evaluates what watershed activities can explain the changes in water quality. This information can then help us determine the effectiveness of water quality management strategies being implemented by many different jurisdictions. When conducting this analysis it is important to understand that some water quality improvement strategies, such as improving the condition of streamside vegetation may take many years before improved water quality conditions are able to be measured.

### 2. ABOUT THE TARGETS

DEQ established targets 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. A greater number of streams with increasing water quality rather 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. DEQ last revised targets during a period of remarkable improvements in water quality. The current targets are not realistically achievable goals since similar gains in water quality improvement cannot be expected because of the major improvements that occurred in the past. This is discussed in more detail in the "Factors Affecting Results" section below. These targets should be revised to establish challenging but achievable goals. DEQ plans to propose revisions for 2012.

### 3. HOW WE ARE DOING

From approximately 1995 to 2004 water quality across the state improved dramatically and this was reflected in Key Performance measures 10a, b, and c. The rate of these improvements started to decline in 2001. In 2009, the percentage of monitored stream sites with significantly increasing trends over the previous ten years was 9 percent (eleven of 127 stream sites). 2010 data will be available in the fall of 2011.

### 4. HOW WE COMPARE

No industry standards exist. The performance is based on changes in the OWQI at routine river monitoring sites throughout the state. The OWQI is used

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

to describe general stream water quality status and trends. Oregon has been an international leader in the development of the OWQI and many other governments; local, state and national (Canada) have developed water quality indices based on the OWQI.

### 5. FACTORS AFFECTING RESULTS

A number of factors contributed to the large improvements in water quality that occurred from 1995 to 2004. During this period, DEQ developed many clean water plans for stream basins that did not meet water quality standards throughout the state. These plans, known as Total Maximum Daily Loads (TMDL) , in many cases required permitted sources to improve wastewater treatment and to meet stricter effluent discharge limits. Many of the streams with the biggest water quality improvements were in areas with clean water plans. In addition, during this time there were improvements in stormwater management in many basins and improved practices for protecting water quality being implemented on forestry and agriculture lands. The improvements resulting from these changes were reflected in the ten-year trends reported for years 1995 through 2004. Since trends are based only on the previous ten years and those improvements occurred over five years ago, current 10 year trend analyses no longer reflect those improvements. Many factors that contribute to water quality are outside the direct control of DEQ. Responsibility for forested lands resides with several federal agencies and the Oregon Department of Forestry. Similarly, the Oregon Department of Agriculture is the lead in implementing water quality protections on agricultural lands. Many urban and suburban land use impacts as well as annual weather variations and climate change all affect the quality of water in Oregon. Nevertheless, DEQ does work closely with sister agencies and jurisdictions to establish activities to protect or restore water quality.

### 6. WHAT NEEDS TO BE DONE

The data for this benchmark are developed from a network of 127 ambient monitoring sites on the state's major rivers and streams. A more detailed analysis is needed to develop a better understanding of the relationship between land use activities and water quality.

In addition, analyzing the response of water quality to specific activities and sources of pollution will help to guide future actions. Implementation of clean water plans (TMDLs) and the periodic update of existing clean water plans are important efforts for improving water quality. There is also a need (as indicated above) to revisit the current targets for the trending measures. Finally, DEQ is evaluating new performance measures that would display the link between the quality of Oregon's waterways and the work DEQ does to protect them.

### 7. ABOUT THE DATA

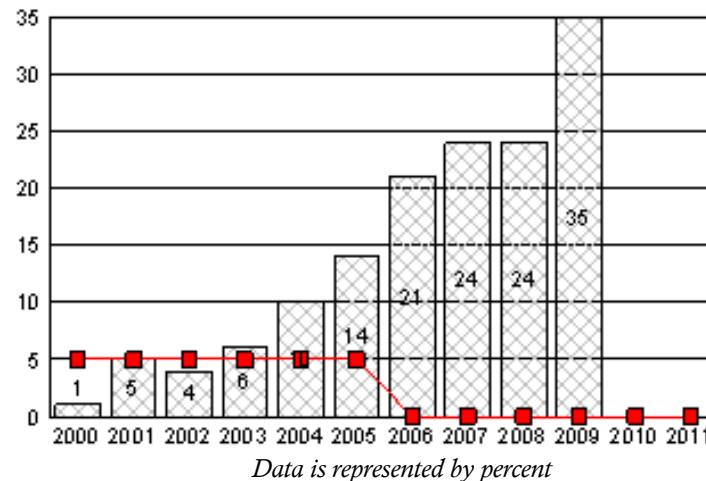
Long term ambient water quality monitoring data are collected in accordance with the Ambient Water Quality Monitoring Network Quality Assurance Project Plan. All data used has met strict data quality requirements. The statistical processes used to analyze the data are documented in the "Annual Water Quality Index Summary Report." DEQ performs analysis on a ten year data set. All DEQ monitoring data are accessible via the web at <http://deq12.deq.state.or.us/lasar2/>.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #10b</b>	WATER QUALITY CONDITIONS: Percent of monitored stream sites with decreasing trends in water quality.	<b>1992</b>
<b>Goal</b>	PROTECT AND IMPROVE OREGON'S WATER AND AIR: IMPROVE ENVIRONMENTAL HEALTH.	
<b>Oregon Context</b>	As an Oregon Benchmark, this measure is also linked to: 1) Oregon's Statewide Planning Goal 6: air, water, and land resources quality (OAR 660- 015-00 (06)); and 2) Oregon Shines goal 3: Healthy, sustainable surroundings.	
<b>Data Source</b>	DEQ water quality monitoring data.	
<b>Owner</b>	DEQ Laboratory. Aaron Borisenko, Watershed Assessment Manager (503) 693-5273.	

**KPM10b:**  
**Percent of monitored stream sites with decreasing trends in water quality**

Bar is actual, line is target



## 1. OUR STRATEGY

All Water Quality programs at DEQ implement strategies which are intended to maintain and improve overall water quality. This performance measure is linked to two goals: 1) DEQ's strategic direction to Protect Oregon's Water and 2) Oregon's statewide planning goal #6: To maintain and improve the quality of the air, water and land resources of the state.

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

The protection of Oregon's water quality is a component of both goals. KPM10 is an important indicator of Oregon's overall water quality conditions and trends. This performance measure is a very high level environmental outcome indicator. Many factors influence overall water quality, and some, such as population growth, land use changes and climate change effects, are beyond the DEQ's jurisdiction. Also, the protection of water quality is shared by a number of agencies including the Oregon Department of Forestry, Oregon Department of Agriculture, and federal land managers like the US Forest Service and the Bureau of Land Management.

KPM 10 (a,b,c) is based on the Oregon Water Quality Index (OWQI). The OWQI combines eight important water quality measurements into a single number that tell us about the general surface water quality. It is based on readily available conventional water quality indicators including level of nutrients, fecal bacteria, pH and dissolved oxygen. It does not include toxic chemicals primarily because such data is limited. DEQ annually analyzes data from a network of approximately 130 ambient river monitoring sites and determines trends in water quality based on the most recent ten-year period, known as a ten-year rolling average. DEQ then summarizes data for the entire state. The term "significantly", as used in benchmarks 10a and 10b, refers to statistically significant change at the 80 percent confidence interval. This is a conservative definition which highlights real changes in water quality over time. DEQ further analyzes data from individual monitoring sites with the greatest changes in water quality to determine which of the water quality measurements are driving the change in water quality. The agency further evaluates what watershed activities can explain the changes in water quality. This information can then help us determine the effectiveness of water quality management strategies being implemented by many different jurisdictions. When conducting this analysis it is important to understand that some water quality improvement strategies, such as improving the condition of streamside vegetation may take many years before improved water quality conditions are able to be measured.

