BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF RECOMMENDING APPROVAL BY THE OREGON ENVIRONMENTAL QUALITY COMMISSION OF THE DRAFT 2006 PORTLAND-VANCOUVER AQMA (OREGON PORTION) AND SALEM KEIZER AREA OZONE MAINTENANCE PLAN	))))))	RESOLUTION NO. 06-3695 Introduced by Michael Jordan, Chief Operating Officer, with the concurrence of Council President Bragdon

WHEREAS, in accordance with the Clean Air Act Amendments (CAAA) of 1990, the U.S Environmental Protection Agency (EPA) designated the Portland metropolitan region a marginal nonattainment area for the one-hour ozone standard; and

WHEREAS, because of the region's air quality designation, the CAAA required that an ozone maintenance plan be prepared for the region; and

WHEREAS, the Metro Council, after consultation and coordination with the Joint Policy Advisory Committee on Transportation (JPACT), approved Resolution No. 96-2260, For the Purpose of Recommending to the Environmental Quality Commission the Transportation Control Measures (TCM's), Contingencies, and Emissions Budgets to Be Included in the Portland Region's Ozone and Carbon Monoxide (CO) Maintenance Plans; and

WHEREAS, the Oregon Environmental Quality Commission (EQC) adopted the 1996 Ozone Maintenance Plan on July 12, 1996, and, in turn, the EPA approved said plan on May 19, 1997; and

WHEREAS, although the region has not violated the one-hour ozone standard since 1998, and has not violated the new eight-hour ozone standard, the CAAA and EPA rules require that the region update the 1997 Ozone Maintenance Plan to demonstrate continued maintenance of ozone standards through the year 2015; and

WHEREAS, the Oregon Department of Environmental Quality (DEQ) has prepared a memo to interested parties dated April 11, 2006 and the draft 2006 Portland-Vancouver AQMA (Oregon Portion) and Salem Keizer Area Ozone Maintenance Plan dated April 18, 2006 (“Draft 2006 Ozone Maintenance Plan”), attached hereto concurrently as Exhibits A and B; and

WHEREAS, the Draft 2006 Ozone Maintenance Plan includes continuation of Employee Commute Options program, Industrial Emission Management program and air quality contingency plans which help ensure coordination between the state and region with regard to integrating transportation, land use and air quality; and

WHEREAS, DEQ has, in accordance with state and federal requirements, asked for public comment on the Draft 2006 Ozone Maintenance Plan; and

WHEREAS, the Transportation Policy Advisory Committee (TPAC), JPACT and the Metro Council have reviewed and considered the Draft 2006 Ozone Maintenance Plan; now, therefore

BE IT RESOLVED that the Metro Council hereby recommends that the EQC approve the Portland metropolitan region's portion of the Draft 2006 Ozone Maintenance Plan.

ADOPTED by the Metro Council this 25th day of May 2006.

David Bragdon, Council President

Approved as to Form:

Daniel B. Cooper, Metro Attorney

Exhibit A to Metro Resolution No. 06-3695

State of Oregon
Department of Environmental Quality Memorandum

Date: April 11, 2006

To: Interested Persons

From: Marianne Fitzgerald, (503) 229-5946

Subject: Portland-Vancouver and Salem Ozone Maintenance Plan and Proposed Rule Revisions

Background

The Portland area has exceeded federal clean air standards for ground level ozone (commonly known as summertime smog) in the past. The Oregon Department of Environmental Quality (DEQ) and the Southwest Clean Air Agency (SWCAA) developed Ozone Maintenance Plans for the Portland-Vancouver Air Quality Maintenance Area (AQMA) in 1996 that included several strategies to reduce emissions of air pollutants. DEQ and SWCAA are now updating the plans to demonstrate how the AQMA will maintain air quality within the 8-hour ozone standard through 2015. DEQ is also updating the ozone maintenance plan for the Salem area.

Maintenance Plan Proposal

Air quality data and projections show that the region will maintain clean air with the current programs in place. DEQ proposes to make certain rule changes to update certain parts of the maintenance plans affecting Portland and Salem. Highlights of the proposals include the following:

- Retain existing rules and strategies in the current ozone maintenance plans;
- Revise rules for Employee Commute Options to reduce administrative burdens while maintaining alternative commute programs at larger employers;
- Update rules for Industrial Emission Management in the Portland area, to manage growth of major new and expanding industrial sources;
- Redesignate Salem from a nonattainment area to a maintenance area under state rules; and
- Update rules for New Source Review in the Salem area, to manage growth of major new and expanding industrial sources.
- Amend DEQ rules to reflect the new federal ozone air quality standard, from the old 1-hour standard (which EPA has revoked) to the current federal 8-hour standard of 0.08 ppm, three year average.

The purpose of this memo is to let interested people know about the proposed plan and rule changes. Here is the schedule:

Informational Meeting

Friday, April 21, 2006, 8:30 am
DEQ Headquarters, Room 3A
811 SW Sixth Avenue
Portland

Rules Advisory Committee Meeting

Thursday, May 4, 2006, 8:30 am
DEQ Headquarters, Room 3A
811 SW Sixth Avenue
Portland

Other key dates:

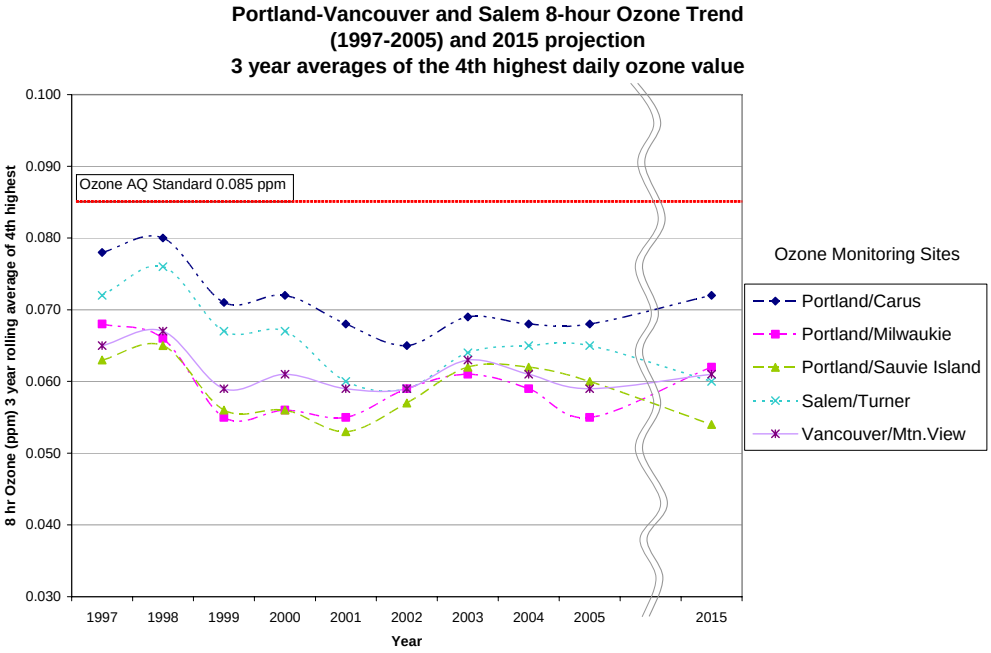
- Public Comment Period: June 1 to July 14, 2006
- Public Hearing: July 11, 2006 (Salem and Portland)
- EQC Adoption: December 14 or 15, 2006

Ozone Air Quality

Ozone air pollution is often called summertime smog. Pollutants known as volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) combine with oxygen to form ground level ozone on hot, stagnant summer days. Ozone producing emissions come from a wide variety of sources. Exposure to high levels of ground-level ozone can damage lung tissue and can be especially harmful to older people, children and people with respiratory ailments such as asthma.

The U.S. Environmental Protection Agency (EPA) revised the ozone standard from a 1-hour average of 0.12 ppm to an 8-hour average of 0.08 ppm in July 1997. After a lengthy court battle, the courts upheld the 8-hour ozone standard in 2002. EPA adopted rules to implement the 8-hour ozone standard on April 30, 2004, and revoked the 1-hour standard effective June 15, 2005.

Figure 1



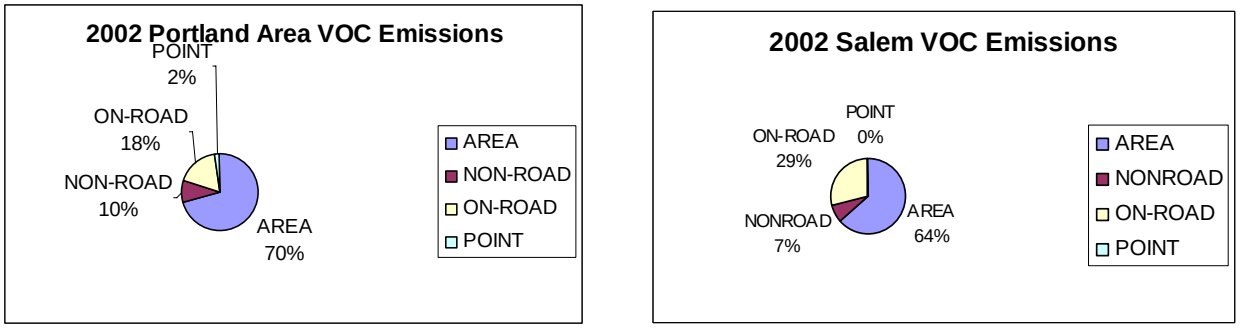
No violations of the 8-hour ozone standard have been recorded in Portland or Salem (see Figure 1). A violation is based on averaging the fourth highest daily 8-hour ozone values over a rolling three year period. There were exceedances of the 1-hour and 8-hour standards in 1996 and 1998 (based on the highest daily maximum 8-hour ozone value).

EPA designated the State of Oregon in “attainment” with the 8-hour ozone standard, effective June 15, 2004, based on air quality data from monitoring sites in the Portland-Vancouver, Salem, Eugene, and Medford areas. The federal Clean Air Act and EPA rules require DEQ to update the maintenance plan for Portland and Salem because they have violated the one-hour ozone standard in the past.

Where does the pollution come from?

The latest emissions estimates indicate that the largest contributors of VOC emissions are "area sources" which are primarily from households, small businesses and other small diffuse sources (see Figures 2 and 3). Area sources include household consumer products, paints and other surface coating, dry cleaners, printing operations, open burning and wildfires. Mobile sources, which include both on-road motor vehicles and non-road engines, also are a major source of VOC emissions as well as air toxics and greenhouse gases. On-road motor vehicle emissions are projected to decrease as federal engine and fuel standards phase in over the next ten years. Emissions from small engines, including lawnmowers, construction equipment and recreational watercraft, are projected to increase due to population increases in the region. Industrial (point) sources are a relatively small portion of the 2002 emission inventory.

Figure 2: VOC Emissions in Portland and Salem



Future Year Forecast

DEQ calculated 2015 air quality values using air quality dispersion modeling techniques. Modeling projections for 2015 ozone values are based on simulating meteorological conditions during a July 1998 episode that produced the highest ozone values in recent years. The model applies future year emission estimates to the meteorology and calculates ozone values. The 2015 maintenance projection predicts that the Portland-Vancouver AQMA and Salem-Keizer Area Transportation Study (SKATS) will remain in compliance with the 8-hour ozone standard (see Figure 1).

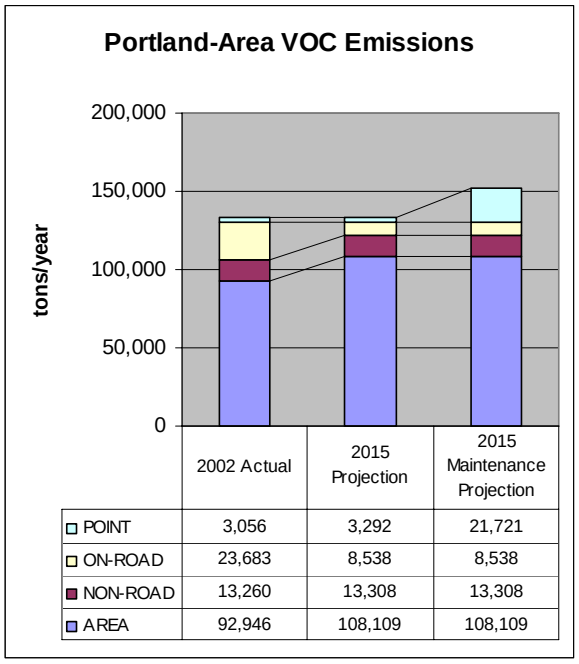
Figure 3 illustrates emission projections for 2015 in both Portland and Salem. These emission values are in tons per year and represent the annual emissions estimates. The Portland area includes Clackamas, Multnomah and Washington Counties. The Salem area includes Marion and Polk Counties.

