OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

OREGON TITLE V OPERATING PERMIT

REVIEW REPORT

Eastern Region

475 NE Bellevue Dr., Suite 110

Bend, OR 97701

**Source Information:**

|  |  |
| --- | --- |
| SIC | 3341 |
| NAICS | 331314 |
| Source Categories (Part and code) | NA |

**Compliance and Emissions Monitoring Requirements:**

|  |  |
| --- | --- |
| Unassigned emissions | yes |
| Emission credits | No |
| Compliance schedule | No |
| Source test [date(s)] | 7/1/2014 |
| COMS | No |
| CEMS | No |
| Ambient monitoring | No |

**Reporting Requirements**

|  |  |
| --- | --- |
| Annual report (due date) | 2/15 |
| Emission fee report (due date) | 2/15 |
| SACC (due date) | 2/15 and 7/30 |
| Quarterly report (due dates) | No |
| Monthly report (due dates) | no |
| Excess emissions report | yes |
| Other reports | NA |

**Air Programs**

|  |  |
| --- | --- |
| NSPS (list subparts) | No |
| NESHAP (list subparts) | RRR |
| CAM | No |
| Regional Haze (RH) | No |
| Synthetic Minor (SM) | No |
| Part 68 Risk Management | No |
| CFC | No |
| RACT | No |
| TACT | No |
| Title V | Yes |
| ACDP (SIP) | No |
| Major HAP source | No |
| Federal major source | Yes |
| NSR | No |
| PSD | No |
| Acid Rain | No |

**TABLE OF CONTENTS**

[LIST OF ABBREVIATIONS USED IN THIS REVIEW REPORT 3](#_Toc266778001)

[INTRODUCTION 4](#_Toc266778002)

[PERMITTEE IDENTIFICATION 6](#_Toc266778003)

[FACILITY DESCRIPTION 6](#_Toc266778004)

[EMISSIONS UNIT AND POLLUTION CONTROL DEVICE IDENTIFICATION 7](#_Toc266778005)

[EMISSION LIMITS AND STANDARDS, testing, monitoring, and recordkeeping 8](#_Toc266778006)

[PLANT SITE EMISSION LIMITS 19](#_Toc266778007)

[HAZARDOUS AIR POLLUTANTS 20](#_Toc266778008)

[GENERAL BACKGROUND INFORMATION 20](#_Toc266778009)

[COMPLIANCE HISTORY 21](#_Toc266778010)

[SOURCE TEST RESULTS 22](#_Toc266778011)

[PUBLIC NOTICE 22](#_Toc266778012)

[EMISSIONS DETAIL SHEETS 23](#_Toc266778013)

[Definition of terms used for the PLant Site Emisson limit: 24](#_Toc266778014)

LIST OF ABBREVIATIONS USED IN THIS REVIEW REPORT

AQMA Air Quality Management Area

ASTM American Society of Testing and Materials

BDT Bone Dry Ton

CEMS Continuous Emissions Monitoring System

CFR Code of Federal Regulations

CMS Continuous Monitoring System

CO Carbon Monoxide

COMS Continuous Opacity Monitoring System

DEQ Oregon Department of Environmental Quality

dscf dry standard cubic feet

EF Emission Factor

EPA United States Environmental Protection Agency

EU Emissions Unit

FCAA Federal Clean Air Act

gr/dscf grains per dry standard cubic feet

HAP Hazardous Air Pollutant

ID Identification Code

I&M Inspection and Maintenance

MB Material Balance

Mlb 1000 Pounds

MM Million

NA Not Applicable

NESHAP National Emission Standard for Hazardous Air Pollutants

NOx Oxides of Nitrogen

NSPS New Source Performance Standard

NSR New Source Review

O2 Oxygen

OAR Oregon Administrative Rules

ORS Oregon Revised Statutes

O&M Operation and Maintenance

Pb Lead

PCD Pollution Control Device

PM Particulate Matter

PM10 Particulate Matter less than 10 microns in size

PSD Prevention of Significant Deterioration

PSEL Plant Site Emission Limit

SO2 Sulfur Dioxide

ST Source Test

VE Visible Emissions

VMT Vehicle Mile Traveled

VOC Volatile Organic Compound

INTRODUCTION

# This is a renewal of Oregon Title V Operating Permit 33-0001-TV-01 issued to Northwest Aluminum Company on June 8, 2006 and schedule to expire on July 1, 2010. The permit is now being issued to Northwest Aluminum Specialties, Inc., the owner and operator of the secondary aluminum production facility. The primary aluminum production facility was demolished and no longer exists at the site.

# In accordance with OAR 340-218-0120(1)(f), this review report is intended to provide the legal and factual basis for the draft permit conditions. In most cases, the legal basis for a permit condition is included in the permit by citing the applicable regulation. In addition, the factual basis for the requirement may be the same as the legal basis. However, when the regulation is not specific and only provides general requirements, this review report is used to provide a more thorough explanation of the factual basis for the draft permit conditions.

# During the last permit term, there was one Administrative Amendment.

| **Date** | **Permit Revision or Notification** | **Brief Explanation** |
| --- | --- | --- |
| 6/8/09 | Administrative Amendment | This action is being processed along with the Title V permit renewal to change the name of the owner and operator, responsible official and facility contact person. |