### 2. ABOUT THE TARGETS

DEQ established targets 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. A greater number of streams with increasing water quality rather 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. DEQ last revised targets during a period of remarkable improvements in water quality. The current targets are not realistically achievable goals since similar gains in water quality improvement cannot be expected because of the major improvements that occurred in the past. This is discussed in more detail in the "Factors Affecting Results" section below. These targets should be revised to establish challenging but achievable goals. DEQ plans to propose revisions for 2012.

### 3. HOW WE ARE DOING

In 2009, the percentage of monitored stream sites with significantly decreasing trends was 35 percent (45 of 127 stream sites). This was an 11 percent increase in the number of sites with decreasing trends compare with 2008. From 2003 to 2009 the percentage of stream sites with decreasing trends in water quality has not met the target of 5 percent. This means that there has been an increase in stream sites with declining water quality. 2010 data will be available in the fall of 2011.

### 4. HOW WE COMPARE

No industry standards exist. The performance is based on changes in the OWQI at routine river monitoring sites throughout the state. The OWQI is used to describe general stream water quality status and trends. Oregon has been an international leader in the development of the OWQI and many other governments; local, state and national (Canada) have developed water quality indices based on the OWQI.

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

### 5. FACTORS AFFECTING RESULTS

The three sites with the largest declines in OWQI were located on the Tualatin River. These declines in OWQI resulted from increases in total solids, nitrate, phosphorous, and decreased dissolved oxygen concentrations. These water quality changes appear to be associated with changes in treatment processes at sewage treatment facilities that discharge to the Tualatin River. There were declining OWQI trends at another 42 sites. The declining trends at these sites were relatively small in magnitude. These remaining 42 sites with declining trends occurred throughout the state at sites relatively unaffected by point source discharges and on streams with good to excellent water quality and watersheds that are generally in good condition. The most common reasons for the declining OWQI scores were increased total solids and increased nutrients. No common causes have been determined for the declines in OWQI at these sites.

### 6. WHAT NEEDS TO BE DONE

The data for this benchmark are developed from a network of 127 ambient monitoring sites on the state's major rivers and streams. A more detailed analysis is needed to develop a better understanding of the relationship between land use activities and water quality. In addition, analyzing the response of water quality to specific activities and sources of pollution will help to guide future actions. Implementation of clean water plans (TMDLs) and the periodic update of existing clean water plans are important efforts for improving water quality. There is also a need (as indicated above) to revisit the current targets for the trending measures. Finally, DEQ is evaluating new performance measures that would display the link between the quality of Oregon's waterways and the work DEQ does to protect them.

### 7. ABOUT THE DATA

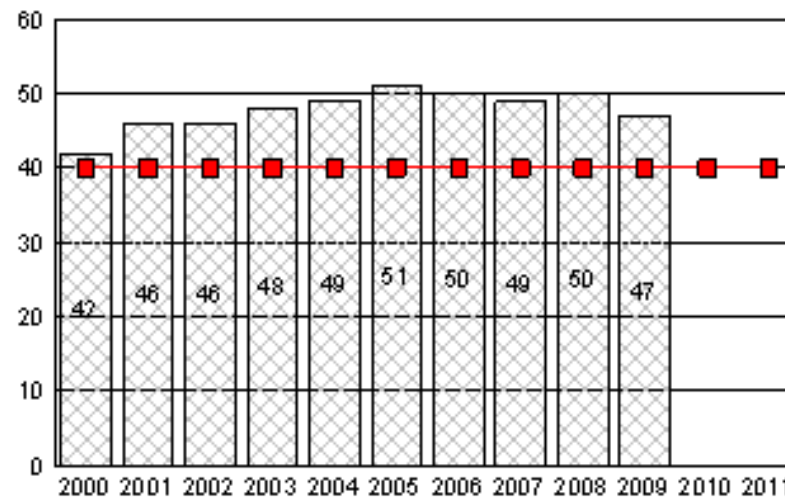
Long-term ambient water quality monitoring data are collected in accordance with the Ambient Water Quality Monitoring Network Quality Assurance Project Plan. All data used has met strict data quality requirements. The statistical processes used to analyze the data are documented in the "Annual Water Quality Index Summary Report." DEQ performs analysis on a ten year data set. All DEQ monitoring data are accessible via the web at <http://deq12.deq.state.or.us/lasar2/>.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #10c</b>	WATER QUALITY CONDITIONS – Percent of monitored stream sites with water quality in good to excellent condition.	<b>1992</b>
<b>Goal</b>	PROTECT AND IMPROVE OREGON'S WATER AND AIR: IMPROVE ENVIRONMENTAL HEALTH.	
<b>Oregon Context</b>	As an Oregon Benchmark, this measure is also linked to: 1) Oregon's Statewide Planning Goal 6: air, water, and land resources quality (OAR 660-015- 00 (06)); and 2) Oregon Shines goal 3: Healthy, sustainable surroundings	
<b>Data Source</b>	DEQ water quality monitoring data	
<b>Owner</b>	DEQ Laboratory. Aaron Borisenko, Watershed Assessment Manager (503) 693-5273.	

**KPM10c:**  
**Percent of monitored stream sites with water quality in good to excellent condition**

Bar is actual, line is target



*Data is represented by percent*



# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

## 1. OUR STRATEGY

All Water Quality programs at DEQ implement strategies which are intended to maintain and improve overall water quality. This performance measure is linked to two goals: 1) DEQ's strategic direction to Protect Oregon's Water and 2) Oregon's statewide planning goal # 6: To maintain and improve the quality of the air, water and land resources of the state.

The protection of Oregon's water quality is a component of both goals. KPM10 is an important indicator of Oregon's overall water quality conditions and trends. This performance measure is a very high level environmental outcome indicator. Many factors influence overall water quality, and some, such as population growth, land use changes and climate change effects, are beyond DEQ's jurisdiction. Also, the protection of water quality is shared by a number of agencies including the Oregon Department of Forestry, Oregon Department of Agriculture, and federal land managers like the US Forest Service and the Bureau of Land Management.

KPM 10 (a,b,c) is based on the Oregon Water Quality Index (OWQI). The OWQI combines eight important water quality measurements into a single number that tell us about the general surface water quality. It is based on readily available conventional water quality indicators including level of nutrients, fecal bacteria, pH and dissolved oxygen. It does not include toxic chemicals primarily because such data is limited. DEQ annually analyzes data from a network of approximately 130 ambient river monitoring sites and determines trends in water quality based on the most recent ten-year period, known as a ten-year rolling average. DEQ then summarizes data for the entire state. The term "significantly," as used in benchmarks 10a and 10b, refers to statistically significant change at the 80 percent confidence interval. This is a conservative definition which highlights real changes in water quality over time. DEQ further analyzes data from individual monitoring sites with the greatest changes in water quality to determine which of the water quality measurements are driving the change in water quality. The agency further evaluates what watershed activities can explain the changes in water quality. This information can then help us determine the effectiveness of water quality management strategies being implemented by many different jurisdictions. When conducting this analysis it is important to understand that some water quality improvement strategies, such as improving the condition of streamside vegetation may take many years before improved water quality conditions are able to be measured.