- The "2002 actual" column represents the baseline year in the maintenance plan.
- The "2015 Projection" column represents the future year emissions using the actual emissions data that industrial sources reported to DEQ in 2002, forecast using employment projections through 2015. Growth factors and modeling techniques were also applied to other sources to calculate the 2015 emissions estimate. The "actual" emissions represent the most likely estimate of future year emissions.
- The "2015 Maintenance Projection" column represents future year emissions using the "allowable" plant site emission limits in industrial source air quality permits. The "allowable" emissions represent the most conservative estimate of industrial emissions

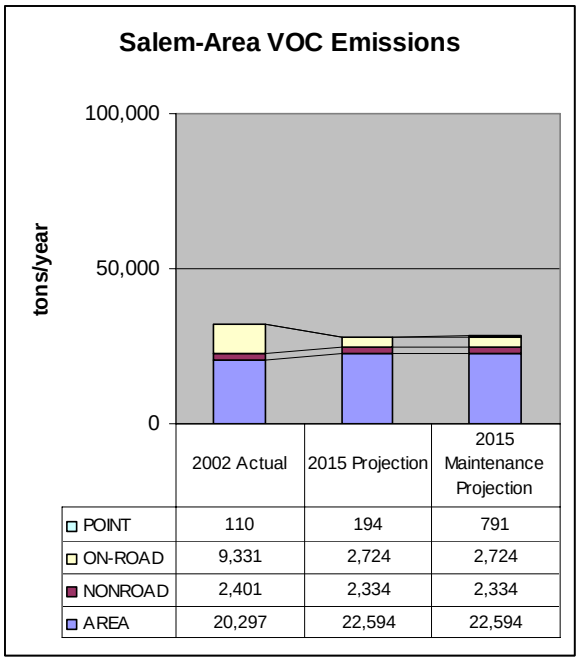
allowed under existing permits. The point source emissions estimate also includes the industrial emissions growth allowance described below.

The "2015 Maintenance Projection" is the emissions inventory used in the air quality dispersion model to determine whether the Portland-Vancouver AQMA and Salem SKATS would maintain compliance with the 8-hour ozone standard. The model predicts that both areas will remain within the 8-hour ozone standard in 2015 (see Figure 1).

Figure 3: VOC Emission Projections



	2002 Actual	2015 Projection	2015 Maintenance Projection
POINT	3,056	3,292	21,721
ON-ROAD	23,683	8,538	8,538
NON-ROAD	13,260	13,308	13,308
AREA	92,946	108,109	108,109



	2002 Actual	2015 Projection	2015 Maintenance Projection
POINT	110	194	791
ON-ROAD	9,331	2,724	2,724
NONROAD	2,401	2,334	2,334
AREA	20,297	22,594	22,594

Air Quality Maintenance Plans for Portland-Vancouver and Salem

DEQ is updating the Oregon portion of the Portland-Vancouver Ozone Maintenance Plan, and developing a Salem Ozone Maintenance Plan, to address federal Clean Air Act requirements and EPA rules. As discussed above, DEQ's air quality modeling analysis demonstrates that even though some sources are projected to increase emissions and other are projected to decrease emissions over the next ten years, the strategies in the plan ensure that ozone air quality will remain within the federal 8-hour ozone standard (see Figures 1 and 3).

Portland-Vancouver Ozone Maintenance Plan

The maintenance plan that was adopted for the Portland-Vancouver AQMA in 1996 contained several rules and programs that reduced VOC and NO_x emissions. These strategies would remain in place and work together to protect air quality as the population increases over the next ten years. These strategies also reduce emissions of air toxics and greenhouse gases that are emerging issues of concern.

The following strategies would remain in the Portland Ozone Maintenance Plan as they currently apply to sources in the Portland area:

- Motor Vehicle Inspection Program;
- Emission Standards for Industrial Sources of VOC;
- New Source Review Program for new and expanding major industrial facilities;
- Voluntary Parking Ratio Rules;
- Barge Loading Rules that control VOCs from gasoline delivery operations;
- Aerosol Paint Rules that lower VOC content from spray paints sold in the Portland area;
- Motor Vehicle Refinishing Rules that require low-emitting painting methods at autobody repair shops; and
- Public education and outreach that encourages people to voluntarily reduce emissions, such as not mowing lawns on Clean Air Action Days, and driving less during Air Pollution Advisories.

The following strategies would also remain in the Portland Ozone Maintenance Plan, but would be modified (see detail below):

- Employee Commute Options (ECO) Program; and
- Industrial Emission Management Program.

Stage II gasoline vapor recovery system requirements for gas stations in the Portland area would remain in effect until enough newer cars and trucks with on-board vapor recovery canister systems become widespread within the motor vehicle fleet.

Salem Ozone Maintenance Plan

The Portland-Vancouver and Salem SKATS Ozone Maintenance Plans are being updated together because Salem's ozone concentrations are impacted by emissions of VOC and NO_x in the Portland area. Salem is technically defined as a "rural" ozone nonattainment area, and a plan was developed in September, 1980 under EPA's rural ozone policy and approved by EPA in 1982. The Salem Ozone Maintenance Plan relies on three strategies:

- Controls on major existing industrial VOC sources under Reasonably Available Control Technology (RACT) rules;
- Controls on major new or expanding industrial VOC sources under Lowest Achievable Emission Rate (LAER) rules; and
- An approved control strategy for the major upwind urban area influencing ozone concentrations in Salem (Portland).

DEQ requested redesignation of Salem to a maintenance area in 1987, but the plan was returned by EPA without formal action. Salem's ozone monitor was temporarily discontinued from 1987 through 1994 due to low ozone air quality levels and agency budget cuts. Following the 1990 Clean Air Act Amendments, Salem was designated a "nonattainment" area with incomplete data. No violations of the 1-hour ozone standard have been recorded at the Salem/Turner monitoring site since 1996, and no violations of the 8-hour ozone standard have ever been recorded.

DEQ proposes to retain the strategies in the Salem Ozone Maintenance Plan, including the industrial source RACT rules, although two rules affecting the Salem area would be modified (see detail below):

- Redesignate Salem from a "nonattainment" area to a "maintenance" area under state rules; and
- Modify requirements for major new industrial sources from "Lowest Achievable Emission Rate" (LAER) to "Best Available Control Technology (BACT); all other new source review requirements would remain the same.

Proposed Revisions to Strategies and Rules

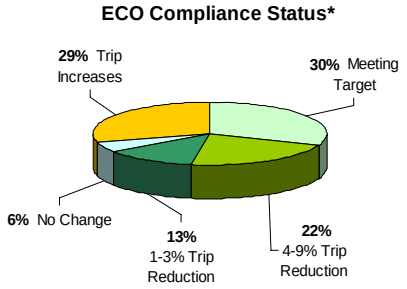
DEQ proposes to amend certain rules as part of the Portland-Vancouver and Salem Ozone Maintenance Plan. The proposed revisions are described below.

Employee Commute Options Program Rules

The Employee Commute Option rules affect employers in the Portland area with more than 50 employees reporting to a single work site. Affected employers must provide incentives for employee use of alternative commute options. The incentives must have the potential to reduce commute trips to the work site by 10% within three years of completing an initial employee survey. Annual surveys measure progress toward this goal.

Key program statistics:

- Number of employer work sites: 1212
- Estimated number of employees affected: 250,000
- Annual Vehicle Miles Traveled reduced: 35.4 million



*based on survey data as of August 2005. Not all employers are required to survey.

Annual survey data indicates that larger employers are more likely to comply with ECO and provide meaningful transportation options to their employees. Larger employers represent most of the employees in the region. Smaller companies make up the majority of employers who are behind with ECO compliance.

- Employers with more than 100 employees generate 92% of the total trip reduction.
- Employers with more than 100 employees make up 86% of the total ECO affected *employees*.
- Employers with more than 100 employees make up 53% of the total ECO affected *employers*.

DEQ is proposing changes that would more effectively focus limited DEQ staff resources on the larger employers, and update some provisions in the rules. The following are proposed changes to the ECO rules:

- Change the threshold for rule applicability from "more than 50" to "more than 100" employees.
- Change the survey requirement from annual to every two years.

- Require all employers to submit an approved plan, or demonstrate that they participate in an equivalent commute trip reduction program, such as EPA's Best Workplaces for Commuters program or TriMet's Passport program.
- Modify the survey requirements to allow an employer to submit follow-up survey results with less than 75% response rate. DEQ would assign single occupancy vehicle trips to the percentage of employees who did not respond up to the 75% rate.
- Eliminate the 2006 sunset date since the ozone maintenance plan does not sunset.
- Require employers that qualify for exemptions (e.g. through restricted parking ratios) to certify every two years that they continue to qualify for the exemption.

The Employee Commute Option Program has been effective in reducing the amount of vehicle miles traveled by single-occupancy-vehicles in the Portland area, thereby reducing air pollution and traffic congestion in the region. The ECO program has resulted in an estimated annual reduction of over 100 tons of VOCs and over 85 tons of NO_x. In addition to the benefits to ozone air quality, DEQ estimates that the ECO program is also effective in reducing over 44 million pounds per year of carbon dioxide (a greenhouse gas), as well as associated air toxics emissions (most notably benzene). DEQ's proposed rule changes would streamline the program and make it more effective in encouraging alternative commute trips among larger employers while providing relief to smaller employers.

Update to the Industrial Emission Management Rules

DEQ proposes to update the Portland-area Industrial Emissions Management Program to support economic development for major new or expanding sources that locate in the Portland area while assuring compliance with the ozone standard. Currently, major new or expanding sources that propose to increase emissions of more than 40 tons/year of VOC or NO_x must "offset" those emission increases. The 1996 Portland Ozone Maintenance Plan established a growth allowance that could be used to offset those emission increases while maintaining clean air. DEQ's modeling analysis shows that the growth allowance could be continued and still maintain air quality within the air quality standard (see Figure 1 and Figure 3).

DEQ proposes to modify the rules to:

- Re-establish the size of the growth allowance at 5000 tons of VOC and 5000 tons of NO_x; and
- Provide an opportunity to replenish the growth allowance, if needed, based on periodic emission inventory updates and an evaluation of ozone air quality monitoring data and trends.

Salem Redesignation and New Source Review

Salem is currently designated a "nonattainment" area under state rules, and major new and modified industrial sources that emit more than 40 tons/year of VOC or NOx are subject to the most stringent emission control technologies known as "Lowest Achievable Emission Rate" (LAER). Once redesignated as a "maintenance" area, state rules would continue to require sources emitting more than 40 tons/year of VOC or NOx to install emission control technology, but would lessen the level of control required from LAER to "Best Achievable Control Technology (BACT). If Salem were not redesignated as a "maintenance" area, but were redesignated a federal attainment area only, then BACT emission control technology would not be required until a new or expanding major industrial source became a Federal Major Source and emitted 100 tons/year or more of VOC or NOx for 28 source categories, or 250 tons/year or more of VOC or NOx for other sources. DEQ believes maintaining a lower maintenance area threshold of 40 tons/year for triggering BACT requirements will better protect future compliance with the ozone standard in the Salem area.

The main difference between LAER and BACT is the consideration of cost. LAER reflects the most stringent level of emission control achievable at the time of permitting, and it must be installed

regardless of cost. BACT can also provide a very high level of control, but cost is allowed as a consideration when evaluating the feasibility and cost effectiveness of control options.

Contingency Plans:

DEQ proposes to modify the existing Portland-Vancouver contingency plan, and adopt a contingency plan for Salem. The contingency plan establishes early warning thresholds that are designed to prevent violations of the 8-hour ozone standard.