# Provided below is summary of the changes to the permit, condition by condition:

| **New Permit Condition Number** | **Old Permit Condition Number** | **Description of Change** | **Reason for Change** |
| --- | --- | --- | --- |
| Cover page | Cover page | Change the name of the company, address, SIC, NAICS, responsible official and facility contact person. | The primary aluminum production plant has been shut down, the permit transferred to Northwest Aluminum Specialties (NWAS). |
| 3 | 3 | Removed on emissions units associated with the primary aluminum production facility. | The primary aluminum production plant has been shut down. |
| 4 | 34 | Renumbered |  |
| 5 | 7 | Renumbered |  |
| 6 | 4 | Renumbered |  |
| 7 | 5 | Renumbered |  |
| 8 | 6 | Renumbered |  |
| --- | 8 – 9 | Deleted | These regulations applied to the primary aluminum production facility. |
| --- | 10 | Deleted | A SERP is no longer required because the PSEL is less than 100 tons per year for each pollutant. |
| --- | 11 | Deleted | No longer applicable. |
| 9 | 32 | Renumbered |  |
| 10-11 | 12-13 | No change |  |
| --- | 14-31 and 33 | Deleted | These regulations applied to the primary aluminum production facility. |
| 12-14 | 35-37 | No change |  |
| 15 | 38 | Reduced PSEL | The primary aluminum production plant has been shut down. |
| --- | 39 | Deleted | These HAPs are no longer emitted. |
|  |  |  |  |
| 16 | --- | Added table of permitted emission for fee purposes. | The PSELs are equal to the Generic PSEL, so this table provides the “permitted emissions” based on the source’s potential to emit. |
| 17-22 | 40-45 | No change |  |
| 23 | 46 | No change |  |
| --- | 47 | Deleted | The primary aluminum production plant has been shut down. |
| 24 | 48 | Minor change | Requires PM and HCl test once during permit term. |
| 25-26 | 49-50 | No change |  |
| --- | 51 | Deleted | The primary aluminum production plant has been shut down. |
| 27-34 | 52-59 | No change |  |
| 35-37 | 60-62 | No change |  |
| 38 | 100 | Minor changes | Deleted reference to primary aluminum production emission units. |
| 39 | 64 | No change |  |
| 40 | 63 | No change |  |
| --- | 65-74 | Deleted | The primary aluminum production plant has been shut down. |
| 41 | 75 | Deleted reference to NWA Emissions Quality Assurance Plan. | The primary aluminum production plant has been shut down. |
| --- | 76-84 | Deleted | The primary aluminum production plant has been shut down. |
| 42-54 | 85-97 | No changes |  |
| --- | 98-99 | Deleted | The primary aluminum production plant has been shut down. |
| --- | 101 | Deleted | The primary aluminum production plant has been shut down. |
| 55 | 102 | Revised to narrow the scope of the PSEL monitoring only to the secondary aluminum production facility. | The primary aluminum production plant has been shut down. |
| --- | 103-104 | Deleted | The primary aluminum production plant has been shut down. |
| 56-59 | 105-108 | No changes |  |
| 60 | 109 | Revised to narrow the scope of the records only to the secondary aluminum production facility. | The primary aluminum production plant has been shut down. |
| 61 | 110 | No changes |  |
| --- | 111-112 | Deleted | The primary aluminum production plant has been shut down. |
| 62 | 113 | No change |  |
| 63 | 114 | Revised to add requirement for submitting a written report of excess emission events within 15 days of the event. | This revision is based on recent revisions to OAR 340-214-340. |
| 64 | 115 | Changed the notification period for permit deviations from 7 days to 15 days. | This revision is based on recent revisions to OAR 340-218-0050(3)(c)(B). |
| 65-66 | 116-117 | No changes |  |
| --- | 118 | Deleted the requirement for monthly reports. | Monthly reports were necessary for the primary aluminum production facility but it has been shut down. |
| 67 | 119 | Removed the primary aluminum reporting requirements from the semi-annual and annual reports. | The primary aluminum production plant has been shut down. |
| 68 | 120 | Revised to require the permittee certify the status of compliance as intermittent or continuous in the semi-annual compliance certifications and other minor changes. | This change is based on recent changes to OAR 340-218-0080(6)(c). |
| 69-74 | 121-126 | No changes |  |
| --- | 127 | Deleted | The primary aluminum production plant has been shut down. |
| 75-77 | 128-137 | Revised to remove requirements for the primary aluminum facility and incorporate the specific requirements of subpart RRR for secondary aluminum production facilities. | The primary aluminum production plant has been shut down. |
| 78 | 138 | Narrowed the scope of the non-applicable requirement section to only those requirements that could apply to the facility. Clarified that the facility is no longer subject to the requirements for primary aluminum production facilities. | This change is based on EPA’s review of DEQ’s Title V program and the primary aluminum production plant has been shut down. |
| G1-G2 | G1-G2 | No changes |  |
| G3 | --- | Added a condition addressing applicable requirements established in ACDPs. | This change is based on recent changes to OAR 340-218-0010(3)(b). |
| G4-G29 | G3-G28 | No changes, except corrections to cross reference as a result of adding condition G3. |  |
| Attachment B | Attachment B | Removed reference to subpart LL from the Part 63 General Requirements. | The primary aluminum production plant has been shut down. |
| --- | Attachment C | Deleted | The primary aluminum production plant has been shut down. |
| Attachment C | Attachment D | No changes |  |
| Attachment D | Attachment E | No changes |  |

PERMITTEE IDENTIFICATION

# Northwest Aluminum Specialties, Inc. (NWAS) owns and operates a secondary aluminum production facility located at 2929 West Second Street in The Dalles, Oregon.

FACILITY DESCRIPTION

# NWAS remelts extrusion scrap for casting and alloying in its 4 electric induction furnaces (B-4a.1-4). From the induction furnaces, the metal is transferred to the 3 Tilt holding furnaces (B-3c), which are heated with natural gas. The metal is then degassed through the sniff units or fluxed with nitrogen, before casting with recycled water. From the casting tables, the billet (logs) are sent to the 4 gas fired homogenizers (B-3d) for grain restructuring. The finished product is sent to the saws for cutting (B-3e) and packaging. The chips from the saws are caught in an outside-enclosed bin. Without electricity, the facility can run on gas until electricity is restored for the induction furnaces. A small induction furnace for research and development (B-3b) is used to help develop new alloys and products for the facility and operate only during the workweek. There is also a scrap metal shredder (B-5) located at NWAS.

EMISSIONS UNIT AND POLLUTION CONTROL DEVICE IDENTIFICATION

# The emissions units at this facility include the following:

| **Emissions Unit** | **EU Capacity** | **EU ID** | **Pollution Control Device** | **Design Parameters** | **PCD ID** |
| --- | --- | --- | --- | --- | --- |
| Casthouse Casting Tables | 0.5 quart/day, lubricating oil | B-3c | None | NA | NA |
| 2 Tilt Holding Furnaces/Fluxing (natural gas) | 3.1 MMBtu/hr capacity, each | B-3c.1, B-3c.2 | Sniff Units (2) | 11,000 Watts | B-3c.1a, B-3c.2a |
| 1 Horizontal Rotary Furnace (natural gas) | Future project | B-3c.3 | Baghouse | Future Project | TBD |
| 4 Homogenizer Furnaces (natural gas) | 4.3 MMBtu/hr capacity each | B-3d.1, B-3d.2, B-3d.3, B-3d.4 | Process Control | NA | NA |
| 1 R&D Induction Furnace (electric heat only) | 250 tons of metal per year | B-3b.4 | Process Control | NA | NA |
| 4 Induction Furnaces (electric heat only)s | 25,000 lbs/hr, each | B-4a.1, B-4a.2, B-4a.3, B-4a.4 | Future Baghouses | NA | NA |
| Scrap Aluminum Shredder | 10,500 tons per year, 8 hrs/day,5 days/week | B-5 | None | NA | NA |
| **Aggregate Insignificant Activities:**  |
| Roads | Approximately 2 miles | NA | None | NA | NA |
| Dross Storage Building | 2,000 ft2 | NA | Work Practice | NA | NA |

There are ten automatic puck saws for cutting to certain sizes for shipment. These saws exhaust inside buildings and do not emit to the atmosphere. Therefore, the saws were not included as regulated emissions units.

# Categorically insignificant activities include the following:

1. Constituents of a chemical mixture present at less than 1% by weight of any chemical or compound regulated under Divisions 20 through 32 of this chapter, or less than 0.1% by weight of any carcinogen listed in the U.S. Department of Health and Human Service's Annual Report on Carcinogens when usage of the chemical mixture is less than 100,000 pounds/year
2. Evaporative and tail pipe emissions from on-site motor vehicle operation
3. Distillate oil, kerosene and gasoline fuel burning equipment rated at less than or equal to 0.4 million Btu/hr
4. Natural gas and propane burning equipment rated at less than or equal to 2.0 million Btu/hr
5. Office activities
6. Food service activities
7. Janitorial activities
8. Personal care activities
9. Groundskeeping activities including, but not limited to building painting and road and parking lot maintenance
10. On-site recreation facilities
11. Instrument calibration
12. Maintenance and repair shop
13. Automotive repair shops or storage garages
14. Air cooling or ventilating equipment not designed to remove air contaminants generated by or released from associated equipment
15. Refrigeration systems with less than 50 pounds of charge of ozone depleting substances regulated under Title VI, including pressure tanks used in refrigeration systems but excluding any combustion equipment associated with such systems
16. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including associated vacuum producing devices but excluding research and development facilities
17. Temporary construction activities
18. Warehouse activities
19. Accidental fires
20. Air vents from air compressors
21. Electrical charging stations
22. Blueprint making
23. Routine maintenance, repair and replacement such as anticipated activities most often associated with and performed during regularly scheduled equipment outages to maintain a plant and its equipment in good operating condition, including but not limited to steam cleaning, abrasive use and woodworking
24. Electric motors
25. Storage tanks, reservoirs, transfer and lubricating equipment used for ASTM grade distillate or residual fuels, lubricants and hydraulic fluids
26. Natural gas, propane and liquefied petroleum gas (LPG) storage tanks and transfer equipment
27. Pressurized tanks containing gaseous compounds
28. Storm water settling basins
29. Paved roads and paved parking lots within an urban growth boundary
30. Hazardous air pollutant emissions of fugitive dust from paved and unpaved roads except for those sources that have processes or activities that contribute to the deposition and entrainment of hazardous air pollutants from surface soils
31. Health, safety and emergency response activities
32. Emergency generators and pumps used only during loss of primary equipment or utility service