## 2. ABOUT THE TARGETS

The target for benchmark 10 c has not been revised since it was originally developed. This benchmark has been met or exceeded for ten years. It should be revised upward to set a challenging but realistic goal. This is something we propose to do in 2012.

## 3. HOW WE ARE DOING

In 2009, the percentage of monitored stream sites with good to excellent water quality condition was 47 percent (61 of 131 stream sites). For the last five years the target has been exceeded by an average of 9 percent. This demonstrates the good water quality at almost half of the sites we routinely monitor. While we are meeting our target for overall water quality condition, over 50 percent of the sites still need improvement and diligence is needed to prevent the improved water quality of some locations from declining. 2010 data will be available in the fall of 2011.

## 4. HOW WE COMPARE

No industry standards exist. The performance is based on changes in the OWQI at routine river monitoring sites throughout the state. The OWQI is used to describe general stream water quality status and trends. Oregon has been an international leader in the development of the OWQI and many other

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

governments; local, state and national (Canada) have developed water quality indices based on the OWQI.

### 5. FACTORS AFFECTING RESULTS

This benchmark has remained about the same for the last five years. This indicates that despite declines in improving trends and increases in declining trends, the increases in the number of sites in good to excellent condition that resulted from increasing trends that occurred from 1995 to 2004 have been maintained.

### 6. WHAT NEEDS TO BE DONE

The data for this benchmark are developed from a network of 131 ambient monitoring sites on the state's major rivers and streams. DEQ needs to continue working with our partners around the state to protect and improve Oregon's waters.

### 7. ABOUT THE DATA

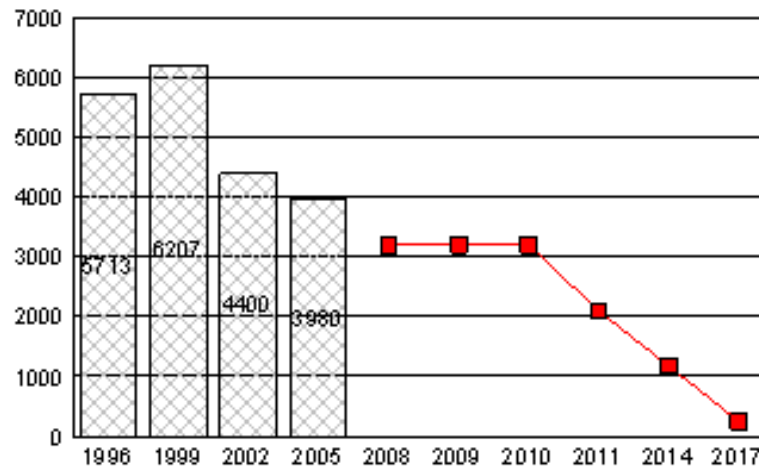
DEQ collects long term ambient water quality monitoring data in accordance with the Ambient Water Quality Monitoring Network Quality Assurance Project Plan. All data used has met strict data quality requirements. The statistical processes used to analyze the data are documented in the "Annual Water Quality Index Summary Report." DEQ performs analysis on a ten year data set. All DEQ monitoring data are accessible via the web at <http://deq12.deq.state.or.us/lasar2/>

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #11</b>	AIR QUALITY DIESEL EMISSIONS: Quantity of diesel particulate emissions.	<b>2007</b>
<b>Goal</b>	IMPROVE OREGON'S AIR AND WATER.	
<b>Oregon Context</b>	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	
<b>Data Source</b>	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.	
<b>Owner</b>	Air Quality Division, Margaret Oliphant, (503) 229-5687	

**KPM11:**  
**Quantity of diesel particulate emissions (in tons)**

Bar is actual, line is target



*Data is represented by number*

## 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 retired and

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

replaced with engines subject to strict federal emission standards for new vehicles. DEQ has developed a Clean Diesel Initiative, an education and incentive program to retrofit or replace these older engines. DEQ's focus 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.

### 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 one cancer in a million individuals over a lifetime of exposure by 2017. DEQ has translated this goal into an emissions target of 250 tons per year of diesel particulate. Achieving this goal would result in fewer cancer-related deaths per year in Oregon and reduced incidence of other health effects 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, but that progress has been made. Several fleets have installed advanced exhaust controls on existing vehicles and other projects are underway, including projects on 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 Oregon, and now Washington and California that showcase a variety of emission-reduction technologies to over-the-road truckers who operate along the I-5 corridor. This organization also leases auxiliary power units and offers 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

Although the National-scale Air Toxics Assessment covers all states, state-to-state comparisons are misleading and not recommended. Each state produces its own inventory of emissions based on methods unique to that state, so differences in risk among states can be artifacts of different methodologies. While EPA attempts to harmonize the data and develop a national estimate of health risk by state, it lacks reliability for comparison purposes among states.

Since diesel fuel consumption in Oregon is slightly higher per capita than other states and the fleet is slightly older than the national average, exposure to the harmful effects of diesel exhaust is likely to be comparable to adjoining states. However, in both California and Washington, multi-million dollar financial assistance programs for public and private fleets have been in place to support cleaner engine repowers and exhaust control upgrades for at least the past six years. California has also adopted a program to phase-in requirements for using cleaner diesel fuel, scrapping of old engines (displacement to another state being regarded as a viable strategy), repowering with cleaner engines and upgrading the exhaust control systems on existing in-use diesel vehicles and equipment.

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

### 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 difficult for many businesses to justify investing up to \$10,000 per device, per vehicle, when the primary benefit of the investment is public health. This is why financial assistance is crucial to making inroads to offer the best and most cost effective solution to reduce diesel particulate matter.

In 2007, the Legislature provided \$1.5 million of state and federal funds, as well as tax credits, for clean diesel projects. The economic downturn placed extraordinary pressures on the state budget, resulting in a rescission of about 20 percent of the General Fund appropriated for clean diesel grants in the 2007-2009 biennium and elimination of General Fund support in the 2009-2011 biennium. Meanwhile, the federal economic stimulus (American Recovery and Reconciliation Act) provided \$1.7 million for clean diesel upgrade projects in municipal, school bus and transit fleets in the Portland area and in Klamath and Lane counties. Once the ARRA projects are completed, the only funding for diesel projects will be annual federal diesel grants ranging from \$200,000 to \$250,000 per year. State tax credits will also expire at the beginning of 2012. The loss of funding for incentive programs will result in less progress toward the target and legislative goal.

### 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 with cleaner new engines, DEQ's projections show that even by 2026 the estimated cancer risk will still be five times over the target. To meet the one in a million cancer risk target in 2017 requires a reduction of about 140 tons of diesel particulate per year in addition to the declines that will occur from normal fleet turnover. A preliminary estimate of reductions from the current level of activity is around 10 tons per year.

Additional funding is required to achieve the target if Oregon relies solely on voluntary measures. Oregon could also consider regulatory approaches, although these would also be difficult to implement without financial assistance programs. In addition, Oregon lacks authority to set emission limits for non-highway diesel engines, such as construction equipment. 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.

At the request of the 2009 Legislature, DEQ convened a study workgroup to consider strategies to reduce greenhouse gas emission from over the road heavy and medium duty trucks by improving efficiency and reducing unnecessary long-duration idling. The result of this effort may be legislative proposals for the 2011 Oregon Legislature. In addition to reducing greenhouse gas emissions, implementation of these strategies would result in emission reductions of diesel particulate.