The contingency plan consists of several tiers:

- If air quality is forecast to exceed the standard for one or more days, DEQ will issue a health warning to sensitive individuals and groups and seek voluntary emission reductions;
- If air quality is at risk of violating the 8-hour ozone standard**,** DEQ will investigate the cause of the event, review key maintenance plan assumptions, and take corrective action with new strategies as needed.
- If air quality violates the standard, DEQ will also investigate the cause of the event, review key maintenance plan assumptions, and take corrective action as needed to reduce emissions and prevent future violations.

For more information

If you have questions or would like a copy of the discussion draft of the Portland-Vancouver AQMA and Salem-Keizer Area Ozone Maintenance Plan and associated rules, please contact Marianne Fitzgerald at DEQ's Air Quality Division in Portland at (503) 229-5946, or fitzgerald.marianne@deq.state.or.us.

Exhibit B to Metro Resolution
No. 06-3695

Discussion Draft

Portland-Vancouver AQMA
(Oregon Portion)
and
Salem Keizer Area
Ozone Maintenance Plan

Oregon Department of Environmental Quality
Air Quality Division
811 SW Sixth Avenue
Portland, OR 97204

April 18th
2006

For more information

If you have questions or would like a copy of the proposed rule revisions, please contact Marianne Fitzgerald at DEQ's Air Quality Division in Portland at (503) 229-5946, or fitzgerald.marianne@deq.state.or.us.

DISCUSSION DRAFT

Oregon State Implementation Plan
Section 4.50

Portland-Vancouver AQMA
(Oregon portion)
And
Salem-Keizer Area
8-hour Ozone Maintenance Plan

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DISCUSSION DRAFT

Executive Summary

The Portland area has exceeded federal clean air standards for ground level ozone (commonly known as summertime smog) as recently as 1998. In 1996, the Oregon Department of Environmental Quality (DEQ) and the Southwest Clean Air Agency (SWCAA) developed Ozone Maintenance Plans for the Portland-Vancouver Air Quality Maintenance Area (AQMA) that included several strategies to reduce air pollutants and ensure compliance with ozone standards. These strategies were successful in reducing smog forming emissions and no violations of the ozone standard have occurred in the Portland-Vancouver area since 1998.

In 1997, the U. S. Environmental Protection Agency (EPA) revised the ozone standard from a 1-hour average of 0.12 parts per million (ppm) to an 8-hour average of 0.08 ppm. This 2006 ozone maintenance plan is a revision to the 1996 maintenance plan for the Portland-Vancouver area, and ensures continued compliance with the new 8-hour ozone standard through at least 2015. The plan also includes an ozone maintenance plan for the Salem-Keizer Area Transportation Study (SKATS) area. Both the Portland-Vancouver and Salem areas are covered in the Departments ozone maintenance (modeling) analysis. An ozone maintenance plan update for the Vancouver portion of the Portland-Vancouver AQMA is being prepared by the Southwest Clean Air Agency in Vancouver, Washington.

This 2006 maintenance plan continues the same strategies adopted for the Portland-Vancouver AQMA in 1996 to reduce and manage Volatile Organic Compounds (VOC) and Nitrogen Oxide (NO_x) emissions. Air quality data and projections show that ozone levels can still occasionally approach or exceed the 8-hour ozone standard in the Portland-Vancouver area, but that with the existing strategies in place, the region will maintain compliance with the 8-hour ozone standard. The suite of strategies described below work together to protect air quality as growth and population pressures increase over the next ten years. This suite of strategies will also reduce emissions of air toxics and greenhouse gases that are important emerging issues of concern.

The following strategies will remain in the Portland-Vancouver Ozone Maintenance Plan as they currently apply to sources in the Portland area:

- Motor Vehicle Inspection Program;
- Emission Standards for Industrial Sources of VOC;
- New Source Review Program for new and expanding major industrial facilities;
- Voluntary Parking Ratio Rules;
- Barge Loading Rules that control VOCs from gasoline delivery operations;
- Aerosol Paint Rules that lower VOC content from spray paints sold in the Portland area;
- Motor Vehicle Refinishing Rules that require low-emitting painting methods at autobody repair shops; and
- Public education and outreach that encourages people to voluntarily reduce emissions, such as not mowing lawns and driving less on Clean Air Action Days (now called Air Pollution Advisories).

Strategies that have reduced VOC emissions in the Salem SKATS area will also remain in place, including emission standards for existing industrial source of VOC.

The 2006 maintenance plan includes updates to several programs:

- Revised rules for Employee Commute Options in the Portland Area to reduce administrative burdens while maintaining alternative commute programs at larger employers;
- Updated rules for Industrial Emission Management in the Portland area, to manage growth of new and expanding major industrial sources;
- Designate the Salem-Keizer Air Quality Area as an ozone maintenance area under state rules;
- Revised rules for New Source Review in the Salem area, to change emission control technology requirements for new and expanding major industrial sources; and
- Amended DEQ rules to reflect the new federal ozone air quality standard, from the old 1-hour standard (which EPA has revoked) to the current federal 8-hour standard of 0.08 ppm, three year rolling average.

4.50.1 Background

Ground level ozone, also known as smog, is an air pollutant formed in the atmosphere by a chemical reaction of volatile organic compounds (VOC) and oxides of nitrogen (NO_x). This reaction is most intense on hot summer days with poor ventilation. Ozone is a strong respiratory system irritant that aggravates respiratory illnesses, impairs athletic performance, and can cause permanent respiratory system damage. Ozone can be especially harmful to older people and children, and can damage crops and other materials. In the past, motor vehicles and industrial operations have been the major sources of ozone precursors. We now recognize that other sources such as household products, paints, construction equipment, watercraft and lawnmowers are major contributors to ozone formation.

Historically, the Portland-Vancouver and Salem-Keizer areas violated the national ambient air quality standard (NAAQS) for ground level ozone[1]. The Portland-Vancouver Air Quality Maintenance Area (AQMA) and the Salem-Keizer Area Transportation Study (SKATS) areas were designated nonattainment for ozone on March 3, 1978 under the 1977 Clean Air Act Amendments. Plans were subsequently developed to reduce ozone precursor emissions of VOC and NO_x, and bring the areas into compliance (attainment) with standards. Under the 1990 Clean Air Act Amendments, the Portland-Vancouver AQMA was designated a “marginal” ozone nonattainment area, and Salem-Keizer Transportation Area Study was designated “nonattainment/insufficient data”.

4.50.1.1 Portland-Vancouver AQMA

Over several decades, efforts to reduce smog forming emissions in the Portland area have included a combination of federal, state, and local emission control strategies, including a vehicle inspection and maintenance program for Portland-area motor vehicles (1975), industrial VOC controls (1978), and area source controls on gasoline station vapors (1991). The most recent ozone maintenance plan for Portland-Vancouver was adopted by the Oregon Environmental Quality Commission (EQC) on July 12, 1996 and approved by EPA on May 19, 1997 (62FR 27204). A violation of the 1-hour ozone standard did occur in 1998, before all

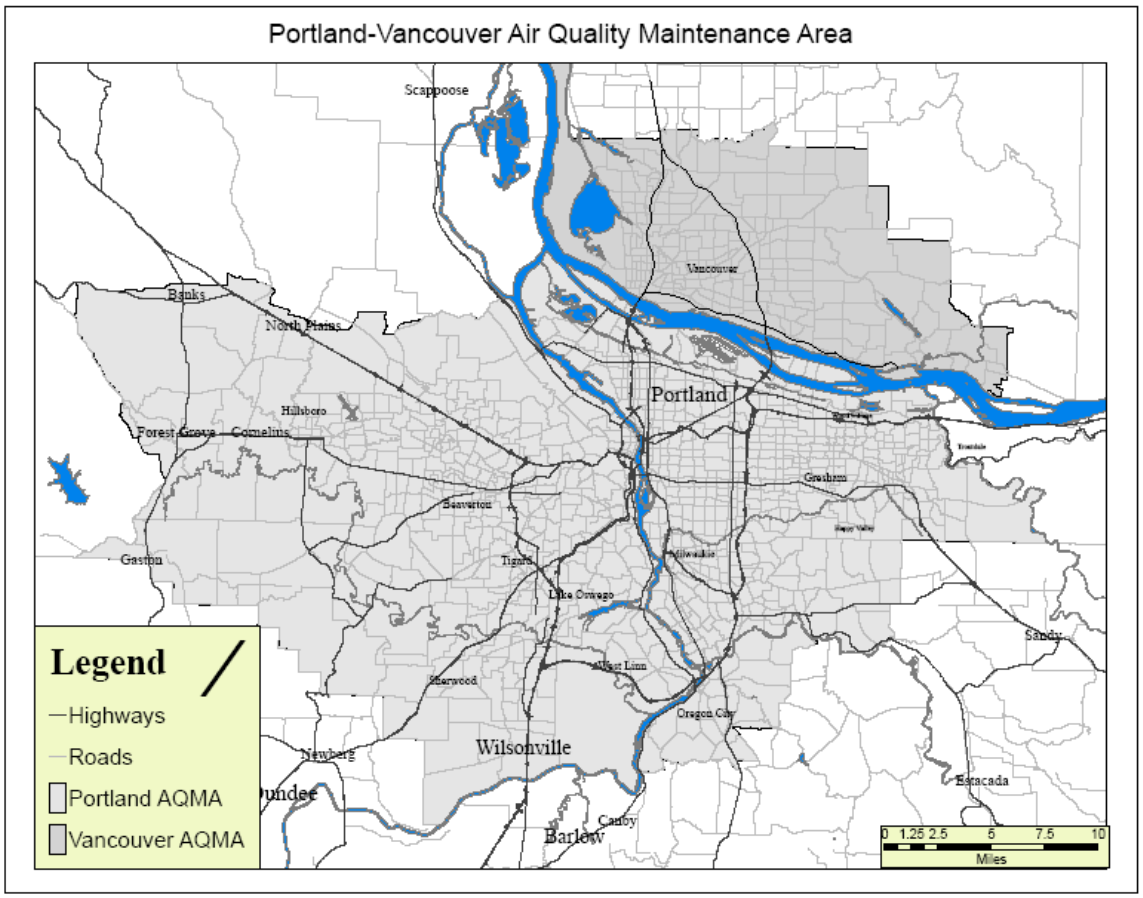
[1] Ozone monitoring sites were established in Oregon beginning in the early 1970s (see Appendix 1).

emission reduction measures had been fully implemented. However, since 1998, there have been no violations of the ozone standard.

In 1997, the U. S. Environmental Protection Agency (EPA) revised the ozone standard from a 1-hour average of 0.12 parts per million (ppm) to an 8-hour average of 0.08 ppm. After a lengthy court battle, the courts upheld the 8-hour ozone standard in 2002. EPA adopted rules to implement the 8-hour ozone standard on April 30, 2004, and revoked the 1-hour standard effective June 15, 2005. EPA designated the State of Oregon in "attainment" with the 8-hour ozone standard, effective June 15, 2004 (62FR 23858, April 30, 2004).

EPA's transition rules from the 1-hour to 8-hour ozone standards require DEQ to prepare this 2006 maintenance plan update for the Portland-Vancouver area to ensure continued compliance with the 8-hour ozone standard. Also, in accordance with EPA rules to implement the 8-hour ozone standard (62 FR 23951, April 30, 2004), Oregon hereby requests that EPA remove the obligation to do a second one-hour ozone maintenance plan.