EMISSION LIMITS AND STANDARDS, testing, monitoring, and recordkeeping

# The primary aluminum production plant no longer exists at the site, so all requirements applicable to that activity have been removed from the permit. There have not been any changes to the requirements applicable to the secondary aluminum production facility.

State Requirements not included in the SIP (OAR Chapter 340)

# The nuisance regulations contained in OAR 340-208-0300 through 340-208-0450 are applicable to all sources in all areas of the state. These regulations include requirements prohibiting nuisances (OAR 340-208-0300), masking of emissions (OAR 340-208-0400), and fallout of particulate matter greater than 250 microns (OAR 340-208-0450). OAR 340-208-0400 is included in the General Conditions. The other two requirements are included in the permit as permit conditions 6 and 7. The permittee is required to maintain a complaint log and investigate any complaints to determine the validity of the complaint and take corrective action, if appropriate for resolving the complaint.

SIP Requirements (OAR Chapter 340)

# SIP requirements that are applicable to both the primary and secondary aluminum facilities:

## Fuels. The permit does not allow the permittee to use residual fuel oil, distillate fuel oil or coal because those fuels have sulfur, which would cause sulfur dioxide emissions in excess of the Plant Site Emission Limits. The authority for this requirement is PSEL rule 0AR 340-222-0040(6). As a result of this requirement, the fuel sulfur requirements in Division 228 are not applicable to this facility. [Permit Condition 8]

### Testing requirements: Testing is not required because this type of standard does not have an emission limit that can be compared to an emissions test result for the purpose of determining compliance.

### Monitoring requirements: The permittee is required to monitor the type and amount of fuel used on a monthly basis. [Permit Condition 40]

### Recordkeeping requirements: The permittee is required to keep records of type and amount of fuel used on a monthly basis. [Permit Condition 60.c]

## Fugitive dust control. The requirement to minimize fugitive dust emissions contained in OAR 340-208-0210(2) applies to this facility because it is located in a special control area. [Permit Condition 5]

### Testing requirements: Testing is not required because this type of standard does not have an emission limit that can be compared to an emissions test result for the purpose of determining compliance.

### Monitoring requirements: Since fugitive emissions could cause nuisance conditions off-site, the permittee is required to keep a log of complaints, investigate the complaint, make a determination as to the validity of the complaint, and resolve any problems at the plant that were the cause of the complaint. [Permit Condition 39]

### Recordkeeping requirements: The permittee is required to maintain a complaint log. [Condition 60.g]

# SIP requirements that are applicable to other emissions units:

## Visible emission limits. All emission units and activities, including fugitive emissions are subject to the visible emissions limit specified by OAR 340-208-0110(2). This regulation requires that visible emissions not be equal to or greater than 20% opacity for more than an aggregate of 3 minutes in any 60-minute period. [Permit Condition 4]

### Testing requirements: Monthly VE tests are required for emissions units B-3c. For those emissions units that are not required to be tested, the permit identifies the reference test method that would be used in the event that testing is performed for compliance purposes. [Permit Conditions 14 and 38]

### Monitoring requirements: Monthly Method 9 tests are required for emissions unit B-3c because these emissions units do have the potential of generating visible emissions. Monitoring of other activities is not required because the activities do not have the potential to cause visible emissions. [Permit Condition 38]

### Recordkeeping requirement: The permittee must maintain records of the visible emissions tests and the type and amount of fuel burned in the emissions units. [Permit Conditions 60.c and 60.i]

## Particulate matter emissions limits. Emissions units B-3c.1, B-3c.2, B-3c.2 and B-3d are subject to the 0.1 gr/dscf limit specified in OAR 340-226-0210(1)(b) because they were installed after June 6, 1970. [Permit Conditions 9]

### Testing requirements: Testing is required once during the permit term of either emissions unit B-3c.1 or B-3c.2. These are the tilt/holding furnaces that could generate PM emissions. The non-fugitive emissions units burn only natural gas or propane, which is a very clean burning fuel that is not expected to generate significant particulate emissions so testing of these units is also not required. [Permit Condition 24]

### Monitoring requirements: For the natural gas fired emissions units (B-3d), the permittee is not required to do any monitoring other than keeping records of the type and amount of fuel burned in the devices. The assumption being that as long as natural gas or propane are burned, the emissions standards will not be exceeded. For the fluxing operations (emissions units B-3c.1, B-3c.2, and B-3c.3), the permittee is required to perform a visible emissions test using EPA Method 9 at least once each month. While there is not a direct correlation between visible emissions and particulate emissions, it is assumed that the emissions will be less than the standard provided the visible emissions are less than 20% opacity. [Permit Condition 38]

### Recordkeeping requirement: The permittee is required to keep records of the type and amount of fuel burned and the monthly visible emissions tests. [Permit Conditions 60.i]

NSPS REQUIREMENTS

# There are not any New Source Performance Standards (40 CFR, Part 60) that apply to this facility.

NESHAP REQUIREMENTS

Subpart A General Provisions

# The general provisions of subpart A of 40 CFR Part 63 apply to this source because it is subject to RRR for secondary aluminum production facilities. A table showing which requirements of subpart A are applicable is provided below. [Permit Condition 11 and Attachment B]