### 7. ABOUT THE DATA

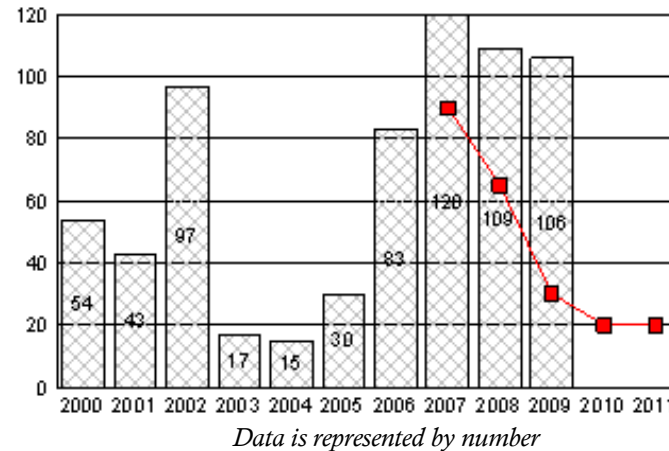
This data is derived from an assessment of all air pollutants from all sources in the state that is compiled every three years. The 2005 calendar year is used for this report. The inventory is made according to methods determined by EPA and used by state and local air quality agencies nationwide. Extensive quality assurance procedures ensure data quality. The 2008 inventory will be published by fall 2010, following the completion of data collection, quality assurance and quality checking procedures.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #12a</b>	AIR QUALITY CONDITIONS – National Standards: Number of days when air is unhealthy for sensitive groups.	<b>2006</b>
<b>Goal</b>	IMPROVE OREGON'S AIR AND WATER.	
<b>Oregon Context</b>	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	
<b>Data Source</b>	DEQ air quality monitoring database	
<b>Owner</b>	Air Quality Division. Margaret Oliphant, (503) 229-5687	

**KPM12a:**  
**Air Quality – National Standards Number of days**  
**when air is unhealthy for sensitive groups**

Bar is actual, line is target



## 1. OUR STRATEGY

There are three 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 local advisory committees to develop plans to meet the federal standards. To gain EPA approval, these plans must include a demonstration that permanent and enforceable measures will result in

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

attainment of the standard by federal deadlines. 2) In communities where the levels are close to exceeding the national standards, DEQ works with the community to reduce existing sources of air pollution to protect public health and prevent violations of federal standards. 3) DEQ develops and implements statewide air quality improvement initiatives to reduce emissions from specific source categories (e.g. industrial factories, old polluting residential wood stoves, diesel engines and open burning) that will improve air quality for all Oregonians. This includes implementation of federal measures, as well as development of voluntary and mandatory state measures to address Oregon-specific air pollution problems.

### 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. Initially, the measure was based on the number of communities violating federal air quality standards. However, this did not allow DEQ to track gradual improvement or worsening of air quality, and resulted in swings in results when the administrative step of designating an area as "attainment" or "non-attainment" occurred. The measure was revised in 2006 to reflect the annual trend in actual air quality for both sensitive individuals and the general population. KPM 12a indicates the number of days that sensitive groups of Oregonians (e.g. children and asthmatics) breathe air that exceeds the federal health-based air quality standards for particulate matter, ozone (smog) and four other air pollutants. The unhealthy air days from 2007 through 2009 reflect the recent tightening of EPA's 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.

While Oregon has made great progress in improving air quality, much work remains. 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 violated the new daily standard and have been designated as "non-attainment" necessitating emissions reduction planning. Another community will be designated non-attainment soon and several more are at risk of future violations.

This change in the federal fine particulate standard is largely responsible for the increase in unhealthy days that occurred from 2006 through 2009.

Previous years have not been restated for this report. In each of the last three years, wildfires and prescribed burns have caused some unhealthy air days when air pollution exceeded the revised measure; nine in 2007, eighteen in 2008, and fourteen in 2009. However, wintertime inversions coupled with woodstove smoke caused the majority of the unhealthy days.

In total, nineteen Oregon communities experienced a total of 106 days in 2009 when air was unhealthy for sensitive groups. Klamath Falls provides one important success story. Prior to the 2008-9 winter heating season, DEQ and its local partners carried out an extensive public education effort to explain how residential wood heating could affect air quality and public health. This was followed in early 2009 with aggressive enforcement of the local ordinance mandating wood heating restrictions on poor ventilation days. Thanks to this effort, along with improved weather conditions, unhealthy days for sensitive people plummeted in Klamath Falls from 24 days in 2008 to nine days in 2009.

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

### 4. HOW WE COMPARE

The US 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 2009 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.). The measure will be comparable again in coming years when other states update their measures to include the new federal standards.

### 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. EPA has revised the national standards for a number of pollutants, they have proposed a tightening of the ozone (smog) standard, and they have announced plans to further tighten the fine particulate standard. These new standards reflect advancing health information, and indicate that additional people are at risk from air pollution. In Oregon, our reliance on burning for heat and for waste disposal – along with increasing motor vehicle use, consumer and commercial activities and industrial emissions – are the primary causes 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 new legislation that requires removal of old, polluting woodstoves upon sale of homes, will reduce smoke (particulate matter) from woodstoves. DEQ is leveraging this new program by seeking federal grant funding to help homeowners 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 (for example, cars and lawn equipment), fuel distribution and commercial processes are also needed. For some pollutants in some areas, further reductions in industrial emissions will also be needed. By identifying local problems through air monitoring and developing localized emission reduction strategies (such as 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. The data is available for any timeframe, and is summarized by calendar year 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. In addition, EPA revised the fine particulate standard in the fall of 2006 but has not adjusted the Air Quality Index that provides the basis for the unhealthy days designation. In this report, DEQ has included in the count of days unhealthy for sensitive groups the number of days over the new fine particulate standard. EPA will revise the AQI to be in line with the 2006 standard sometime in the next few years.

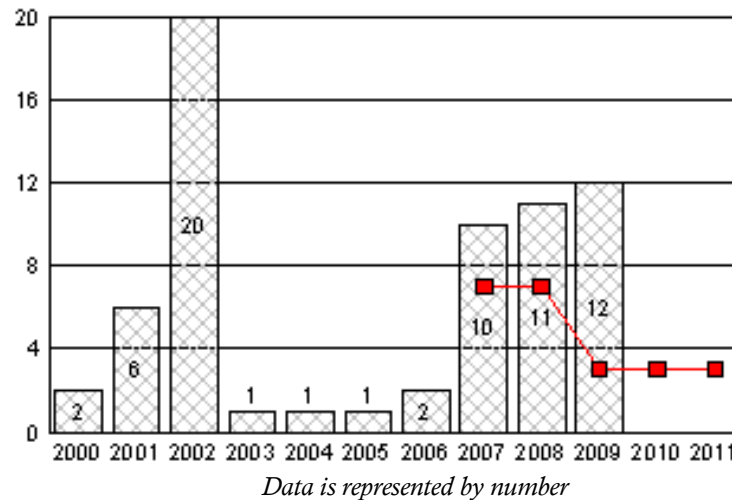


# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #12b</b>	AIR QUALITY CONDITIONS – National Standards: Number of days when air is unhealthy for all groups.	<b>2006</b>
<b>Goal</b>	IMPROVE OREGON'S AIR AND WATER.	
<b>Oregon Context</b>	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.	
<b>Data Source</b>	DEQ air quality monitoring database.	
<b>Owner</b>	Air Quality Division. Margaret Oliphant, (503) 229-5687	

**KPM12b:**  
**Air Quality – National Standards Number of days**  
**when air is unhealthy for all groups**

Bar is actual, line is target



## 1. OUR STRATEGY

There are three 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 local advisory committees to develop plans to

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

meet the federal standards. To gain EPA approval, these plans must include a demonstration that permanent and enforceable measures will result in attainment of the standard by federal deadlines. 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 to protect public health and prevent violations of federal standards. 3) DEQ develops and implements statewide air quality improvement initiatives to reduce emissions from specific source categories (e.g. industrial factories, old polluting residential wood stoves, diesel engines, and open burning) that will improve air quality for all Oregonians. This includes implementation of federal measures, as well as development of voluntary and mandatory state measures to address Oregon-specific air pollution problems.