Figure 1: Portland-Vancouver Interstate Air Quality Maintenance Area



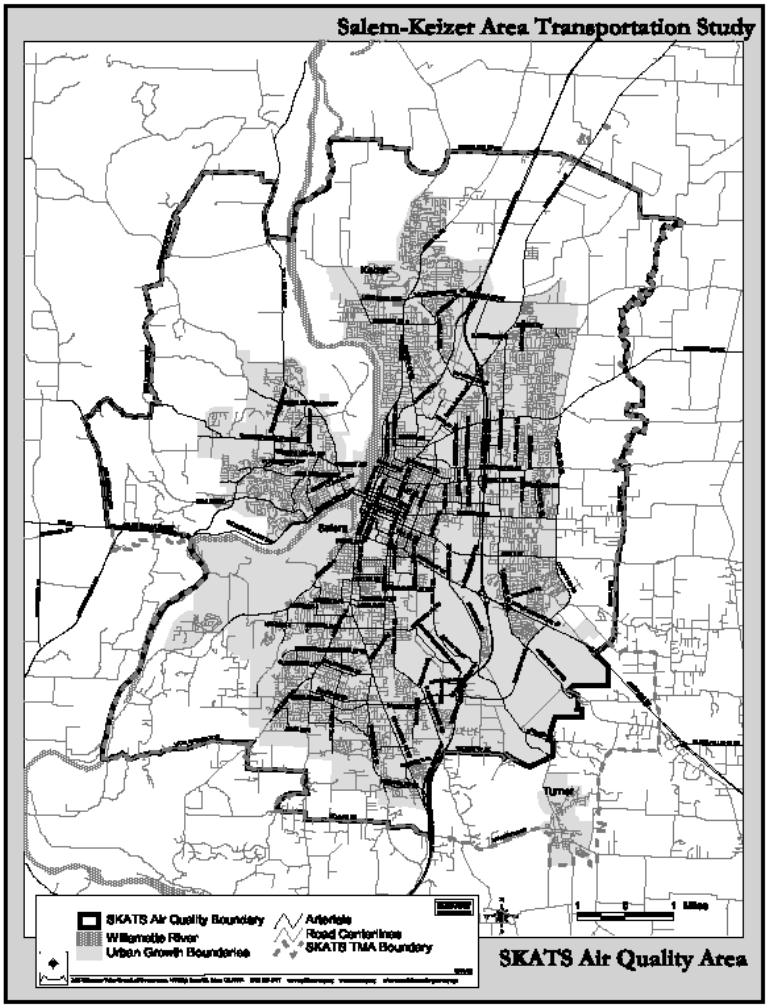
An analysis of meteorological and growth factors indicates that the number of days with elevated ozone levels should have risen over the past several years, but in fact has remained relatively stable (see Appendix 2). This stable ozone trend indicates that the ozone strategies

continue to work despite significant population growth in the metropolitan area and the occurrence if high temperature/air stagnation events that drive ozone formation. The suite of emission reduction strategies contained in Portland ozone plan will continue to be very successful in reducing smog forming emissions, and will continue to ensure compliance with ozone standards in to the future.

4.50.1.2: Salem-Keizer Area

The Salem area marginally violated the federal air quality standard for ozone in the 1970s and was designated an ozone nonattainment area on March 3, 1978 under the 1977 Clean Air Act Amendments. The Mid-Willamette Valley Council of Governments recommended the nonattainment area as the area within the Salem-Keizer Area Transportation Study boundary (SKATS). This includes portions of Marion and Polk County, including the cities of Salem and Keizer.

Figure 2: Salem-Keizer Area Transportation Study Air Quality Area



Salem's ozone concentrations appear to be influenced by emissions of ozone precursors in the Portland area. In 1979 the Salem area was defined under EPA guidelines as a "rural" ozone nonattainment area, and an Attainment Plan was adopted by the EQC in September, 1980 and approved by EPA on April 12, 1982. Salem's attainment plan under the rural ozone policy consists of three elements: 1) controls on major existing sources of volatile organic compounds under Reasonably Available Control Technology (RACT) rules, 2) controls on major new VOC sources under Lowest Achievable Emission Rate (LAER) rules, and 3) an approved maintenance plan for the Portland-Vancouver AQMA, which is the major urban area upwind of Salem.

DEQ had developed a maintenance plan and requested redesignation to attainment in 1987, but EPA returned the plan because EPA did not believe it contained sufficient emission inventory data and forecasts. Due to low ambient ozone levels and agency budget cuts, DEQ discontinued the Salem ozone monitor from 1987 through 1994 and was not able to complete the necessary planning work for redesignation. Under the 1990 Clean Air Act Amendments, SKATS was designated a nonattainment area with incomplete data. In 1995, DEQ reinstated the ozone monitor to support development of a maintenance plan for Salem, but was unable to secure staffing resources to complete the plan.

No violations of the federal 1-hour standard have been recorded at the Salem/Turner ozone monitoring site since 1996, and no violations of the 8-hour ozone standard have ever been recorded (see Figure 3 and Tables 1 and 2). Salem SKATS was designated in attainment with the 8-hour ozone NAAQS effective June 15, 2004 (62 FR 23858, April 30, 2004).

4.50.2 Ozone Trends and Compliance with Standards

Figure 3 shows the ozone trends measured at monitoring sites for the Portland, Vancouver, and Salem areas for the period 1997 through 2005. Table 1 shows the highest maximum 8-hour average ozone concentrations measured for 1998, 2003, 2004, and 2005. While these peak values are important in assessing public health risk, they are not used to determine official compliance with the federal ozone standard. Compliance with the standard is based on a statistical method that looks at the three year average of the 4th highest (maximum 8-hr avg.) ozone value each year. If the three-year average of the 4th highest values exceeds the standard, the area is in violation. Table 2 shows the rolling three-year average of 4th high values for 1998, 2003, 2004, and 2005. It is these ("design values") that are compared to the 0.08 ppm ozone standard to determine compliance. Under EPA's calculation convention, a value of 0.084 ppm would round down to 0.08 ppm (i.e. in compliance), while a value of 0.085 ppm or higher would be a violation.

Key ozone monitoring sites include the "Carus" site in Portland, "Mountain View" site in Vancouver, and the "Turner" site in Salem (see Appendix 1).

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Figure 3: Portland-Vancouver and Salem 8-Hour Ozone Values

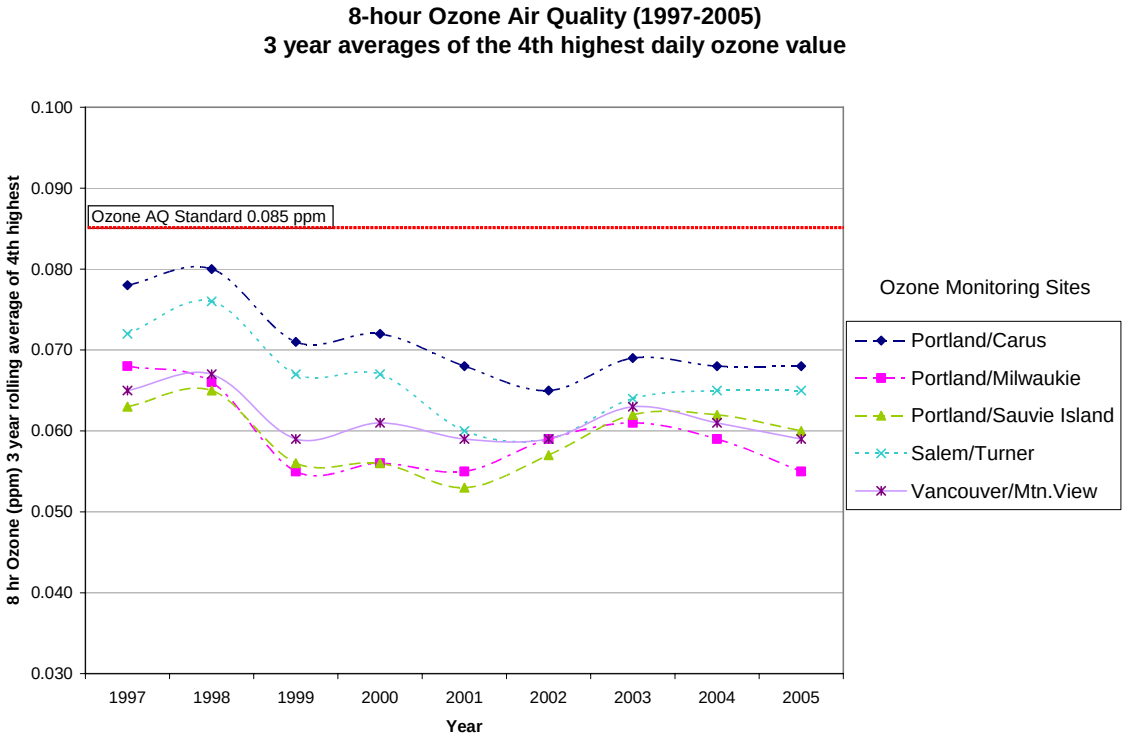


Table 1: 8-Hour Ozone Maximum Values

8-hour ozone standard = 0.08 ppm

Exceedance = 0.085 ppm maximum

Monitoring Site	1998 8-hour Maximum	2003 8-hour Maximum	2004 8-hour Maximum	2005 8-hour Maximum
Portland/Carus	0.116	0.084	0.084	0.079
Portland/Milwaukie	0.100	0.068	0.077	0.063
Portland/Sauvie Island	0.077	0.073	0.061	0.065
Vancouver/Mtn. View	0.078	0.076	0.065	0.076
Salem/Turner	0.098	0.080	0.068	0.080

Table 2: 8-Hour Ozone 4th High, Design Values
Design Value = 4th highest 8-hour average, averaged over three years
8-hour ozone standard = 0.08 ppm
Violation = 0.085 ppm design value

Monitoring Site	1998 Design Value	2003 Design Value[2]	2004 Design Value	2005 Design Value
Portland/Carus	0.080	0.070	0.068	0.068
Portland/Milwaukie	0.066	0.060	0.059	0.055
Portland/Sauvie Island	0.065	0.060	0.062	0.060
Vancouver/Mtn View	0.067	0.060	0.061	0.060
Salem/Turner	0.076	0.060	0.065	0.065

4.50.3 Attainment Inventory

DEQ developed an attainment emission inventory for the year 2002. The emission inventory reflects detailed estimates of emissions from all sources on an annual, countywide basis. Emissions are grouped in four major categories:

- Industrial (Point) Sources (sources with a DEQ air quality permit),
- On-Road Mobile Sources (e.g. motor vehicles and trucks),
- Non-Road Mobile Sources (e.g. lawnmowers, construction equipment and other small engines), and
- Area Sources (e.g. household products, print shops, degreasing and surface coating operations, pesticide application, open burning and wildfires).

The 2002 Consolidated Emissions Reporting Rule (CERR) emissions data submitted by DEQ and SWCAA to EPA's National Emission Inventory (NEI) was used as the basis for the 2002 attainment year inventory. This 2002 county-by-county annual inventory was developed following the currently accepted methodologies for the National Emission Inventory. Appendix 3 and Appendix 4 describe the emissions inventory calculations in more detail.

Table 3 contains the countywide estimates for the Portland-Vancouver AQMA, Oregon portion (Clackamas, Multnomah and Washington Counties) and Salem SKATS (Marion and Polk Counties) in tons/year. Countywide estimates, in tons/year, will be used to track future emission trends. The final Portland-Vancouver and Salem Ozone Maintenance Plan will include a typical summer-seasonal day emission inventory, adjusted for AQMA and SKATS boundaries, in accordance with EPA guidance.

Area source emissions were calculated following EPA guidance for the 2002 NEI. Area sources are the largest category of emission sources. Some of these sources of VOC emissions include

[2] 2003 Design Value was used to determine the attainment designation for Portland-Vancouver AQMA (January 22, 2004 letter from DEQ to EPA). Design value is calculated using the 4th highest ozone value at each monitoring site, averaged over 3 years.

painting, surface coating and degreasing operations; print shops; dry cleaners; and household consumer products. The annual area source emissions inventory in both Portland and Salem includes residential wood stoves, a significant emitter of VOC but not likely to be in use during ozone episode conditions with temperatures above 90 degrees. The summer-seasonal emissions inventory and ozone maintenance modeling demonstration reflect daily summertime conditions.