| **Section or Sub-section** | **Description** | **Subpart RRR Applicability Determination** | **Permit Action** |
| --- | --- | --- | --- |
| 63.1 | Part 63 applicability | Yes, except EPA retains approval authority in 63.1(b) and states have option to exclude area sources from Title V permitting in 63.1(b)(2) | Incorporate by reference |
| 63.2 | Definitions | Yes, except 63.1503 includes additional definitions | Incorporate by reference |
| 63.3 | Units and abbreviations | Yes | Incorporate by reference |
| 63.4 | Prohibited activities and circumvention | Yes | Incorporate by reference |
| 63.5 | Construction and reconstruction | Yes, but not currently | Incorporate by reference |
| 63.6 | Compliance with standards and maintenance requirements | Yes, except as specified below for specific sub-sections | Incorporate by reference, except as specified for specific sub-sections. |
| 63.6(b) | Compliance dates for new and reconstructed sources | Yes, but not currently | Incorporate by reference |
| 63.6(c)(1) | Compliance dates for existing sources | Yes, except 63.1501 specifies compliance dates for subpart RRR | Use specific subpart requirement rather than general provision |
| 63.6(c)(2) | Compliance date after 112(f) residual risk analysis | Yes, but not currently | Incorporate by reference |
| 63.6(c)(5) | Compliance date for a source that becomes a major source | No, the source is already a major source | List as non-applicable |
| 63.6(e) | Operation and maintenance requirements (SSM plans) | Yes, 63.1510 requires plan | Include in permit |
| 63.6(g) | Use of an alternative non-opacity emission standard | No | List as non-applicable |
| 63.6(h) | Compliance with opacity and visible emissions standards | Yes | Incorporate by reference for subpart RRR  |
| 63.6(i) | Extension of compliance with emission standards (early reductions) | No, the permittee has not requested an extension for early reductions | List as non-applicable |
| 63.6(j) | Presidential exemption from compliance with emission standards | Yes, but not currently | Incorporate by reference |
| 63.7 | Performance testing requirements | Yes, except as specified below for specific sub-sections | Incorporate by reference, except as specified for specific sub-sections |
| 63.7(a) | Applicability and performance test dates | Yes, 63.1511 requires repeat tests every 5 years | Include in permit |
| 63.7(b) | Notification of performance test | Yes | Include in permit |
| 63.7(c) | Quality assurance program (site-specific test plan) | Yes | Include in permit |
| 63.7(f) | Use of an alternative test method | Yes, but not currently. 63.1510(w) includes provisions for monitoring alternatives | Incorporate by reference |
| 63.7(g) | Data analysis, recordkeeping, and reporting | Yes | Include in permit |
| 63.7(h) | Waiver of performance tests | No, not requested by permittee | List as non-applicable |
| 63.8 | Monitoring requirements | Yes, except as specified below for specific sub-sections | Incorporate by reference, except as specified for specific sub-sections |
| 63.8(b) | Conduct of monitoring | Yes | Include in permit |
| 63.8(c) | Operation and maintenance of continuous monitoring systems | Yes | Incorporate by reference. |
| 63.8(d) | Quality control program | Yes | Incorporate by reference |
| 63.8(e) | Performance evaluation of continuous monitoring systems | Yes | Incorporate by reference |
| 63.8(f) | Use of an alternative monitoring method | Yes, except 63.8(f)((1)-(4) are not applicable to subpart RRR because 63.10(w) includes provisions for monitoring alternatives | Incorporate by reference, but clarify that **63.8(f)(1)-(4) do not apply to subpart RRR** |
| 63.8(g) | Reduction of monitoring data | Yes, except 63.8(g)(2) is not applicable to subpart RRR because 63.1512 requires five six-minute averages for an aluminum scrap shredder | Incorporate by reference, but clarify **that 63.8(2) is not applicable to subpart RRR** |
| 6.3.9 | Notification requirements | Yes, except as specified below for specific sub-sections | Incorporate by reference, except as specified for specific sub-sections |
| 63.9(b) | Initial notifications | Yes | Include in permit |
| 63.9(e) | Notification of performance test | Yes | Include in permit |
| 63.9(f) | Notification of opacity and visible emission observations | Yes | Include in permit |
| 63.9(g) | Additional notification for sources with continuous monitoring systems | Yes | Include in permit |
| 63.9(h) | Notification of compliance status | Yes | Include in permit |
| 63.9(i) | Adjustment to time periods or post mark deadlines for submittal and review of required communications | Yes, but not currently | Incorporate by reference |
| 63.10 | Recordkeeping and reporting requirements | Yes, except as specified below for specific sub-sections | Incorporate by reference, except as specified for specific sub-sections |
| 63.10(b) | General recordkeeping requirements | Yes, except 63.1517 includes additional requirements | Include in permit |
| 63.10(d) | General reporting requirements | Yes | Include in permit |
| 63.10(e) | Additional reporting requirements for sources with continuous monitoring systems | Yes | Include in permit |
| 63.10(f) | Waiver of recordkeeping or reporting requirements | Yes, but not currently | Incorporate by reference |
| 63.11 | Control device parameters | No, flares are not applicable | List as non-applicable |
| 63.12 | State authority and delegations | Yes | Incorporate by reference |
| 63.13 | Addresses of state air pollution control agencies and EPA regional offices | Yes | Incorporate by reference |
| 63.14 | Incorporation by reference | Yes, except Chapters 3 and 5 of ACGIH Ventilation Manual for capture/collection systems is also incorporated by reference | Incorporate by reference |
| 63.15 | Availability of information and confidentiality | Yes | Incorporate by reference |

## Testing requirements: Testing is not required because these types of standards do not have emission limits that can be compared to an emissions test result for the purpose of determining compliance.

## Monitoring and recordkeeping requirements: The monitoring and recordkeeping requirements for the specific NESHAP standards will be used to determine compliance with the general provisions so no additional monitoring is required.

Subpart RRR Requirements

# NWA was required to comply with the applicable requirements of 40 CFR part 63, subpart RRR by March 24, 2003. A summary of the applicability determinations for subpart RRR requirements is provided below: [Permit Conditions 35, 36, 40 through 45, 52 through 59, 85 through 97, 110, 111, 113, 121 through 126, 128, and 129 through 137]