### 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. Initially, the measure was based on the number of communities violating federal air quality standards. However, this did not allow DEQ to track gradual improvement or worsening of air quality, and resulted in swings in results when the administrative step of designating an area as "attainment" or "non-attainment" occurred. The measure was revised in 2006 to reflect the annual trend in actual air quality for both sensitive individuals and the general population. KPM 12b measures whether the outdoor air meets the federal health-based air quality standards for particulate matter, ozone (smog) and four other air pollutants for all groups (general population). The unhealthy air days from 2007 through 2009 reflect the recent tightening of EPA's 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 indicates that air quality is unhealthy for the general population on some days in some places. The majority of the unhealthy air days are caused by elevated fine particulate levels resulting from woodstoves and other combustion sources.

While Oregon has made great progress in improving air quality, much work remains. 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 violated the new daily standard and have been designated as "non-attainment" necessitating emissions reduction planning. Another community will be designated non-attainment soon and several more are at risk of future violations.

This change in the federal fine particulate standard is largely responsible for the increase in unhealthy days that occurred from 2006 through 2009. Previous years have not been restated for this report. In each of the last three years, wildfires and prescribed burning have caused some unhealthy air days when air pollution exceeded the revised measure; two in 2007, one in 2008 and five in 2009. However, wintertime inversions coupled with woodstove smoke caused the majority of the unhealthy days. In total, seven Oregon communities experienced a total of 12 days in 2009 when air was unhealthy for the general population.

### 4. HOW WE COMPARE

The US 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 one day of unhealthy air in one city, Washington experienced two unhealthy days in two cities, and Idaho had eight

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

unhealthy air days in four cities. Oregon data for 2006 through 2009 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.). The measure will be comparable again in coming years when other states update their measures to include the new federal standards.

### 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. EPA has revised the national standards for a number of pollutants, proposed a tightening of the ozone (smog) standard and announced plans to further tighten the fine particulate standard. These new standards reflect advancing health information, and indicate that additional people are at risk from air pollution. In Oregon, our reliance on burning for heat and for waste disposal – along with increasing motor vehicle use, consumer and commercial activities and industrial emissions – are the primary causes 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 new legislation that requires removal of old, polluting woodstoves upon sale of homes, will reduce smoke (particulate matter) from woodstoves. DEQ is leveraging this new program by seeking federal grant funding to help homeowners 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 (for example, cars and lawn equipment), fuel distribution, and commercial processes are also needed. For some pollutants in some areas, further reductions in industrial emissions will also be needed. By identifying local problems through air monitoring, and by developing localized emission reduction strategies (such as the Klamath Falls Attainment Plan) DEQ can provide the best air quality improvements for Oregonians.

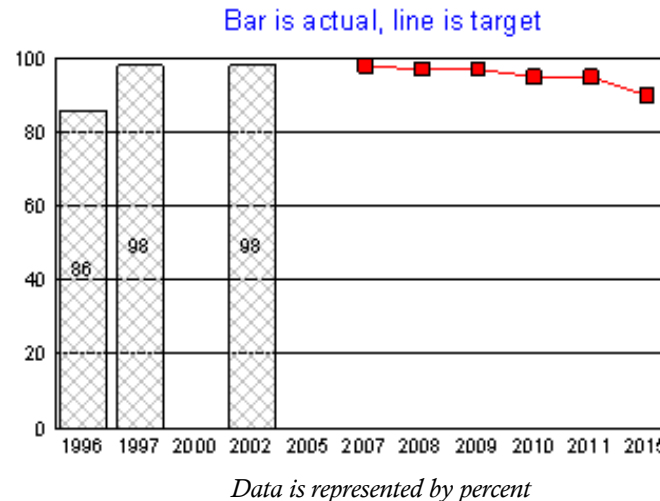
### 7. ABOUT THE DATA

This data is collected from monitoring sites throughout the state and is available through the DEQ website. The data is available for any timeframe, and is summarized by calendar year 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. In addition, EPA revised the fine particulate standard in the fall of 2006 but has not adjusted the Air Quality Index that provides the basis for the unhealthy days designation. In this report, DEQ has included in the count of days unhealthy for sensitive groups the number of days over the new fine particulate standard. EPA will revise the AQI to be in line with the 2006 standard sometime in the next few years.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #13a</b>	AIR QUALITY – AIR TOXICS - Percent of Oregonians at risk from toxic air pollutants that contribute to cancer.	<b>2007</b>
<b>Goal</b>	PROTECT PEOPLE AND THE ENVIRONMENT FROM TOXICS.	
<b>Oregon Context</b>	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.	
<b>Data Source</b>	DEQ air pollution inventory and EPA National-scale Air Toxics Assessment.	
<b>Owner</b>	Air Quality Division. Margaret Oliphant, (503) 229-5687	

**KPM13a:**  
**Air Quality – Percent of Oregonians at risk from toxic air pollutants  
that contribute to cancer**



## 1. OUR STRATEGY

There are three elements in DEQ's strategy to reduce Oregonians' exposure to toxic air pollutants. 1) DEQ works to reduce air toxics from categories of emission sources statewide. This includes implementation of federal emission standards, as well as development and implementation of Oregon-specific air toxics measures. Many of these measures are designed to provide benefits to more than one type of pollutant. For example, DEQ's measures to reduce

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

emissions from diesel engines and residential wood combustion reduce both air toxics and fine particulate pollution. 2) DEQ is developing an innovative approach to address the cumulative risk from all sources of air toxics within a geographic area. The Portland Air Toxics Solutions project is DEQ's first attempt to craft a comprehensive emissions reductions strategy to reduce risk from all air toxics to levels below health benchmarks. 3) DEQ also implements source-specific measures needed to reduce air toxics risks from individual industrial sources. Most significantly, this has included measures to reduce mercury emissions from Oregon's two largest mercury emission sources.

### 2. ABOUT THE TARGETS

DEQ strives to fully protect public health from outdoor air pollution. Benchmark number 13a is designed to track progress in reducing risk from toxic air pollutants that cause cancer. The measure is based on a representative group of air toxics, known as polycyclic aromatic hydrocarbons. The target is the percentage of Oregonians exposed to air toxics concentrations that would result in 10 or more excess cancers per million individuals after a lifetime of exposure. Because most Oregonians are exposed to air toxics concentrations above this level and because reductions in air toxics will take considerable time, the target for 2011 was set at 95 percent.