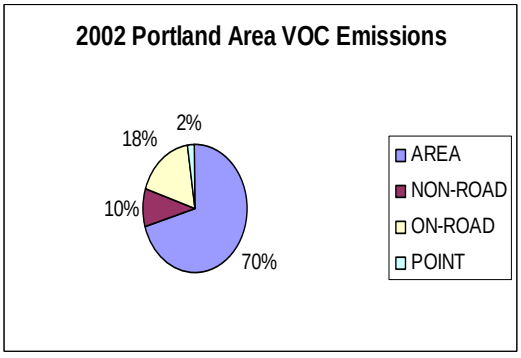
Table 3: Portland and Salem 2002 Annual Emissions (tons/year)

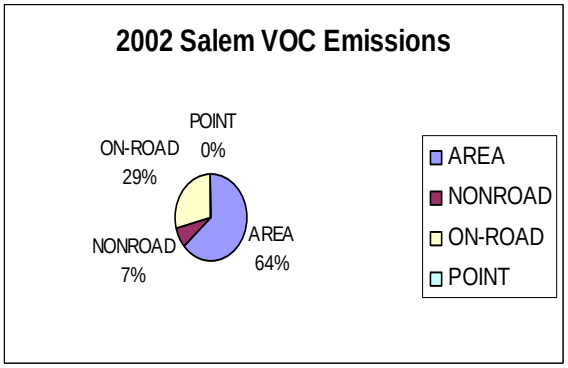
Portland-Area 2002 Emissions (Clackamas, Multnomah, Washington Counties)

Source Type	2002 VOC	2002 NO_x
AREA	92,946	5,808
NON-ROAD	13,260	17,347
ON-ROAD	23,683	36,786
POINT	3,056	2,522
Total	132,944	62,464

Salem-Area 2002 Emissions (Marion, Polk Counties)

Source Type	2002 VOC	2002 NO_x
AREA	20,297	1,646
NONROAD	2,401	3,159
ON-ROAD	9,331	11,276
POINT	110	290
Total	32,138	16,371





Non-road mobile source emissions were calculated using EPA's draft NONROAD2002 model and other methods following EPA guidance for the NEI. Non-road engines are also significant contributors to both VOC and NO_x during the summer ozone season, and sources include aircraft, locomotives and marine engines as well as lawn and garden equipment, construction equipment, boats and personal watercraft.

On-road mobile source emissions for the 2002 CERR were calculated using traffic data and growth forecasts from the Oregon Department of Transportation. Because of growing vehicle travel throughout the region, motor vehicles will continue to be significant emitters of VOCs and NO_x, although motor vehicle emission standards will reduce individual vehicle emissions over the next ten years.

Point source emissions for the 2002 Attainment Inventory are based on data submitted by permitted facilities and reflect actual 2002 emissions reported in annual permit reports to DEQ.

Within the Portland-Vancouver AQMA, industrial point sources that emit more than 10 tons/year of VOC, 40 tons/year of NO_x, or 100 tons/year of CO were inventoried. Outside of the Portland-Vancouver AQMA (including Salem), point sources that emit more than 40 tons/year of NO_x or 100 tons/year of VOC or CO were inventoried. Stack parameters, activity, and exact location were collected to provide the most comprehensive accounting possible.

Reserved for seasonally adjusted summer-season emissions inventory

Table 4: Portland and Salem 2002 VOC and NOx Summer-Season Daily Emissions

Reserved

4.50.4 Portland and Salem Control Strategies

4.50.4.1 Portland-Vancouver AQMA Ozone Maintenance Plan

The Portland-Vancouver AQMA Ozone Maintenance Plan (Oregon portion) includes federal, state and local emission control programs. All four major source categories of ozone precursor emissions (VOC and NO_x) are affected by rules that reduce emissions from these sources. Several of the strategies provide benefits beyond VOC and NO_x emission reductions, such as air toxics and greenhouse gas emission reductions, traffic congestion reduction, energy savings, and overall cost-savings for the transportation systems.

The existing Portland-Vancouver AQMA Ozone Maintenance Plan strategies will remain in place and work together to protect air quality as the population increases over the next ten years. These strategies have successfully reduced VOC and NO_x emissions and also reduce emissions of air toxics and greenhouse gases that are emerging issues of concern.

The following strategies will remain in the Portland Ozone Maintenance Plan as they currently apply to sources in the Portland area:

- Motor Vehicle Inspection Program;
- Emission Standards for VOC Point Sources (Reasonably Available Control Technology) for existing major industrial facilities;
- New Source Review Program for new and expanding major industrial facilities;
- Voluntary Parking Ratio Rules;
- Barge Loading Rules that control VOCs from gasoline delivery operations;
- Aerosol Paint Rules that lower VOC content from spray paints sold in the Portland area;
- Motor Vehicle Refinishing Rules that require low-emitting painting methods at autobody shops; and
- Public education and outreach that encourages people to voluntarily reduce emissions, such as not mowing lawns and driving less on Clean Air Action Days (now called Air Pollution Advisories).

The following strategies Portland-Vancouver Ozone Maintenance Plan strategies (Oregon portion), have been modified:

- Employee Commute Options Program: Program requirements now focus on larger employers (100 or more employees) and reduce the survey requirements from annual to every two years (see detail below),
- Industrial Emission Management Program: Updated industrial growth allowance for new and modified major industrial sources and create a public process to replenish the growth allowance (see detail below).

In June, 2005, the Environmental Quality Commission amended the Vehicle Inspection Program rules to replace the "enhanced" vehicle inspection test with the "basic" vehicle inspection test for vehicle model years 1981-1995. This change is reflected in the modeling projections and maintenance demonstration of this plan.

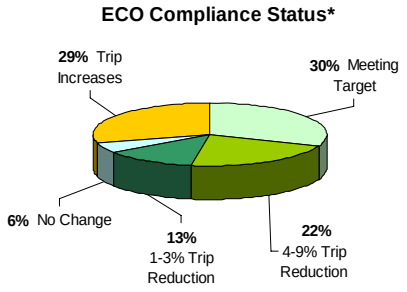
Stage II vapor recovery system requirements for gas stations will remain in effect until the motor vehicle fleet reflects widespread use of on-board canister systems. The Stage II rules will be revised at that time (prior to 2015). The eventual shift from Stage II vapor recovery to on-board canisters is reflected in the 2015 modeling projections and maintenance demonstration of this plan.

4.50.3.1.1 Changes to the Employee Commute Options Rule

The Employee Commute Options Program rules adopted in 1996 (OAR 340-242-0010 through 0290) require Portland-area employers with more than 50 employees to implement programs that would reduce single-occupancy commute travel by 10%. Affected employers must provide incentives for employee use of alternative commute options. The incentives must have the potential to reduce commute trips to the work site by 10% within three years of completing an initial employee survey. Annual surveys measure progress toward this goal.

Key program statistics:

- Number of employer work sites: 1212
- Estimated number of employees affected: 250,000
- Annual Vehicle Miles Traveled reduced: 35.4 million



*based on survey data as of August 2005. Not all employers are required to survey.

Annual survey data indicates that larger employers are more likely to comply with ECO and provide meaningful transportation options to their employees. Larger employers represent most of the employees in the region. Smaller companies make up the majority of employers who are behind with ECO compliance.

- Employers with more than 100 employees generate 92% of the total trip reduction.
- Employers with more than 100 employees make up 86% of the total ECO affected *employees*.
- Employers with more than 100 employees make up 53% of the total ECO affected *employers*.

DEQ has modified the ECO program to more effectively focus limited DEQ staff resources on larger employers that produce the most significant amount of emission reduction benefit, and to streamline reporting requirements. Program changes include:

- Changing the threshold for rule applicability from “more than 50” employees to “more than 100” employees;
- Changing survey requirements from annual to every two years;
- Requiring all employers to submit an approved plan, or demonstrate that they participate in an equivalent commute trip reduction program, such as EPA’s Best Workplaces for Commuters program or TriMet’s Passport program;
- Modifying survey requirements to allow an employer to submit follow-up survey results with less than 75% response rate. DEQ will assign single occupancy vehicle trips to the percentage of employees who did not respond up to the 75% rate;
- Eliminating the 2006 sunset date since the ozone maintenance plan does not sunset; and
- Requiring employers that qualify for exemptions (e.g. through restricted parking ratios) to certify every two years that they continue to qualify for the exemption.

The Employee Commute Option Program has been effective in reducing the amount of vehicle miles traveled by single-occupancy-vehicles in the Portland area, thereby reducing air pollution and traffic congestion in the region. The ECO program has resulted in an estimated annual reduction of over 100 tons of VOCs and over 85 tons of NO_x. In addition to the benefits to ozone air quality, DEQ estimates that the ECO program is also effective in reducing over 44 million pounds per year of carbon dioxide (a greenhouse gas), as well as associated air toxics emissions (most notably benzene). DEQ’s proposed rule changes would streamline the program and make it more effective in encouraging alternative commute trips among larger employers while providing relief to smaller employers. The program is one of many efforts in the Portland area to reduce single-occupancy vehicle trips and DEQ will continue to partner with regional alternative transportation programs in these efforts.

DEQ will continue to focus on larger employers (those with over 100 employees) who account for over 90% of the trip and emission reduction achieved by the EQO program.

Therefore, DEQ believes there will be no significant loss in emission reduction benefit from ECO by focusing the program on larger employers.

4.50.4.1.2 Industrial Emission Management Rules

The 1996 Portland-Vancouver Ozone Maintenance Plan included an industrial emissions growth allowance that could be used by new and expanding major industry in lieu of obtaining emission offsets. This 2006 maintenance plan update continues this approach to managing industrial emissions growth. The growth allowance program is described below.

Under the existing Industrial Emission Management Rules adopted in 1996 (OAR 340-242-0400 through 0440), new or expanding major industrial sources located in or near the Portland AQMA must "offset" emission increases of more than 40 tons/year of VOC and NO_x by obtaining an equivalent decrease from another facility. However, the offset requirement can be satisfied by obtaining an allocation from an emissions growth allowance set aside for this purpose. This 2006 maintenance plan update reestablishes the growth allowance for new and expanding major VOC and NO_x industrial sources, and retains the emission offset requirement as a safeguard. The growth allowance has been included in the modeled 2015 ozone maintenance demonstration.

Growth Allowance Program Elements

This plan reestablishes the industrial growth allowance at 5,000 tons for VOC and 5,000 tons for NO_x. The owner or operator of a proposed major source or major modification may apply to DEQ for an allocation of the growth allowance in lieu of providing an emission offset. As required in the existing rules, the growth allowance will be allocated on a first come first served basis, with one exception. Sources that previously reduced their allowable emissions through the voluntary Plant Site Emission Limit (PSEL) donation program will receive priority access to the growth allowance.

Consumption of the growth allowance will be monitored and tracked by the Department. If the growth allowance decreases to 1,000 tons per year or less, DEQ may increase the growth allowance by utilizing new federally enforceable emission reductions and shutdown credits that were not relied on in the maintenance demonstration. Any such increase to the growth allowance will be subject to public comment and review by EPA. Federally enforceable emission reductions include requirements adopted by EPA, requirements adopted by the EQC and approved by EPA as a revision to the Oregon State Implementation Plan, and requirements established by a federally enforceable permit condition. If the growth allowance is consumed, and cannot be reestablished, emission offsets for VOC and NO_x will be required for new and expanding major industry.

The Department may consider temporarily reducing the growth allowance if monitored ozone concentrations exceed the thresholds described in the contingency plan (Section 4.50.7.2.1). The Department must provide reasonable advance notice to affected industries if there is a possibility that the growth allowance could be reduced.

Growth Management System

The emissions growth allowance approach described above works together with several other elements in the maintenance plan, including the tracking of emission growth, ambient ozone monitoring, the emission offset backstop requirement, and the early warning and action elements in the contingency plan, to meet air quality management goals and protect compliance with standards. The Industrial Emissions Management Rules provide both flexibility for future economic opportunity and protection of the ozone NAAQS.

4.50.4.1.3 Transportation Conformity and Transportation Control Measures

Under EPA's 2004 ozone implementation rules (40 CFR 51.905), neither general conformity nor transportation conformity is required. This means that new transportation project plans will no longer need to demonstrate that they conform to clean air plans. However, DEQ and Metro (the Portland-area metropolitan planning organization) have agreed to informally track VOC, NO_x, air toxics and greenhouse gas emissions when Metro assesses conformity for the purposes of the Portland Carbon Monoxide Maintenance Plan as a voluntary program to assess impacts of transportation emissions on air quality over time. In addition, when Metro assesses VMT/Capita for purposes of the Portland Carbon Monoxide Maintenance Plan Contingency Plan, the information will also be used for the Portland-Vancouver AQMA Ozone Contingency Plan (see Section 4.50.7.2.2).