| **Section or Sub-Section** | **Description** | **Applicability Determination** | **Permit Action** |
| --- | --- | --- | --- |
| 63.1500 | Applicability | Yes, NWA has a scrap shredder, group 2 furnaces, and secondary aluminum processing units. The facility is a major source. | The requirements of subpart RRR are being incorporated into the Oregon Title V Operating Permit. |
| 63.1502 | Incorporation by reference | Yes | No permit action because this section only provides information about the regulations instead of specifying a specific requirement that needs to be included in the permit |
| 63.1503 | Definitions | Yes | No permit action because this section only provides information about the regulations instead of specifying a specific requirement that needs to be included in the permit |
| 63.1504 | Reserved | No | No permit action |
| 63.1505(a) | Summary of emission standards | Yes | Include in permit |
|  |  |  |  |
| 63.1505(b) | PM and VE standards for scrap shredders | Yes, except (b)(2) does not apply. | Include the PM limit in the permit but do not include the VE limit because there are no add-on controls on the shredder.. |
| 63.1505(c) | Standards for thermal chip dryers | No | NWA does not have a thermal chip dryer. |
| 63.1505(d) and (e) | Standards for dryer/delacquering kiln/decoating kiln | No | NWA does not have dryer/delacquering kiln/decoating kiln. |
| 63.1505(f) | Standards for sweat furnaces | No | NWA does not have a sweat furnace. |
| 63.1505(g) | Standards for dross-only furnaces | No | NWA does not have a dross-only furnace. |
| 63.1505(h) | Standards for rotary dross cooler | No | NWA does not have a rotary dross cooler. |
| 63.1505(i) | PM, VE, D/F, and HCl standards for Group 1 furnaces | Yes, except the VE standards may not apply if there is no add-on control device. Reactive fluxing using chlorine has been discontinued, but one or more of the furnaces may be Group 1 if processing non-clean charge. Currently, only clean charge is processed so all furnaces are Group 2 furnaces and these limits would not apply | Include in permit. |
| 63.1505(j) | PM, VE, and HCl standards for in-line fluxers  | The PM and HCl standards do not apply. The VE standards may apply if there is an add-on control device | Reactive flux materials are not used with the in-line fluxers on emission units B-3c.1-3, but the exhaust gases may be ducted to the baghouse controls planned for the holding furnaces |
| 63.1505(k) | PM, HCl, and D/F standards for secondary aluminum processing units (SAPU) | Yes | Include in permit |
| 63.1506(a) | Summary of operating requirements | Yes, except §63.1506(a)(3) and (4) do not apply. | Include applicable operating requirements in the permit. §63.1506 does not apply because NWA does not have sweat furance |
| 63.1506(b) | Labeling of group 1 furnaces, group 2 furnaces, in-line fluxer, and scrap dryer/delacquering kiln/decoating kiln | Yes, except NWA does not have a scrap/delacquering kiln/decoating kiln. | Include labeling requirements for group 1 and group 2 furnaces in the permit |
| 63.1506(c) | Design and installation requirements for control device capture/collection systems | Yes, if there are add-on control devices. Most of the affected sources do not have control devices but a baghouse(s) will be added to furnaces at the NWA Specialties plant | Include in permit for affected source that have add-on control devices |
| 63.1506(e) | Bag leak detector, COMS, or VE observations for scrap aluminum shredder with an add-on control device | No | NWA has a scrap shredder, but there is no add-on control device. Include performance test to determine compliance with standards but do not include operating requirements |
| 63.1506(f) | Operating requirements for a thermal chip dryer | No | NWA does not have a thermal chip dryer |
| 63.1506(g) | Operating requirements for scrap dryer/delacquering kiln/decoating kiln | No | NWA does not have dryer/delacquering kiln/decoating kiln |
| 63.1506(h) | Operating requirements for sweat furnace | No | NWA does not have a sweat furnace |
| 63.1506(i) | Operating requirements for a dross-only furnace | No | NWA does not have dross-only furnace |
| 63.1506(j) | Operating requirements for a rotary dross cooler | No | NWA does not have rotary dross cooler |
| 63.1506(k) | Operating requirements for in-line fluxers | No | NWA does not have a lime injected fabric filter control device |
| 63.1506(l) | Operating requirements for in-line fluxer using no reactive flux material | Yes | Include in permit |
| 63.1506(m) | Operating requirements for group 1 furnaces with add-on control devices | No | This does not currently apply, but apply in the future if baghouses are added to the Group 1 furnaces |
| 63/1506(n) | Operating requirements for group 1 furnaces without add-on control devices | Yes | Include in permit |
| 63.1506(o) | Operating requirements for group 2 furnaces (use only clean charge and no reactive flux material) | Yes | Include in permit |
| 63.1506(p) | Corrective action | Yes | Include in permit |
|  |  |  |  |
| 63.1507-63.1509 | Reserved | No | No permit action |
| 63.1510 | Monitoring requirements | Yes, except §63.1510(f), (g), (h), (i), (k), (l), (n), and (v) are not applicable | The following monitoring requirements are included in the permit because they are applicable to the facility: summary (a), OM&M plan (b), labeling (c), capture/collection system inspection (d), feed/charge weight (e), reactive flux injection rate (j), in-line fluxers using no reactive flux (m), group 1 furnaces w/o add-on controls (o), scrap injection program (p), scrap contamination level (q), group 2 furnace (r), site-specific requirements for SAPU (s), SAPU compliance monitoring (t) and (u), alternative methods (w). The following monitoring requirements are not included in the permit because NWA does not have the affected source or control device: fabric filter (f), afterburner (g), fabric filer inlet temperature (h), lime injection (i), thermal chip dryer (k), dross-only furnace (l), sidewell furnace with add-on control device (n), and altenative monitoring methods for lime injection (v) |
| 63.1511 | Performance test/compliance demonstration general requirements | Yes | The site-specific test plan has been submitted |
| 63.1512 | Performance test requirements | Yes, except §63.1512(b), (c), (d), (f), (g), (h), (i), (l), (m), (n), (p), and (q) do not apply | The applicable performance test requirements are included in the permit. §63.1512(b), (c), (d), (f), (g), (h), (i), (l), (m), (n), (p), and (q) are not applicable because NWA does not have the affected source or control device |
| 63.1514 | Reserved | No | No permit action |
| 63.1515(a) | Initial notification | Yes, except it only applies to new or reconstructed sources | Include initial notification requirements for new or reconstructed sources, but do not include the requirement for existing sources because the initial notification was submitted by NWA on 7/21/00 (it was due by 7/24/00) |
| 63.1515(b) | Notification of compliance status report | Yes | Include in permit as part of compliance schedule |
| 63.1516(a) | SSM plan reports | Yes | Include in permit |
| 63.1516(b) | Excess emissions/summary report | Yes, if using continuous monitoring systems | Incorporate into permit by reference |
| 63.1516(c) | Annual compliance certifications | Yes | Include as part of Title V semi-annual compliance certification report |
| 63.1517(a) | General recordkeeping requirements | Yes | Include in permit |
| 63.1517(b) | Specific recordkeeping requirements | Yes, except §63.1517(b)(2), (3), (4), and (10) do not apply and only one of §63.1517(b)(1)(i) - (iii) will apply | §63.1517(b)(2), (3), (4), and (10) do not apply because NWA does not have the affected source or control device. The applicable requirement from §63.1517(b)(1) will have to be determined once the baghouse is installed at NWA Specialties |
| 63.1518 | Applicability of general provisions | Yes | Include in permit |
| 63.1519 | Delegation of authority | Yes | No permit action |
| 63.1520 | Reserved | No | No permit action |

## Site-specific test plan: NWA is required to submit a site-specific test plan as part of a significant permit modification by September 23, 2001. This will provide adequate time for EPA and the Department to review and approve the plan prior to the compliance date. Elements of the test plan will be incorporated into the permit as part of the significant permit modification.

## SSM plan: In accordance with 40 CFR §63.1 NWA is required to develop and implement an SSM plan for the secondary aluminum production facility. The plan will be incorporated by reference into the Title V permit as part of the significant permit modification.

## OM&M plan: In accordance with 40 CFR §63.1506(a) and §63.1510(b), NWA is required to develop and implement an Operation, Monitoring and Maintenance (OM&M) plan and submit it to the Department for review as part of the significant permit modification that is due by September 23, 2001. Some elements of the OM&M plan, such as the control device parameter limits may not be available prior to conducting the performance test. As part of the significant permit modification, the permit will be revised to include a requirement to revise the plan shortly after completing the initial performance test. Completion of the initial performance tests for SAPUs will be considered to be the date of approval of the OM&M plan. In addition to the specific operating requirements specified in 40 CFR §63.1506, the OM&M plan must also include the following:

### A site-specific monitoring plan for Group 1 furnaces;

### A site-specific monitoring plan for Group 2 furnaces; and

### Site-specific requirements for secondary aluminum processing units (SAPU).

Note: All of the plans specified above have been completed, but need to be updated to address just the secondary aluminum production facility.

Other FEDeral Requirements

# New Source Performance Standards (NSPS). None of the NSPS (40 CFR Part 60) are applicable to this facility either because the facility is not within the source category regulated by the standard or does not have emissions units regulated by the standard. Although there are no specific standards that apply to the facility, the general provisions (subpart A) and appendices to Part 60 (test methods) may be applicable or become applicable during the permit term, so they are not listed in the nonapplicable requirements section of the permit.

# National Emissions Standards for Hazardous Air Pollutants (NESHAP). With the exception of Subpart M (asbestos standards), none of the NESHAPs in 40 CFR Part 61 are applicable to this facility because the facility is not within the source categories regulated by the standards. However, just as with the NSPS, the general provisions (subpart A) and appendices may be applicable or become applicable during the permit term. With the exception of subparts A (general provisions) and RRR (secondary aluminum production facilities), none of the NESHAPs in 40 CFR Part 63 are applicable to this facility because the facility is not within the source categories regulated by the standards. The applicable provisions of 40 CFR part 63, subparts A and RRR have been discussed above.