### 3. HOW WE ARE DOING

This measure shows that air toxics pose a significant risk of cancer to almost all Oregonians. Data for this measure comes from the National-scale Air Toxics Assessment, which EPA develops periodically using states' emission data. While EPA is expected to release the 2005 Assessment results later this year, the most current results are available for 2002. The 2002 results did not change much from the previous 1999 analysis and continued to show serious cancer risk from polycyclic aromatic hydrocarbons. The 2005 results are expected to show some improvement, although much of this may be due to improvements to the emission data used in the assessment. These results indicate that federal air toxics reduction measures are not sufficient, and that additional state and federal strategies are needed to reduce risk to acceptable levels in Oregon.

### 4. HOW WE COMPARE

Although the National-scale Air Toxics Assessment covers all states, state-to-state comparisons are misleading and not recommended. Each state produces its own inventory of emissions based on methods unique to that state, so differences in risk among states can be artifacts of different methodologies. While EPA attempts to harmonize the data and develop a national estimate of health risk by state, it lacks reliability for comparison purposes among states.

### 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 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, the reliance on burning for heat and for waste disposal, along with increasing motor vehicle and engine use, are the primary sources of toxic air pollution. Forestry and agricultural burning in rural areas also contribute, and industry is a major contributor of some toxic air pollutants. Weather patterns, such as winter-time stagnation and natural events, such as wildfires, can be significant factors resulting in high air toxics concentrations.

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

### 6. WHAT NEEDS TO BE DONE

A number of new federal and state standards are being adopted and implemented for categories of small businesses that collectively release significant amounts of air toxics 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 work with these groups to craft a comprehensive emissions reductions strategy that will protect public health from air toxics throughout the Portland region. Possible strategies to reduce air toxics risk could include reducing emissions from industrial sources, woodstoves, open burning, gasoline distribution, diesel engines (e.g. trucks, construction equipment, trains, and marine vessels) and other sources of combustion. Focused strategies in some localized areas of Portland may also be needed to address high concentrations of air toxics caused by a unique mix of localized sources. If successful in the Portland area, this geographic approach may be applied to other areas of the state where air toxics are shown to be a problem.

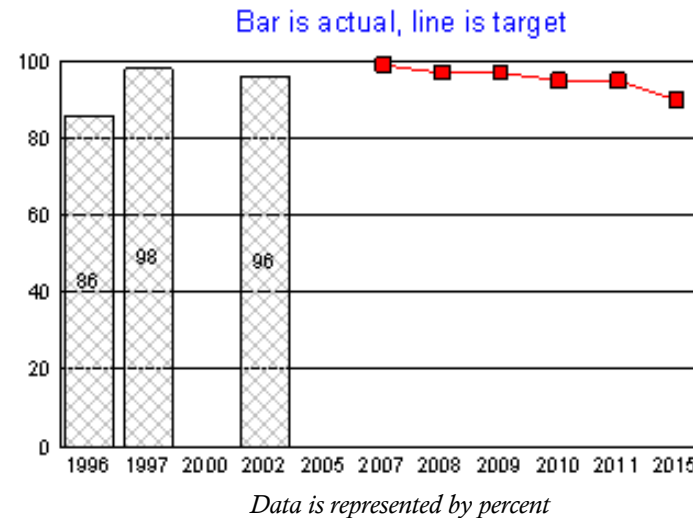
### 7. ABOUT THE DATA

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. EPA uses DEQ's inventory data to predict toxic air pollutant concentrations and the associated health threat using sophisticated modeling techniques. These methods are well-documented and include substantial quality control, but take time to produce results. EPA's last published analysis was released in 2009 using data from the 2002 calendar year; the 2005 analysis is expected to be available in late 2010.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #13b</b>	AIR QUALITY – AIR TOXICS - Percent of Oregonians at risk from toxic air pollutants that contribute to respiratory problems.	<b>2007</b>
<b>Goal</b>	PROTECT PEOPLE AND THE ENVIRONMENT FROM TOXICS.	
<b>Oregon Context</b>	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.	
<b>Data Source</b>	DEQ air pollution inventory and EPA National-scale Air Toxics Assessment	
<b>Owner</b>	Air Quality Division. Margaret Oliphant, (503) 229-5687	

**KPM13b:**  
**Air Quality – Percentage of Oregonians at risk from  
toxic air pollutants that contribute to respiratory problems**



## 1. OUR STRATEGY

There are three elements in DEQ's strategy to reduce Oregonians' exposure to toxic air pollutants. 1) DEQ works to reduce air toxics from categories of emission sources statewide. This includes implementation of federal emission standards, as well as development and implementation of Oregon-specific air

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

toxics measures. Many of these measures are designed to provide benefits to more than one type of pollutant. For example, DEQ's measures to reduce emissions from diesel engines and residential wood combustion reduce both air toxics and fine particulate pollution. 2) DEQ is developing an innovative approach to address the cumulative risk from all sources of air toxics within a geographic area. The Portland Air Toxics Solutions project is DEQ's first attempt to craft a comprehensive emissions reductions strategy to reduce risk from all air toxics to levels below health benchmarks. 3) DEQ also implements source-specific measures needed to reduce air toxics risks from individual industrial sources. Most significantly, this has included measures to reduce mercury emissions from Oregon's two largest mercury emission sources.

### 2. ABOUT THE TARGETS

DEQ strives to fully protect public health from outdoor air pollution. Benchmark number 13b is designed to track progress in reducing risk from toxic air pollutants that contribute to respiratory problems and other non-cancer health effects. The measure is based on a representative pollutant, acrolein, which causes serious respiratory disease. The target is the percentage of Oregonians exposed to air toxics concentrations that would result in ten or more excess respiratory problems per million individuals after a lifetime of exposure. Because most Oregonians are exposed to air toxics concentrations above this level and because reductions in air toxics will take considerable time, the target for 2011 was set at 95 percent.

### 3. HOW WE ARE DOING

This measure shows that air toxics pose a significant risk of respiratory and other non-cancer health effects to almost all Oregonians. Data for this measure comes from the National-scale Air Toxics Assessment, which EPA develops periodically using states' emission data. While EPA is expected to release the 2005 Assessment results later this year, the most current results are available for 2002. The 2002 results did not change much from the previous 1999 analysis and continued to show serious respiratory disease risk from acrolein. The 2005 results are expected to show some improvement, although much of this may be due to improvements to the emission data used in the assessment. These results indicate that federal air toxics reduction measures are not sufficient, and that additional state and federal strategies are needed to reduce risk to acceptable levels in Oregon.

### 4. HOW WE COMPARE

Although the National-scale Air Toxics Assessment covers all states, state-to-state comparisons are misleading and not recommended. Each state produces its own inventory of emissions based on methods unique to that state, so differences in risk among states can be artifacts of different methodologies. While EPA attempts to harmonize the data and develop a national estimate of health risk by state, it lacks reliability for comparison purposes among states.

### 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 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, the reliance on burning for heat and for waste disposal, along with increasing motor vehicle and engine use, are the primary sources of toxic air pollution. Forestry and agricultural burning in rural areas also contribute, and industry is a major contributor of some toxic air pollutants. Weather patterns, such as winter-time stagnation and natural events, such as wildfires, can be significant factors resulting in high air toxics concentrations.



## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

### 6. WHAT NEEDS TO BE DONE

A number of new federal and state standards are being adopted and implemented for categories of small businesses that collectively release significant amounts of air toxics 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 work with these groups to craft a comprehensive emissions reductions strategy that will protect public health from air toxics throughout the Portland region. Possible strategies to reduce air toxics risk could include reducing emissions from industrial sources, woodstoves, open burning, gasoline distribution, diesel engines (e.g. trucks, construction equipment, trains, and marine vessels) and other sources of combustion. Focused strategies in some localized areas of Portland may also be needed to address high concentrations of air toxics caused by a unique mix of localized sources. If successful in the Portland area, this geographic approach may be applied to other areas of the state where air toxics are shown to be a problem.

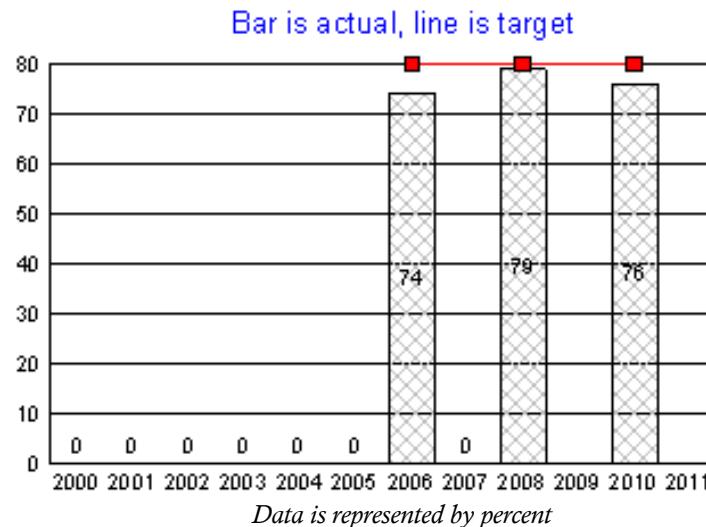
### 7. ABOUT THE DATA

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. EPA uses DEQ's inventory data to predict toxic air pollutant concentrations and the associated health threat using sophisticated modeling techniques. These methods are well-documented and include substantial quality control, but take time to produce results. EPA's last published analysis was released in 2009 using data from the 2002 calendar year; the 2005 analysis is expected to be available in late 2010.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #14</b>	ERT: Percent of local participants who rank DEQ involvement in Economic Revitalization Team process as good to excellent.	<b>2006</b>
<b>Goal</b>	PROVIDE EXCELLENCE	
<b>Oregon Context</b>	There are no Oregon Benchmarks or High Level Outcomes related to this measure, but participating on ERT is a priority for DEQ.	
<b>Data Source</b>	Customer service survey results provided by Economic Revitalization Team (ERT), 2008 Oregon Joint CSAT Survey.	
<b>Owner</b>	DEQ ERT Representative, Mary Camarata, (541) 687-7435	

**KPM14:**  
**Percent of local participants who rank DEQ involvement**  
**in Economic Revitalization Team process**



## 1. OUR STRATEGY

The Governors Economic Revitalization Team conducts a survey to measure customer satisfaction with ERT service once every two years (the first survey was conducted in 2006). The 2010 survey methodology was changed from targeted telephone interviews to an eSurvey tool. The method increased the

## **DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT**

number of customers and respondents. Survey questions measure ERT participants' perception of the involvement of four partner ERT agencies which include DEQ, Oregon Department of State Lands, Oregon Department of Land Conservation and Development and Oregon Department of Transportation . The 2010 survey criteria on agency involvement changed from six elements to one element. The desired outcome is the highest percentage of responses rating DEQ's performance as good to excellent.

### **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 2006, we received a ranking of 74 percent. In 2008, our ranking slightly increased to 79 percent and in 2010 our ranking slightly decreased to 76 percent. We are slightly below our target of 80 percent, but continue to receive higher rankings in the good to excellent categories.

### **4. HOW WE COMPARE**

DEQ received the highest ranking amongst the four partner agencies. The rankings for the four agencies ranged from 66 to 76 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 methodology changed, which 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 state's coordination. The survey results indicate that DEQ can refine our involvement in the ERT to provide better service in the future.

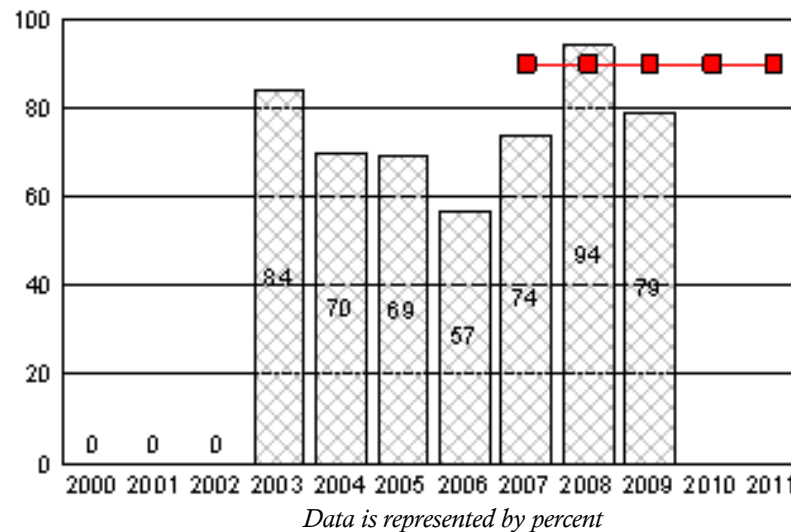
### **7. ABOUT THE DATA**

This data is reported in the 2010 Economic Revitalization Team Customer Satisfaction Study, completed June 4, 2010, and is available from the Governor's ERT office.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #15</b>	PERMIT TIMELINESS: Percent of Title V operating permits issued within the target period.	<b>2007</b>
<b>Goal</b>	IMPROVE OREGON'S AIR AND WATER.	
<b>Oregon Context</b>	KPM #15 links to: (1) Oregon's 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.	
<b>Data Source</b>	DEQ Air Quality Permit Tracking database	
<b>Owner</b>	DEQ Air Quality Program. Margaret Oliphant, (503) 229-5687	

**KPM15:**  
**Air Quality Permit Timeliness:**  
**Title V Permits issued within Target**  
*Bar is actual, line is target*



# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

## 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

DEQ's 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 was added as a Key Performance Measure 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; 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. Title V timeliness in 2009 was 79 percent, slightly lower than the adjusted 2008 and well below 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 led 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 as a result, timeliness has improved from the 2006 level. At the same time, the general public has become more concerned about emissions from industrial sources in their neighborhoods and the impact on their health. DEQ has responded by increasing the amount of time spent engaging the public and addressing their concerns regarding specific permits. Transparency is a service to the public but also means it takes more time to issue controversial permits and as a result, timeliness suffers. In 2009, permit writers were also involved in a higher than usual number of enforcement cases that have significant compliance issues. These permits often take much longer to process because compliance problems must be resolved before the permit can be finalized.

## 6. WHAT NEEDS TO BE DONE

As noted above, the 2007 Legislature approved a fee increase to add back staffing over three years, with the last position added in July 2009. Now that the

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

program is fully staffed, we would expect to see timeliness improvement; however, new federal requirements for the Title V program could impede progress. Recently, EPA added new permitting requirements for sources emitting significant amounts of greenhouse gases. The regulation will add new sources to the Title V program and require modifications to the permits of some existing Title V sources. DEQ has proposed a legislative concept to add a new Title V fee for greenhouse gas permitting and a policy package to add one additional position to perform the new work. Without the added staff resource, Title V permit timeliness will decline from current levels.