4.50.4.2 Salem SKATS Ozone Maintenance Plan

DEQ also proposes to retain existing strategies in the Salem-Keizer Area Transportation Study (SKATS) area Attainment Plan that was adopted in 1980, including Emission Standards for VOC Point Sources (RACT rules), with some updates:

- Designate Salem/SKATS a maintenance area under state rules;
- Modify control technology requirements for new and expanding major industrial sources from "Lowest Achievable Emission Rate" (LAER) to "Best Available Control Technology" (BACT); all other new source review requirements would remain the same.
- Adopt a contingency plan that includes a commitment to adopt measures to reduce emissions if the Salem area is at risk of violating or violates the ozone standard in the future.

Salem is currently an ozone "nonattainment" area under state rules, and major new and modified industrial sources that emit more than 40 tons/year of VOC or NO_x are required to install the most stringent level of emission control technology known as "Lowest Achievable Emission Rate" (LAER). Once designated a "maintenance" area under state rules, sources emitting more than 40 tons/year of VOC or NO_x will be required to install "Best Achievable Control Technology" (BACT).

The main difference between LAER and BACT is the consideration of cost. LAER reflects the most stringent level of emission control achievable at the time of permitting, and it must be installed regardless of cost. BACT can also provide an equivalent or very high level of control, but cost is allowed as a consideration when evaluating the feasibility and cost effectiveness of control options.

Under the Clean Air Act, Salem could be designated as a federal ozone attainment area. Under this designation, emission control technology (BACT) would only be required for Federal Major Sources (those sources in 28 categories emitting 100 tons/year or more of VOC or NO_x, or other sources emitting 250 tons/year or more). However, as an Oregon ozone maintenance area, BACT controls will be continue to be required for sources emitting 40 tons/year of VOC or NO_x. DEQ believes maintaining a lower maintenance area threshold of 40 tons/year for triggering BACT requirements will better protect future compliance with the ozone standard in the Salem area. All other requirements for new source review in Salem would remain the same, including the current exemption from the need to provide emission offsets or use a growth allowance.

Because Portland has the highest ozone levels in the region, new or expanding major industrial sources within 100 km of the Portland-Vancouver AQMA (which includes part of the Salem area) would continue to evaluate their impact on Portland's ozone air quality.

4.50.5 Maintenance Demonstration (Portland-Vancouver and Salem)

4.50.5.1 Ozone Modeling Study

DEQ and SWCAA teamed with Washington State University (WSU), the Washington Department of Ecology and EPA to study ozone formation using a computer dispersion model (see Appendix 4, "Historical and Future Ozone Simulations using the MM5/SMOKE/CMAQ System in the Portland/Vancouver Area", WSU, 12/31/05 final report). The purpose of the study was to develop a predictive tool to forecast future ozone concentrations based on emission projections and summer meteorology in which ozone formation occurs.

The modeling study simulated two historical high ozone episodes that occurred during the summer of 1997 and 1998. The study compared actual ozone levels measured (monitored) during the 1997 and 1998 events to model predicted ozone levels for the same period in order to test and validate model performance. The model performed within EPA guidelines for both episodes. The model performance testing verifies that the CMAQ model can predict future ozone concentrations for the region.

The modeling team selected the July 26-28, 1998 episode as the basis for future year projections because ozone levels were much higher in 1998 than in 1997, and meteorology reflected worst case conditions that contribute to ozone formation in the Portland area (high temperatures and low wind speeds, with predominant winds from the north). Methodology for developing the modeling emissions data is detailed in the WSU modeling report (Appendix 4).

4.50.5.2 Growth Projections

The 2015 emissions forecast used in the modeling study reflects 2002 emissions, increased by expected growth in various sectors. The 2002 emission inventory reflects the 2002 Consolidated Emissions Reporting Rule (CERR) emissions data submitted by DEQ and SWCAA to the National Emission Inventory (NEI) and documented in Appendix 3 and 4. Growth factors for various source sectors were derived from the 2002 "Economic Report to the Metro Council, 2000-2030 Regional Forecast for the Portland-Vancouver, Metropolitan Area" (see Appendix 5).

For the 2015 Maintenance Projection, the following growth assumptions were included in the forecast:

Area sources: Area source emissions were calculated following EPA guidance for the 2002 NEI. The 2015 emissions inventory assumes a linear, non-compounding population growth rate of 1.8% per year, and household growth rate of 2.0% per year (see Appendix 5). Table 5 summarizes population trends in Portland and Salem. The area source emission inventory was adjusted to reflect summertime conditions when used in the modeling analysis and maintenance demonstration.

Table 5: Portland and Salem Area Population Projections

	2000 Estimate	2003 Estimate	2005 Forecast	2010 Forecast	2015 Forecast
Oregon	3,436,750	3,541,500	3,618,200	3,843,900	4,095,708
Portland Area (Clackamas, Multnomah and Washington Counties)	1,451,650	1,503,900	1,540,055	1,646,124	1,759,470
Salem Area (Marion and Polk Counties)	349,000	359,900	368,347	395,973	427,781

Prepared by the Oregon Office of Economic Analysis, April 2004

Non-road mobile sources: EPA's draft NONROAD2004 model was used to estimate area source emissions for 2015. This model incorporates the latest assumptions and rules, including EPA's Tier 4 non-road diesel engine standards and non-road diesel fuel sulfur standards associated with the Tier 4 rule. Railroads, marine vessels and airports were estimated independently of the NONROAD model (see Appendix 4). Aircraft emissions for the four airports with the Portland AQMA were calculated using Port of Portland data (Aviation Demand Forecast Update for Portland International Airport, Port of Portland, November 4, 1999, and associated spreadsheets), which was also used in the 2002 NEI submittal.

On road mobile sources: 2015 emissions estimates used in the modeling analysis are based on two sources: travel demand forecast models run by Metro and the Southwest Regional Transportation Council for the Portland-Vancouver AQMA, and Department of Transportation data and projections for the modeling domain. For emissions tracking purposes, ODOT projections are included in the 2015 Maintenance Projection because they will be used in future CERR submittals.

Point sources: The 2015 Maintenance Projection for major industry (point sources) used in the modeling analysis reflects the legally allowable emission level currently permitted for existing sources plus an emissions growth allowance for new and expanding facilities (Tables 6 and 7 and Figures 4 and 5).

Point source emissions in the 2015 Projection and Figures 4 and 5 were calculated based on actual emissions data and forecast using employment projections in the "Economic Report to Metro Council, 2000-2030 Regional Forecast," Appendix A-5 (Appendix 5). For the 2015 projection, "actual" emissions were used because they most closely represent the emissions that will be emitted by the sources in the region in 2015.

The point source emission projections include a few sources that were permitted but not yet operational when the point source inventory was completed in 2004. The most significant change since that time is the withdrawal of a permit application for a large energy facility that was proposed for construction in Marion County (this facility is included in the projections for the Salem area).

Biogenics: The modeling analysis included biogenic emissions which are produced by life substances (e.g. terpenes from pine trees). The data will be included in the seasonally adjusted daily emissions inventory.

4.50.5.3 Forecast and Maintenance Inventory (2015)

The 2015 Maintenance Inventory reflects 2002 emission levels, increased by the various growth factors described in section 4.50.5.2. Again, for the major industry sector, the future forecast reflects a very conservative scenario of maximum allowable emissions plus a growth allowance. Tables 6 and 7 below show the 2015 Maintenance Projection that was used in the maintenance demonstration modeled by DEQ.

Both VOC and NO_x emissions are involved in the formation of ozone and the relative amounts of each (VOC/NO_X ratio) can influence the level of ozone formation. DEQ's modeling analysis shows of the two pollutants, VOC is the primary driver of ozone formation in the urban Portland and Salem areas. Both VOC and NO_x emission reduction strategies continue to be important to reducing ozone formation. Figures 4 and 5 below focus on VOC emissions; information regarding NOx emissions will be added for the final draft plan.

Figure 4 below shows graphically the 2002 estimate of actual VOC emissions, a 2015 projection reflecting modest employment increases, and the 2015 Maintenance Projection in which industry emissions have been conservatively increased to reflect legally allowable emissions and a growth allowance. Including maximum allowable emissions and the growth allowance, the major industry sector would account for approximately 14% of total 2015 Portland area VOC emissions. Actual emissions from industry in 2015 are expected to be much less than expressed in the worst-case maintenance scenario. Major industry currently accounts for about 2% of total VOC emissions in the Portland area. Under the 2015 maintenance forecast, the majority of VOC emissions (approximately 71% annually) come from the area source sector.

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Figure 5 shows expected growth in VOC emissions for the Salem area, including allowable emissions for existing industry. No industrial growth allowance is established for the Salem-Keizer area. Future growth in that area is expected to be accommodated through the New Source Review process. Including maximum allowable emissions, the major industry sector accounts for under 3% to total Salem area VOC emissions. The majority of VOC emissions (approximately 79% annually) come from the Area Source sector.

Table 6: Portland-Area VOC and NO_x Emissions and 2015 Maintenance Projection

Portland-Area 2015 VOC Emissions
(Clackamas, Multnomah, Washington Counties)

Source Type	2002 Actual	2015 Maintenance Projection	% Change
AREA	92,946	108,109	16.3%
NONROAD	13,260	13,308	0.4%
ON-ROAD	23,683	8,538	-63.9%
POINT	3,056	21,721	610.9%
Total	132,944	151,675	14.1%

Portland-Area 2015 NO_x Emissions
(Clackamas, Multnomah, Washington Counties)

Source Type	2002 Actual	2015 Maintenance Projection	% Change
AREA	5,808	5,822	0.2%
NONROAD	17,347	17,223	-0.7%
ON-ROAD	36,786	10,339	-71.9%
POINT	2,522	15,191	502.3%
Total	62,464	48,574	-22.2%

Table 7: Salem-Area VOC and NO_x Emissions

Salem-Area 2015 VOC Emissions
(Marion and Polk Counties)

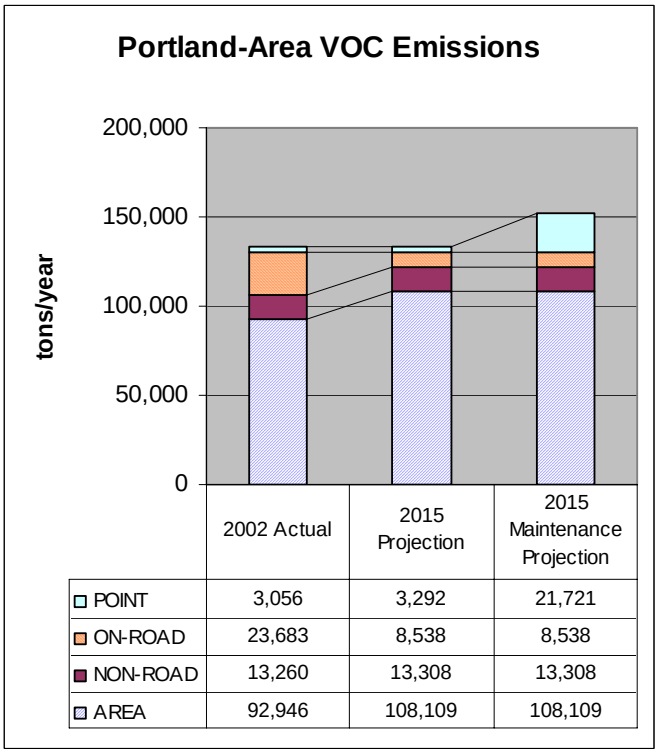
Source Type	2002 Actual	2015 Maintenance Projection	% Change
AREA	20,297	22,594	11.3%
NONROAD	2,401	2,334	-2.8%
ON-ROAD	9,331	2,724	-70.8%
POINT	110	791	621.9%
Total	32,138	28,443	-11.5%

Salem-Area 2015 NO_x Emissions
(Marion and Polk Counties)

Source Type	2002 Actual	2015 Maintenance Projection	% Change
AREA	1,646	1,581	-4.0%
NONROAD	3,159	3,062	-3.1%
ON-ROAD	11,276	3,326	-70.5%
POINT	290	782	169.7%
Total	16,371	8,751	-46.5%