# Compliance Assurance Monitoring (40 CFR part 64). As part of the previous permit renewal application, NWA determined that all emissions units at the NWAS facility were not subject to CAM because they either do not have control devices, or the pre-control potential emissions are less than 100 tons per year for affected pollutants, or the emissions unit is subject to 40 CFR part 63. The determination was evaluated by the Department and approved.

# Accidental Release and Prevention (40 CFR part 68). The accidental release prevention regulations in 40 CFR Part 68 did apply to this facility because chorine was used in processes at levels greater than the threshold levels. The use of chlorine has been discontinued, so the 40 CFR Part 68 no longer applies. However, the requirement is still included in the permit in the event that regulated materials are used in the future. [Permit Conditions 12]

# Stratospheric ozone standards (40 CFR part 82). Halon 1301 is used in the fire suppression system. The fire suppression system is serviced once per year by an outside contractor. The production of halon was discontinued on 10/01/94. Use of halon is not regulated and can continue until supplies are depleted. The use of 1,1,1-trichoroethane as a part cleaning solvent has been discontinued. The stratospheric ozone standards are incorporated by reference as General Condition G10.

Insignificant Emissions Units

# As identified earlier in this Review Report, this facility has insignificant emissions units (IEUs) that include categorically insignificant activities and aggregate insignificant emissions, as defined in OAR 340-200-0020. For the most part, the standards that apply to IEUs are for opacity (20% limit) and particulate matter (0.1 gr/dscf limit). The Department does not consider it likely that IEUs could exceed an applicable emissions limit or standard because IEUs are generally equipment or activities that do not have any emission controls (e.g., small natural gas fired space heaters) and do not typically have visible emissions. Since there are no controls, no visible emissions, and the emissions are less than one ton per year, the Department does not believe that monitoring, recordkeeping or reporting is necessary for assuring compliance with the standards. According to the application, none of the IEUs are subject to a NESHAP or NSPS. [Permit Condition 37]

PLANT SITE EMISSION LIMITS

# The baseline emissions rate, netting baseline and PSEL information is summarized in the following table: [Permit Condition 38]

|  |  |  |  |
| --- | --- | --- | --- |
| **Pollutant** | **Baseline Emission Rate (tons/yr)** | **Netting Basis (tons/yr)** | **Plant Site Emission Limit (PSEL) (tons/yr)** |
| **Previous** | **Proposed** | **Previous PSEL** | **Proposed PSEL** | **PSEL Increase** |
| PM/PM10 | 421 | 421 | 421 | 435 | 14 | -421 |
| SO2 | 484 | 484 | 484 | 519 | 39 | -480 |
| NOx | 63 | 63 | 63 | 96 | 39 | -57 |
| CO | 17,413 | 17,413 | 15,514 | 17413 | 99 | -17314 |
| VOC | 209 | 209 | 209 | 235 | 39 | -196 |
| Fluoride | 98 | 98 | 98 | 98 | 0 | -98 |

## Definitions for the terms used in the PSEL summary table are provided at the end of this review report.

## The baseline emissions rate and netting basis include emissions from the primary aluminum production facility, which no longer exists at the site.

## The current PSEL is being reduced to the Generic PSEL because the NWAS facility does not have the capacity to emit more than a significant emission rate for each pollutant. The fluoride PSEL is reduced to zero because fluoride is not used or emitted in the process.

COMPONENTS of the Netting basis

# Components of the Netting Basis are shown in the following table:

|  |  |  |  |
| --- | --- | --- | --- |
| **Pollutant** | **PSEL****(tons/yr)** | **Unassigned Emissions (tons/yr)** | **Credits****(tons/yr)** |
| PM/PM10 | 14 | 407 | 0 |
| CO | 99 | 15315 | 0 |
| NOx | 39 | 24 | 0 |
| SO2 | 39 | 445 | 0 |
| VOC | 39 | 170 | 0 |
| Fluoride | 0 | 51 | 0 |

## The current potential to emit for all pollutants is less than the PSEL, which is based on the current capacity of the plant. The excess emissions are classified as unassigned emissions in accordance with OAR 340-222-0045.

## The previous permit included 1,995 tons of unassigned emissions for carbon monoxide and 47 tons of fluoride. The unassigned emissions were not used during the permit term, so they are no longer available to the facility in accordance with OAR 340-222-0045.

## In this permitting action, unassigned emissions are being established for shutting down the primary aluminum production facility. The unassigned emissions may be used for internal netting during this permit term to allow an emission increase at the existing source in accordance with the permit. If not used during this permit term, the unassigned emission will be reduced to the significant emission rate.

## Unassigned emissions may not be banked or transferred to another source.

## Emissions that are removed from the netting basis are unavailable for netting in any future permit actions.

## Unassigned emissions will be reduced to not more that the significant emission rate on July 1, 2015.

## NWAS must notify the Department of any changes at the facility that would utilize the unassigned emissions in accordance with OAR 340-218-0190.

Significant Emission Rate

# The proposed PSEL is not greater than the previous netting baseline for any pollutant. Thus, no further analysis is required in accordance with OAR 340-222-0040(1)(a)(A).

| **Pollutant** | **SER** | **Requested Increase Over Previous Netting Basis** | **Increase Due to Utilizing Capacity that Existed in the Baseline Period** | **Increase Due to Physical Changes or Changes in the Method of Operation** |
| --- | --- | --- | --- | --- |
| PM/PM10 | 15 | 0 | 0 | -421 |
| CO | 100 | 0 | 0 | -17314 |
| NOx | 40 | 0 | 0 | -57 |
| SO2 | 40 | 0 | 0 | -480 |
| VOC | 40 | 0 | 0 | -196 |
| Fluoride | 3 | 0 | 0 | -98 |

HAZARDOUS AIR POLLUTANTS

# NWAS is not a major source of hazardous air pollutants. However, since the facility was co-located with the primary aluminum production facility, the entire source was considered a major source of HAPs when the MACT standard for secondary aluminum productions was promulgated. According to EPA policy, once a facility is subject to a MACT standard, the facility will always be subject to the standard. DEQ reviewed EPA’s TRI database and found no report for NWAS.

GENERAL BACKGROUND INFORMATION

# The proposed permit is a renewal of an existing Oregon Title V Operating Permit that was issued on June 8, 2006.

# Other permits issued or required by the Department for this source include a NPDES permit (NPDES 0001708).

# The source is located in an area that is designated as in attainment with all National Ambient Air Quality Standards (NAAQS).

# The source is located within 200 kilometers of the Mount Hood and Mount Adams Wilderness Areas, which are Class I air quality protection areas. The source is also located in the Columbia River Gorge National Scenic Area.

COMPLIANCE HISTORY

# During the last permit term, the facility was inspected on 8/14/07 and 9/16/09. Two violations were identified during the inspection in 2007 (see Warning Letter below). The facility was found to be in compliance with permit conditions during the inspection in 2009.

# Warning Letter WL-BND-AQ-2007-0055 was issued on December 17, 2007 for failure to conduct testing on the shredder and missing or incorrect labels. In addition, the Department requested information about the flux material being used in the tilt/holding furnaces. It was determined later that the flux material is reactive flux material as defined in the MACT standard. NWAS subsequently conducted source testing that demonstrated compliance with the standards and reclassified the furnaces as Group 1 furnaces. NWAS requested EPA waive the test requirement for the shredder. The Department has not received a response to the request, but the shredder was not in operation during the last inspection. The labels for the process equipment have been updated.