### 7. ABOUT THE DATA

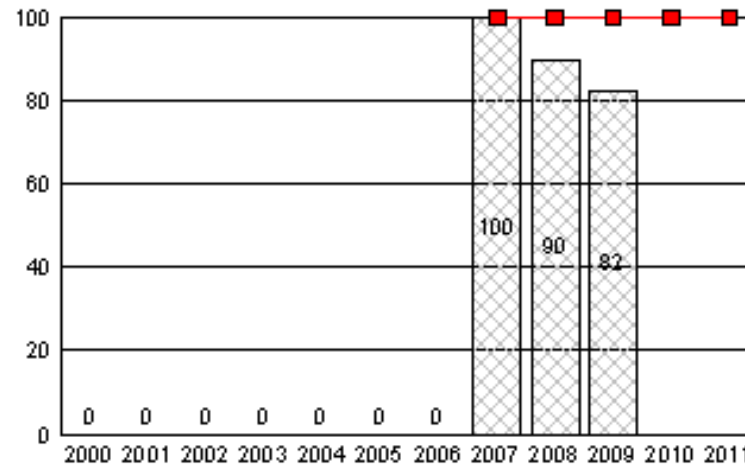
The reporting cycle is a calendar year. The strength of the data is that records exist on each of the Title V permit actions taken by DEQ during the year. The primary weakness of the system is that the data's validity depends on accurate entry by multiple individuals.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of		II. KEY MEASURE ANALYSIS
<b>KPM #16</b>	BOARDS AND COMMISSIONS: Percent of total best practices met by the Environmental Quality Commission	<b>2007</b>
<b>Goal</b>	Effective governance oversight of DEQ by the Environmental Quality Commission	
<b>Oregon Context</b>	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, issues orders, judges appeals of fines or other department actions, and appoints the DEQ director.	
<b>Data Source</b>	Self-evaluation by EQC members.	
<b>Owner</b>	Management Services Division. Joanie Stevens-Schwenger (503) 229-6585	

**KPM16:**  
**Percent of total best practices**  
**met by the Environmental Quality Commission**

Bar is actual, line is target



*Data is represented by percent*

## 1. OUR STRATEGY

Support the EQC in completing their annual self-evaluation and in making performance improvements identified by their self-evaluation.

## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

### 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 EQC is included in DEQ's budget and because it hires DEQ's executive director, DAS and LFO deemed 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, EQC adopted the percent of total best practices met by the commission as the performance standard. The measure is an annual self-assessment of 15 best practices for boards and commissions, as laid out by DAS and customized to EQC. The commissioners completed this survey during July and August 2010. Commission members held a discussion at their August 2010 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 third annual self-evaluation by EQC, so only the data from 2007 and 2008 are available for comparison.

### 3. HOW WE ARE DOING

The EQC rated itself an average of 82 percent across 15 survey questions. This is under the performance target, which is set for 100 percent. Several commissioners identified a need for increased opportunities for more training for commission members and a need to review EQC's best management practices to ensure proper implementation. One commissioner indicated a lack of knowledge to adequately assess the question about financial controls at DEQ. Another commissioner commented on the importance of the staff briefings, updates, information sharing and alerts as very critical to the commission being prepared to make the decisions commissioners need to make. It was also noted that DEQ allows for both the commission and the public to have the time necessary for critical input and decision-making processes.

### 4. HOW WE COMPARE

The 2007 results had a 100 percent rate of success. These 2008 results had a 90 percent rate of success and the 2009 results reveal an 82.3 percent rate of success. In each survey year, all five commissioners replied to the survey. The commission is now 18 percent below the performance target of 100 percent rate of success.

### 5. FACTORS AFFECTING RESULTS

The commission builds into its yearly calendar agenda items that ensure they perform best practices for commissions. For example, EQC regularly reviews the agency's budget and strategic plans. The 2008 and 2009 surveys allowed more response options than the 2007 survey, which resulted in a broader range of answers. The 2009 results indicate the need to provide more extensive training for the commission.

### 6. WHAT NEEDS TO BE DONE

The commission needs to continue its approach of annual self-evaluations, with an emphasis on identifying areas of potential improvement. Questions 10, 14 and 15 of the survey showed the lowest scores of 72, 72 and 68 percent respectively. Question 10 asks if the commission is appropriately accounting for resources. 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. When compared to the 2008 results, there were improvement in the scores for both questions 14 and 15, but the overall averaged score for all 15 questions declined. The commission and staff discussed the development of a training plan to improve the scores for the next evaluation. Staff will present a draft plan at the November 2010 commission retreat.



## DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

### 7. ABOUT THE DATA

Individual EQC members rate EQC's performance as a board having governance oversight on several criteria. The 2009 results are from information submitted by all five commissioners as replies to a standardized survey. The survey is the same as the 2007 survey, though the level of possible responses has changed. 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 2009, 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). This provided for greater gradation in the responses received.

# DEPARTMENT OF ENVIRONMENTAL QUALITY ANNUAL PERFORMANCE PROGRESS REPORT

ENVIRONMENTAL QUALITY, DEPARTMENT of	III. USING PERFORMANCE DATA
<b>Agency Mission:</b> To be a leader in restoring, maintaining and enhancing the quality of Oregon's air, water and land.	
<b>Contact:</b> Gregory K. Aldrich	<b>Contact Phone:</b> (503) 229-6345
<b>Alternate:</b> Melissa Aerne	<b>Alternate Phone:</b> (503) 229-5155

The following questions indicate how performance measures and data are used for management and accountability purposes.

<b>1. INCLUSIVITY</b>	<p><b>* Staff :</b> DEQ's measures coordinator facilitates internal and external reporting, as well as reviews and develops the agency's high level performance measures. DEQ's executive management team develops the agency's 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.</p> <p><b>* Elected Officials:</b> The Oregon legislature reviews and adopts DEQ's proposed measures during the budget approval process.</p> <p><b>* Stakeholders:</b> 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.</p> <p><b>* Citizens:</b> DEQ invites citizen input on our strategic priorities through the agency's strategic planning process outlined in DEQ's 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.</p>
<b>2. MANAGING FOR RESULTS</b>	<p>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 agency's 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 agency's 2006-2011 priorities. DEQ also proposed modifications to several Key Performance Measures in the agency's FY 2007-09 requested budget which were adopted by the Oregon Legislature in 2007. Performance measures are one tool DEQ's senior</p>

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
ANNUAL PERFORMANCE PROGRESS REPORT**

	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.
<b>3. STAFF TRAINING</b>	DEQ's measures coordinator provides training on the agency's 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.
<b>4. COMMUNICATING RESULTS</b>	<p><b>* Staff :</b> Performance is measured at many levels within DEQ, including program performance measures, such as those incorporated into the agency's Performance Partnership Agreement with EPA Region X, regional implementation measures, executive measures that support DEQ's 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.</p> <p><b>* Elected Officials:</b> 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.</p> <p><b>* Stakeholders:</b> DEQ's Annual Performance Progress Report is posted on the agency's 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.</p> <p><b>* Citizens:</b> DEQ's Annual Performance Progress Report is posted on the agency's website to inform Oregonians of agency performance and environmental results.</p>