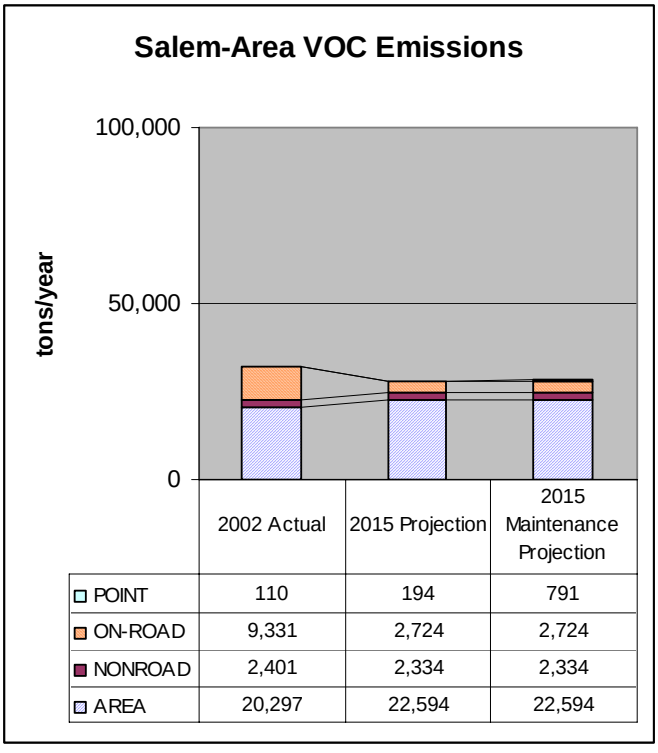
DISCUSSION DRAFT

Figure 4: Portland-Area VOC Emissions (t/yr) and 2015 Maintenance Projection



	2002 Actual	2015 Projection	2015 Maintenance Projection
POINT	3,056	3,292	21,721
ON-ROAD	23,683	8,538	8,538
NON-ROAD	13,260	13,308	13,308
AREA	92,946	108,109	108,109

Figure 5: Salem Area VOC Emissions (t/yr) and 2015 Maintenance Projection



	2002 Actual	2015 Projection	2015 Maintenance Projection
POINT	110	194	791
ON-ROAD	9,331	2,724	2,724
NONROAD	2,401	2,334	2,334
AREA	20,297	22,594	22,594

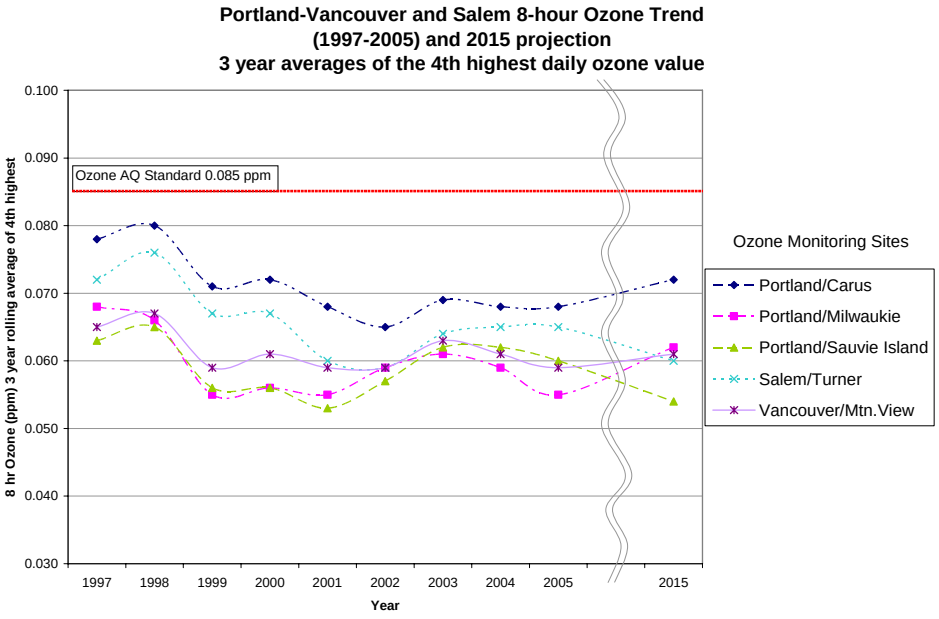
4.50.5.4 Maintenance Projection

The Department used the 2015 maintenance emission forecast and worst-case meteorology from the 1998 high ozone event in the CMAQ model to estimate future ozone concentrations for the Portland and Salem areas in 2015. Table 8 shows the predicted maximum 8-hour ozone concentrations predicted for the key Portland, Vancouver, and Salem monitoring sites. Table 8 also shows the 2015 predicted "Design Value", which is used to compare to the ozone standard for purposes of determining compliance. DEQ's modeling analysis also confirms that the existing monitoring network is capturing the areas of highest ozone concentrations.

The 8-hour NAAQS for ozone requires the fourth highest 8-hour daily maximum ozone concentration, averaged over three consecutive years, to be equal to or less than 0.08 ppm[3] . Compliance is demonstrated when the modeled estimates of future ozone concentrations are less than or equal to 0.084 ppm.

Figure 6 shows the ozone compliance trend for the Portland-Vancouver and Salem areas, including the 2015 maintenance forecast. Figure 6 and Table 8 show that the Portland-Vancouver and Salem-Keizer areas will remain in compliance with the 8-hour ozone standard. Table 8 also shows that peak ozone concentrations can exceed the standard, illustrating the need for continuing the suite of emission reduction strategies that limit ozone formation in the Portland and Salem areas.

Figure 6: Portland-Vancouver and Salem Ozone Maintenance Projection



[3] Because of rounding conventions in which non-significant figures are truncated, a modeling estimate of <0.085 ppm is equivalent to <= 0.08 ppm

Table 8: 2015 Maintenance Projection (ozone values)
8-hour ozone standard = 0.08 ppm
Exceedance = 0.085 ppm maximum

Monitoring Site	1998 Predicted Maximum	2015 Predicted Maximum	2015 Predicted Design Value*
Portland/Carus	98	94	72
Portland/Milwaukie	92	96	62
Portland/Sauvie Island	82	76	54
Vancouver/Mtn. View	83	81	61
Salem/Turner	88	75	60

*Predicted Design Value is calculated using the relative reduction factor as described in Appendix 5 and EPA 8-hour ozone modeling guidance.

Again, Figure 6 and Table 8 illustrate that the Portland-Vancouver AQMA and Salem SKATS will maintain compliance with the 8-hour ozone standard through 2015. The Carus monitoring site, downwind of Portland, has traditionally been the site with the highest ozone readings in the region. The model predicted that the Milwaukie site would produce a slightly higher maximum value under meteorological conditions similar to the 1998 episode, and the maximum value would exceed the standard. However, the 4th high compliance values show that the Carus site is expected to remain the highest and most important site for determining compliance with the ozone standard.

4.50.6 Air Quality Monitoring (Portland and Salem)

DEQ will continue to operate an ozone air quality monitoring network in accordance with 40 CFR 58 to verify maintenance of the 8-hour ozone standard in Portland and Salem (see Appendix 1). Any modification to the ambient air monitoring network, such as removal of duplicative or unnecessary monitors, will be accomplished through close consultation with EPA Region 10. Proposed network modifications would be accompanied by technical and statistical analysis sufficient to document a given monitor may be removed because it is unnecessary or duplicative in the case of network reductions, or to justify the value of investing in monitoring network enhancements. In accordance with 40CFR 58, the final network design will be subject to the approval of the Regional Administrator.

4.50. 7 Contingency Plan

The maintenance plan must include a process to quickly prevent or correct any measured violation of the 8-hour ozone standard. This process of investigation and (if needed) corrective action is called the “contingency plan”. Contingency plans typically have several stages of action depending on the severity of monitored ozone levels. Ambient ozone thresholds are established in the contingency plan as early-warning action levels. If monitored ozone levels exceed these action levels, the contingency provisions are triggered.

4.50.7.1 Request To Replace the Portland-Vancouver AQMA 1-Hour Contingency Plan With an 8-Hour Contingency Plan

EPA revoked the 1-hour ozone standard, effective June 15, 2005 (69 FR 23951, April 30, 2004). DEQ hereby requests that the 1-hour ozone contingency plan be removed from the Portland-Vancouver AQMA Ozone Maintenance Plan, and replaced with a contingency plan that addresses the 8-hour ozone standard as described below, in accordance with EPA rules implementing the 8-hour ozone standard (40 CFR 51.905).

4.50.7.2 Portland-Vancouver AQMA 8-hour Ozone Contingency Plan

This contingency plan includes two sets of contingency measures. The provisions specified under Part A of the Contingency Plan for the Portland-Vancouver AQMA are linked to ambient concentrations of ozone and would be triggered if measured ozone levels at any of the ozone monitoring sites (Mtn. View, Sauvie Island, Milwaukie, or Carus) exceed the early-warning thresholds below, or if a violation of the 8-hour ozone standards occurs. The provisions specified under Part B of the Contingency Plan are linked to increases in the average amount of vehicle use per person in the Portland metropolitan area, and would only affect the Oregon portion of the Portland-Vancouver AQMA.

4.50.7.2.1 Part A, Contingency Plan Based On Ambient Concentrations in Portland or Vancouver

PHASE 1: ELEVATED OZONE LEVELS
If the air quality index (AQI) is forecast to be within the “orange” range for ozone air quality (unhealthy for sensitive populations), or 8-hour daily maximum ozone values approach 0.100 ppm or greater, and meteorological conditions conducive to ozone formation are expected to persist, DEQ and SWCAA will issue an advisory to inform the public of air quality levels and voluntary actions they can take to limit exposure to unhealthy air pollution levels and reduce emissions.

PHASE 2: RISK OF VIOLATION
If monitored 8-hour ozone levels at any site within the Portland-Vancouver area registers an annual fourth high monitored value of 0.085 ppm or greater within *a single ozone season*, or 0.08 ppm or greater *averaged over two years*, DEQ and SWCAA will assess the likely emissions and meteorological events contributing to elevated ozone levels. DEQ may form a planning group to assist the Department in its review. The DEQ could recommend that no action be taken if it is determined that: (a) elevated ozone levels were caused by an event that is unlikely to occur again within the maintenance planning timeframe, or (b) high ozone levels were caused by an uncontrollable event, or (c) federal regulations that will reduce ozone precursor emissions are scheduled to be implemented within two years. If it is determined that the event was caused by conditions that could occur again, and that new federal, state or local emission reduction strategies will be not implemented and affective within two years, the Department will evaluate options for appropriate action, including the option for additional emission reduction strategies to prevent future exceedances or a violation of the 8-hour ozone standard.

PHASE 3: ACTUAL VIOLATION
If a violation of the 8-hour ozone standard occurs, DEQ and SWCAA will determine the emissions and meteorological events contributing to the violation. If the violation is not due to an uncontrollable event, DEQ will identify new strategies necessary to ensure compliance with the 8-hour ozone standard within 18 months of the conclusion of the ozone season that prompted the contingency plan, and revise the maintenance plan as needed to correct the violation. A revised maintenance plan would be submitted to EPA for approval.
Measures that would be considered for implementation include the following:

- Reinstatement of the Enhanced Inspection/Maintenance Test for certain model year vehicles (EPA requires that this be considered);
- Other measures as appropriate.

4.50.7.2.2 Part B, Contingency Plan Based on Significant Increase in Vehicle Miles Traveled in the Oregon portion of the Portland-Vancouver AQMA

EPA's 8-hour ozone implementation rule (69FR pages 23987-88, April 30, 2004) notes that although states cannot implement conformity for attainment areas as a matter of federal law, they could still work with their metropolitan planning organizations to develop a voluntary program to address motor vehicle emissions growth. Metro has agreed to informally track motor vehicle VOC and NO_x emissions at the same time as they are demonstrating conformity with the Portland Carbon Monoxide Maintenance Plan emissions budget. In addition, Metro has agreed to the following contingency measures for the Portland Carbon Monoxide Maintenance Plan. These transportation control measures are also appropriate as voluntary measures for addressing ozone precursor emissions within the Portland metropolitan area. However, transportation control measures cannot be adopted or enforced for the Portland-Vancouver AQMA Ozone Maintenance Plan (40 CFR 51.905).