# The Department received the following complaints during the last permit term. Both of these related to activities at the primary aluminum production facility, which no longer exists.

| **Date** | **Description** | **Resolution** |
| --- | --- | --- |
| 1/22/08 | The DEQ received a complaint of black dust coming from the facility. The permittee was contacted and they said the lines supplying water to the area for dust control froze. The dust was caused by crushing the anode carbon. The activity was being done inside, but it was moved outside. | The activity was suspended until water would be available to control the dust or the material would be shipped off site to be crushed somewhere else.  |
| 4/22/08 | The DEQ received a complaint of high dust. The facility was contacted and they said the sandy backfill material used to cover the excavation site was being blown offsite due to very high winds. They had ordered a dust suppressant material, but the wrong material was delivered.  | Three water trucks were commissioned to control the dust until the dust suppressant material arrived and could be applied to the area. |

SOURCE TEST RESULTS

# The Tilt/holding group 1 furnace (EU B-3c.2) was tested on June 10-12, 2008. The results of the test were as follows:

|  |  |  |
| --- | --- | --- |
| **Testing Parameter** | **Average Results** | **Permit Limit** |
| Particulate emissions (gr/dscf) | 0.005 | 0.1 |
| Particulate emissions (lbs/hr) | 0.31 | --- |
| Particulate emissions (lb/ton aluminum produced) | 0.058 | 0.80 |
| HCl (ppmvd) | 1.1 | --- |
| HCl (lbs/hr) | 0.044 | --- |
| HCl (lbs/ton aluminum produced) | 0.009 | 0.40 |
| Aluminum production (tons) | 5.08 | --- |
| Flux powder usage (lbs) | 50 | --- |

# The permit includes a requirement to conduct a particulate matter and hydrogen chloride emissions test on either emissions unit B-3c.1, B-3c.2, or B-3c.3 at least once during the permit term.

PUBLIC NOTICE

# This permit was placed on public notice from **Aug. 6, 2010 to Sept. 10, 2010**. DEQ received one comment in support of the permit. A proposed permit has been sent to EPA for a 45 day review period. The Department may request and EPA may agree to an expedited review of 5 days if there were no substantive or adverse comments during the comment period.

If the EPA does not object in writing, any person may petition the EPA within 60 days after the expiration of EPA's 45-day review period to make such objection. Any such petition must be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided for in OAR 340-218-0210, unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period.

EMISSIONS DETAIL SHEETS

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Pollutant** | **Emission Point** | **EU ID** | **Operating Parameter** | **Emission Factor** | **Reference** | **Emissions (tons/yr)** |
| **(annual)** | **Units** | **EF value** | **EF units** |
| Particulate Matter | Casthouse fluxing | B-3 | 90000 | TAP | 0.058 | lb/TAP | 2008 ST | 2.6 |
| Tilt hold furnaces | B-3b | 77000000 | cubic feet n.g. | 7.6 | lb/10^6 ft^3 | a | 0.3 |
| Homogenizer furnaces | B-3d | 140000000 | cubic feet n.g. | 7.6 | lb/10^6 ft^3 | a | 0.5 |
| Chips & shavings w/cutting fluid residue |  | 15000 | tons | 0.000508 | lb/TAP | c | 0.004 |
| Fugitive & aggregate sources |  |  |  |  |  | d | 0.7 |
| Aggregate insignificant | AI |  |  |  |  |  | 1.0 |
|  |  |  |  |  | **PM Total** |  | **5.1** |
| Sulfur Dioxide | Tilt hold furnaces | B-3b | 77000000 | cubic feet n.g. | 2.6 | lb/10^6 ft^3 | b | 0.1 |
| Homogenizing furnaces | B-3d | 140000000 | cubic feet n.g. | 2.6 | lb/10^6 ft^3 | b | 0.2 |
| Aggregate insignificant | AI |  |  |  |  |  | 1.0 |
|  |  |  |  |  | **SO2 Total** |  | **1.3** |
| Carbon Monoxide | Tilt hold furnaces | B-3b | 77000000 | cubic feet n.g. | 84 | lb/10^6 ft^3 | a | 3.2 |
| Homogenizing furnaces | B-3d | 140000000 | cubic feet n.g. | 84 | lb/10^6 ft^3 | a | 5.9 |
| Aggregate insignificant | AI |  |  |  |  |  | 1.0 |
|  |  |  |  |  | **CO Total** |  | **10.1** |
| Oxides of Nitrogen | Tilt hold furnaces | B-3b | 77000000 | cubic feet n.g. | 100 | lb/10^6 ft^3 | a | 3.9 |
| Homogenizing furnaces | B-3d | 140000000 | cubic feet n.g. | 100 | lb/10^6 ft^3 | a | 7.0 |
| Aggregate insignificant | AI |  |  |  |  |  | 1.0 |
|  |  |  |  |  | **NOx Total** |  | **11.9** |
| Volatile Organic Compounds | Tilt hold furnaces | B-3b | 77000000 | cubic feet n.g. | 5.5 | lb/10^6 ft^3 | a | 0.2 |
| Homogenizing furnaces | B-3d | 140000000 | cubic feet n.g. | 5.5 | lb/10^6 ft^3 | a | 0.4 |
| Chips & shavings w/cutting fluid residue |  | 15000 | TAP | 9.58E-05 | lb HC/TAP | c | 0.001 |
| Lubricating oil |  | Material balance | 3.25 | lb/day | e | 0.6 |
| Aggregate insignificant | AI |  |  |  |  |  | 1.0 |
|  |  |  |  |  | **VOC Total** |  | **2.2** |
| HCl | Tilt hold furnaces | B-3c | 90000 |  | 0.009 |  | 2008 ST | 0.4 |

**Emission factor references:**

1. AP-42, section 1.4, table 1.4-1 and 1.4-2
2. DEQ factor based on a maximum sulfur content of 1.32 grains/100 ft^3 and an average of 0.91 grains/100 ft^3
3. AP-42 for commercial oil
4. AP-42 wind erosion calculations for piles and roads
5. material balance

Definition of terms used for the PLant Site Emisson limit:

**Plant Site Emissions Limit Table:**

Pollutant: Plant site emission limits must be established for all regulated pollutants listed in Table 2 of OAR 340-200-0020 that are emitted above the de minimis levels defined in 340-200-0020. It is also possible to include the Generic PSEL for a single or combined HAPs so that the source will not be considered a major source of HAPs. This would be important for any source that has the capacity to emit greater than 10 tons of a single HAP or 25 tons of combined HAPs but wants to avoid being subject to a future MACT standard.

Other pollutant mass emission limits may be established, but these should be considered performance standards and not PSELs. For example, during the initial permitting of a fiberglass facility, the Department may establish a mass emissions limit specifically for styrene. This limit should not be considered a PSEL because there is no ambient air quality, NSPS, or Part 61 NESHAP standard for styrene, but the styrene would be included in the PSEL for VOC. Another example would be if the Department believes it is necessary to establish an ammonia emission limit for a combustion device utilizing ammonia injection for control of NOx. The ammonia limit should not be a PSEL because there is no ambient air quality standard for ammonia. Lead is one hazardous air pollutant for which it may be necessary to establish a PSEL because there is an ambient air quality standard for lead. However, it is not included in the table above because most sources do not emit lead. It would have to be added for the sources that do emit lead.

The annual PSEL applies to each 12 consecutive month period. Therefore, it is considered a limit on the potential to emit (PTE). Short term PSELs (e.g., lb/hr, lb/day, lb/week, lb/month) are not required, except for sources located in the Medford-Ashland AQMA must have a lb/day PSEL for PM10 if the emissions are greater than 5 lbs/day.