PHASE 1: 5% VMT INCREASE
Metro will review and verify the local average vehicle miles traveled per capita (VMT/capita) for the Oregon portion of the Portland-Vancouver Air Quality Maintenance Area derived from the most recent estimates of population and daily vehicle miles traveled from federal and state sources.

If daily VMT/capita exceeds 20.5 daily VMT/capita (a 5 % increase above the 2002 rate) for two successive years, the Standing Committee [TPAC, as defined at OAR 340-252-0060(2)(b)(A)(iii)] shall be convened to:

a) determine whether there is a data problem with the trigger;

b) if there is not a data problem with the trigger, identify and analyze the effectiveness of those local actions that could reduce air pollutant emissions; and,

c) determine whether a recommendation should be made to JPACT to initiate local action to reduce VMT/capita until the 2002 level is once again attained.

PHASE 2: 10% VMT INCREASE

Metro will review and verify local VMT/capita values derived from the most recent estimates of population and daily vehicle miles traveled from federal and state sources.

If average daily VMT/capita exceeds 21.5 miles (a 10 percent increase above the 2002 rate) for the Oregon portion of the Portland-Vancouver Air Quality Maintenance Area for two successive years, the following measures will become required Transportation Control Measures for the region (as determined by the programming of funds for specified projects) under the Portland Carbon Monoxide Maintenance Plan and would be considered for inclusion in the 8-hour ozone maintenance plan:

a) Washington County Commuter Rail within six years after exceeding the 21.5 VMT/capita rate,

b) Interstate 205 Light Rail Transit (I-205 LRT) within six years after exceeding the 21.5 VMT/capita rate;

c) An increase of efforts for the Regional Travel Options Program sufficient to increase the number of employers reached by the program by at least 5 % per year the number of employers currently subject to the DEQ Employee Commute Options program. Alternatively, specific projects from the Regional Transportation Options program could be substituted.

d) An increase of funding of at least 5% per year greater than current funding for Transit Oriented Development projects.

e) Other programs or projects consistent with state and federal law as may be determined by the Metro Council after consultation with the Joint Policy Advisory Committee on Transportation.

4.50.7.3 Salem SKATS 8-Hour Ozone Contingency Plan

PHASE 1: ELEVATED OZONE LEVELS
If the air quality index (AQI) is forecast to be within the “orange” range for ozone air quality (unhealthy for sensitive populations), or 8-hour daily maximum ozone values reach 0.100 ppm or greater, and meteorological conditions conducive to ozone formation are expected to persist, DEQ will issue an advisory to inform the public of air quality levels and actions they can take to limit exposure to unhealthy air pollution levels and reduce emissions.

PHASE 2: RISK OF VIOLATION
If monitored 8-hour ozone levels at any site within the Salem/Turner area registers an annual fourth high monitored value of 0.085 ppm or greater *within a single ozone season*, or 0.08 ppm or greater *averaged over two years*, DEQ will assess the likely emissions and meteorological events contributing to elevated ozone levels DEQ may form a planning group to assist the Department in its review. The DEQ could

recommend that no action be taken if it is determined that: (a) elevated ozone levels were caused by an event that is unlikely to occur again within the maintenance planning timeframe, or (b) high ozone levels were caused by an uncontrollable event, or (c) federal regulations that will reduce ozone precursor emissions are scheduled to be implemented within two years. If it is determined that the event was caused by conditions that could occur again, and that new federal, state or local emission reduction strategies will be not implemented and affective within two years, the Department will evaluate options for appropriate action, including the option for additional emission reduction strategies to prevent future exceedances or a violation of the 8-hour ozone standard.

PHASE 3: ACTUAL VIOLATION
If a violation of the 8-hour ozone standard occurs, the Department will determine the probable emissions and meteorological events contributing to the violation. If the violation is not due to an uncontrollable event, DEQ will identify new strategies necessary to ensure compliance with the 8-hour ozone standard within 18 months of the conclusion of the ozone season that prompted the contingency plan, and revise the maintenance plan as needed to correct the violation. A revised maintenance plan would be submitted to EPA for approval.

4.50.8 Verification of Continued Attainment (Portland and Salem)

DEQ will continue to monitor ambient air quality ozone levels as described in the Contingency Plan. DEQ will update countywide emission inventories every three years beginning in 2005 as required by the Consolidated Emission and Reporting Rule (CERR) update of the National Emissions Inventory. If ambient ozone levels appear to be increasing, DEQ will compare CERR updates with the 2002 and 2015 emissions inventories and evaluate the assumptions used in the 2015 emissions projections to determine whether emissions are increasing at a rate not anticipated in the maintenance plan. The triggers in the Contingency Plan should prevent violations of the 8-hour standard in the Portland-Vancouver and Salem area.

Appendices

1. Ozone Monitoring Network (Vancouver-Portland-Salem regional area map and site description)
2. 1992 to 2005 Meteorological Factors Conducive to Ozone Formation in the Portland-Vancouver Area (ODEQ, draft, April 2006)
3. Emission Inventory
    a. Explanation of growth factors used in 2015 modeling projection, by source type, including assumptions included in the modeling projection
    b. AQMA and SKATS, 2002 (actuals) and 2015 (allowables + growth allowance), VOC Emissions, lb/seasonal day
    c. AQMA and SKATS, 2002 (actuals) and 2015 (allowables + growth allowance), NO_x Emissions, tons/year

   d. AQMA and SKATS, 2002 (actuals) and 2015 (allowables + growth allowance), NO_x Emissions, lb/seasonal day
   e. AQMA and SKATS, 2002 (actuals) and 2015 (allowables + growth allowance), CO Emissions, tons/year
   f. AQMA and SKATS, 2002 (actuals) and 2015 (allowables + growth allowance), CO Emissions, lb/seasonal day
4. Historical and Future Ozone Simulations Using the MM5/SMOKE/CMAQ System in the Portland-Vancouver Area (WSU, December 31, 2005)
5. Economic Report to the Metro Council, 2000-2030 Regional Forecast for the Portland-Vancouver Metropolitan Area (Metro's Data Resource Center, December 2002 final draft)
6. Maintenance Demonstration (detailed spreadsheet)

References

- "Maintenance Plan Guidance Document for Certain 8-hour Ozone Areas Under Section 110(a)(1) of the Clean Air Act" (memo dated May 20, 2005 from Lydia Wegman, EPA). The May 20, 2005 guidance applies to areas designated in attainment with the 8-hour ozone standard and preparing maintenance plans under Section 110(a)(1) of the Clean Air Act and 40 CFR 51.905(c) and (d).
- "Demonstrating Noninterference Under Section 110(l) of the Clean Air Act When Revising a State Implementation Plan" (draft EPA Guidance, 6/8/05)
- "1-Hour Ozone Maintenance Plans Containing Basic I/M Programs (memo dated May 12, 2004 from Tom Helms, EPA)
- April 30, 2004 Federal Register (69FR 23951), Final Rule to Implement the 8-Hour Ozone NAAQS-Phase 1
- July 8, 2005 Federal Register (70FR 39413), Notice of Final Rulemaking regarding Nonattainment Major New Source Review Implementation under 8-Hour Ozone NAAQS
- "Guidance on the Use of Models and Other Analyses in Attainment Demonstrations for the 8-hour Ozone NAAQS" (EPA-450/R-05-002, October, 2005)
- "Emission Inventory Guidance for Implementation of Ozone and Particulate Matter NAAQS and Regional Haze" (EPA-454/R-05-001, August 2005)
- "2002 Base Year Emission Inventory SIP Planning: 8-hr Ozone, PM 2.5 and Regional Haze Programs" (memo dated November 18, 2002 from Lydia Wegman, EPA)
- "Procedures for Processing Requests to Redesignate Areas to Attainment" (memo dated September 4, 1992 from John Calcagni, EPA)

STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 06-3695, FOR THE PURPOSE OF RECOMMENDING APPROVAL BY THE OREGON ENVIRONMENTAL QUALITY COMMISSION OF THE DRAFT 2006 PORTLAND-VANCOUVER AQMA (OREGON PORTION) AND SALEM KEIZER AREA OZONE MAINTENANCE PLAN

Date: May 3, 2006 Prepared by: Mark Turpel

BACKGROUND

In the 1980's and 1990's, the Metro region had a problem with meeting federal ozone (smog) standards. There have been no ozone violations in the region since 1998. Today, the region is in attainment with both the 1-hour and 8-hour ozone standards. In addition, air quality conformity determinations (comparisons of future emissions from transportation with maximum transportation "budgets") for ozone are no longer required. However, an ozone maintenance plan update is still required by the federal Clean Air Act and U.S. Environmental Protection Agency rules.

Accordingly, the Oregon Department of Environmental Quality has prepared a draft 2006 Portland-Vancouver AQMA (Oregon Portion) and Salem Keizer Area Ozone Maintenance Plan dated April 18, 2006 ("Draft 2006 Ozone Maintenance Plan").

The Draft 2006 Ozone Maintenance Plan features of note to the region include continuing the Employee Commute Option (ECO) and Industrial Emissions Management Program. The ECO program is proposed to be refocused to address employers with more than 100 employees instead of employers with more than 50 employees and reporting every two years instead of annually. These changes to the Employee Commute Option have been reviewed by the Regional Travel Options (RTO) committee. The Draft 2006 Ozone Maintenance Plan also continues the Industrial Emissions Management Program, where a "cushion" is provided for expansion of existing businesses or new businesses. New growth allowances totals have been proposed and appear to be sufficient to provide for substantial growth.

As there is no longer any requirement for the region to model future ozone emissions from transportation sources, Metro and DEQ staff have discussed the worth of continuing this effort as a means of identifying potential problems early on. Such analysis is required for carbon monoxide and running the air quality emission model for ozone is easily done at the same time and with little extra effort. Metro and DEQ staff recommend that such ozone monitoring be done on a voluntary basis.

At the April 28, 2006 TPAC meeting, one of the proposed Transportation Control Measures (TCM) concerning monitoring Vehicle Miles Traveled (vmt) per capita was discussed. TPAC suggested that this measure remain substantially as proposed with triggers for reassessment should vmt per capita increase by the five percent trigger or more. However, they suggested that the additional nominal numbers representing the absolute vmt per capita be deleted so that adjustments in the geography of the area where vmt per capita is measured is not tied to older data based on a smaller urban area. (Previous data on vmt capita did not include the Damascus area as well as portions of Sherwood and Wilsonville.)

ANALYSIS/INFORMATION

1. **Known Opposition**

None

2. **Legal Antecedents**

Federal

Clean Air Act

SAFETEA-LU and predecessor transportation legislation

State

OAR 340, Division 200, State of Oregon Clean Air Act Implementation Plan
OAR 340, Division 202 Ambient Air Quality Standards and PSD Increments
OAR 340, Division 204 Designation of Air Quality Areas
OAR 340, Division 224 Major New Source Review
OAR 340, Division 225 Air Quality Analysis Requirements
OAR 340, Division 232 Emission Standards for VOC Point Sources
OAR 340, Division 242 Rules Applicable to the Portland Area - Employee Commute Options Program

Metro

Resolution No. 82-305, For the Purpose of Adopting the Ozone and Carbon Monoxide State Implementation Plans For the Oregon Portion of the Portland-Vancouver Air Quality Maintenance Area.

Resolution No. 85-610, For the Purpose of Endorsing the Revised Ozone Control Strategy For the Portland-Vancouver Interstate Air Quality Maintenance Area (AQMA).

Resolution No. 96-2260**,** For the Purpose of Recommending to the Environmental Quality Commission the Transportation Control Measures (TCM's), Contingencies, and Emissions Budgets to Be Included in the Portland Region's Ozone and Carbon Monoxide (CO) Maintenance Plans.

3. Anticipated Effects
Approval of the 2006 Ozone Maintenance Plan will ensure that federal regulations are met and air quality standards maintained.

4. **Budget Impacts**
The approval of the 2006 Ozone Maintenance Plan will result in fewer requirements for Metro.

RECOMMENDED ACTION

Staff recommends the adoption of Resolution No. 06-3695.