The baseline emission rate equals the actual pollutant emissions during the baseline period of 1977 or 1978. An earlier year may be used if neither 1977 nor 1978 are representative of normal operations. (Note: Each source should have already identified an appropriate baseline period, so only in very rare cases will the Department approve an alternative year.) Once established, the baseline emission rate never changes, except that it may be corrected when better information about the actual emissions during the baseline period becomes available (e.g., source test data). For new sources (those that were installed after 1978), the baseline emission rate is zero for all pollutants. If a current source operated in the baseline period, and continuously since that time, the source has a baseline emission rate whether or not it is permitted. However, a source that permanently shut down and then started up again after the baseline period would have a baseline emission rate equal to zero, even if the source is the original facility and includes the original equipment. In addition, any source that elects to have a Basic, General or Simple ACDP forfeits their baseline emission rate.

With the first permitting action for a source after July 1, 2001, the baseline emission rate will be frozen and recalculated only if:

* A better emission factor is established for the baseline period and approved by the Department;
* A currently operating emissions unit that the Department thought had negligible emissions is determined to have non-de minimis emissions needs to be added to the baseline emission rate; or
* A new pollutant is added to the regulated pollutant list (e.g., PM2.5). For a pollutant that is newly regulated after 11/15/90, the initial netting basis is the actual emissions during any 12 consecutive month period within the 24 months immediately preceding its designation as a regulated pollutant. The Department will allow a prior 12 consecutive month time period to be used if it is shown to be more representative of normal source operation.

The netting basis is the baseline for determining net increases as a result of a major modification as defined in OAR 340-200-0020. The netting basis equals the baseline emission rate or the emissions that were approved during the last NSR action in accordance with OAR Chapter 340, Division 224, but only for the pollutants subject to NSR. In addition, the netting basis must be adjusted to reflect any emission reductions required by rule, unassigned emissions, and emission reduction credits. Reductions required by rule will effect the netting basis at the time the rule is adopted, which could occur at any time during the permit term. The previous netting basis would be adjusted at the next permit renewal.

Both the previous and proposed netting basis should be shown in the columns if it is being changed due to the current permit action. If the netting basis is changed, the review report will also need a complete discussion of the NSR action or reductions due to a new rule. Normally, the netting basis is not changed with a Title V permitting action because the rules require that an ACDP be issued for any NSR/PSD action.

The previous PSEL is the PSEL approved in the previous permit. In some cases, the previous PSEL will need to be corrected if new emissions information becomes available. If there are corrections, they should be explained in the review report. The previous PSEL is provided to show whether there are any proposed PSEL increases.

The proposed PSEL is the PSEL requested by the permittee and approved by the Department. The PSEL shall equal the netting basis and be adjusted upward or downward in accordance with OAR 340-222-0041. Since the PSEL cannot include emission reductions required by a rule, the PSEL is equal to the netting basis plus any past or present requested increases approved by the Department. Requested increases are evaluated as follows:

1. If the requested increase is due to utilizing existing capacity that also existed during the baseline period (e.g., the increase is not due to a physical modification and it is not due to, or associated with, capacity that was installed after the baseline period), the permittee shall demonstrate a need and:

* demonstrate that the requested increase above the netting baseline is less than the significant emission rate (SER); or
* if greater than or equal to the SER, provide an assessment of the air quality impact showing that no ambient air quality standard or PSD increment will be violated in an attainment area or an offset has been obtained in a nonattainment area.

2. If the requested increase is due to a proposed physical modification or change in the method of operation (e.g., de-bottle necking that would increase the capacity of the facility), the permittee shall:

* demonstrate that the net emission increase above the netting baseline is less than the significant emission rate (SER);
* if greater than or equal to the SER but not subject to NSR, provide an assessment of the air quality impact showing that no ambient air quality standard or PSD increment will be violated in an attainment area or an offset has been obtained in a nonattainment area; or
* if greater than or equal to the SER and subject to NSR, satisfy the requirements of the NSR rules in OAR Chapter 340, Division 224.

3. If the requested increase is due to both utilizing existing capacity and a physical modification, the increases shall be tracked separately as shown in the significant emissions rate table. If the total increase is greater than the SER, but the increase due to a physical modification is less than the SER, the source shall satisfy the requirements of item 1 above.

4. PSELs shall not be established which allow emissions in excess of those allowed by any applicable federal or state regulation in accordance with OAR 340-222-0043(1). Note that reductions required by rule do not affect the baseline emission rate, but they will affect the netting basis.

PSEL increase means the difference between the proposed PSEL and the previous PSEL. This can be a positive or negative number. This information is primarily for the purpose of keeping the public informed of any recent changes in the allowable emissions of a source. The information is not used to determine if an SER has been exceeded. SER exceedances are determined as the difference between the proposed PSEL and the netting basis.

Capacity means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Capacity is necessary for establishing the PSEL and unassigned emissions if the current capacity is less than the netting basis.

Potential to Emit (PTE) means the lesser of the capacity of a source or the maximum allowable emissions taking into consideration any physical or operational limitation, including the PSEL, air pollution control equipment and restrictions on hours of operation or on the type and amount of material combusted, stored, or processed, if the limitation is enforceable by the DEQ and EPA.

PTE is used to determine which type of permit is required. If the PTE is less than the Title V major source threshold levels, the source would be required to obtain an ACDP. If the PTE is greater than the Title V major source threshold levels, the source would be required to obtain an Oregon Title V Air Operating Permit.

The PSEL can be used to establishe the PTE but the PSEL shall not be reduced solely because of the PTE. However, it is not expected that any previous action that decreased PSELs to equal the PTE be reversed.

Unassigned emissions are that portion of the baseline emission rate that is greater than the source’s current capacity, excluding any credits. The source’s current capacity can be thought of as the source’s potential emissions at the maximum possible production levels without considering the PSEL. Unassigned emissions are established during the first permit renewal after July 1, 2001. If the unassigned emissions are not used during the permit term, they are reduced to the significant emission rate during the next permit renewal.

Emission Reduction Credits are established by OAR 340, Division 268. Emission reduction credits are a portion of the netting basis. Credits need to be identified separately in the permit with the terms (e.g., expiration date) of the credit clearly stated. Note, the baseline emission rate is not affected by credits and the PTE of a source would, by definition, not include any credits, whether transferred or banked.

Emission reduction credits, whether from shutdowns, curtailments, or over-control, are available for external offsets for a period of two years from the date of the actual emissions reduction. Emission reduction credits may also be banked for a specified period up to ten years. Requests for emission reduction credit banking shall be submitted to the Department prior to or within one year following the actual emissions reduction.

If credits are not used either internally or externally within the banked period, they are converted to unassigned emissions.

**Significant Emission Rate table:**

The SER (significant emission rate) for each pollutant is defined in OAR 340-200-0020. Pollutant emission increases above the SER are subject to additional requirements. For PSEL increases that do not involve a physical modification, an air quality assessment is required to show that there will not be a violation of an ambient air quality standard or PSD increment. For PSEL increases that are the result of a physical modification, the permittee shall comply with the NSR requirements in OAR Chapter 340, Division 224.

The requested increase is the difference between the proposed PSEL and the previous netting basis less any credits and reductions required by rule since the last permit action. The requested increase is also divided into portions that are due to utilization of capacity that existed in the baseline period and/or physical modifications at the facility as discussed in the Proposed PSEL section above. If the requested increase is greater than the SER, the review report will have to include a discussion of why the Department is approving the increase. This could be the results of an air quality assessment or NSR review, depending on the reason for the increase.