

Department of Environmental Quality
 Air Quality Division

OREGON TITLE V OPERATING PERMIT APPLICATION REVIEW REPORT

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PSEL CRED	SOURCE TEST	CMS	AMB MON	COMPL SCHED	SPEC COND	REPORT			EXCESS		NSPS	NSR	PSD	NESHAP	SIZE			PUBL NOTC
						A	S	M	R	N					TV	SM	A2	
						X	X			X				X				X

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INTRODUCTION

1. This is a renewal of existing Title V permit 26-2944. 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.
2. There were not any off-permit changes, 502(b)(10) changes, administrative amendments, and minor modifications which occurred during the last permit renewal.
3. Condition-by condition changes between previous permit 26-2944 and this renewal permit 26-2944:

New Permit Condition Number	Old Permit Condition Number	Description of change	Reason for change
3	3	Addition of Emission Unit 10-SCMP to table	Stationary source is now subject to NESHAP standard 40 CFR Part 63 Subpart Mmmm
16	16	Addition of Emission Unit 10-SCMP to table; Addition of Emission Unit 11-PSEL _{diff}	Stationary source is now subject to NESHAP standard 40 CFR Part 63 Subpart Mmmm; Fictional EU ID added for differences in actual emissions and new regulation language regarding Generic PSEL levels
19		Addition of permit condition for the spray coating NESHAP MACT standard	Stationary source is now subject to NESHAP standard 40 CFR Part 63 Subpart Mmmm
	27	Deletion of permit condition	Short term plant site emissions no longer applicable
	28	Deletion of permit condition	Plant site emissions for prior years, no longer applicable
29	29	Changed "annual" to specifically, 12-month rolling basis; changed 1 tons/year SO ₂ and CO PSEL to zero tons/year; changed 641 tons/year VOC PSEL to 460 tons/year VOC, changed NO _x PSEL to generic PSEL	Change in regulation language; updated PSELs based either on De minimis level, unassigned emissions, or generic PSEL regulation rules

New Permit Condition Number	Old Permit Condition Number	Description of change	Reason for change
30		Addition of permit condition for emission fee purposes	New regulation language may charge emission fees at a different rate than actual emissions
32		Addition of permit condition pertaining to purposeful rendering of inaccurate monitoring devices or methods	Addition of general permit condition in the regulations
33		Addition of permit condition pertaining to methods used for both emission fee purposes and compliance.	Addition of general permit condition in the regulations
42-43		Addition of permit condition for the monitoring for the NESHAP MACT standard	Stationary source is now subject to NESHAP standard 40 CFR Part 63 Subpart Mmmm
44h	40h	Changed "annual" to specifically, 12-month rolling basis	Updated regulation language
45		Addition of permit condition for source testing requirements	Addition of general permit condition in the regulations
51		Addition of permit condition pertaining to permittee's effort to maintain 100% of all required records	Addition of general permit condition in the regulations
56-57		Addition of permit condition for the recordkeeping for the NESHAP MACT standard	Stationary source is now subject to NESHAP standard 40 CFR Part 63 Subpart Mmmm
58		Addition of permit condition regarding excess emissions	Addition of general permit condition in the regulations
59		Addition of permit condition for permit deviation reporting	Addition of general permit condition in the regulations
60		Addition of permit condition for responsible official certification	Addition of general permit condition in the regulations
61	51	Moved report due date condition to report guidelines and added semiannual compliance certification sub-condition	Streamlining of the permit condition; addition of general permit condition in the regulations
63	52	Addition of PM and PM ₁₀ to condition, updated annual language to 12-month rolling and changed annual VOC reporting to monthly	Updated regulation language

New Permit Condition Number	Old Permit Condition Number	Description of change	Reason for change
65		Addition of permit condition for semiannual compliance report related to NESHAP MACT standard	Stationary source is now subject to NESHAP standard 40 CFR 63 Subpart Mmmm
G4		Addition of permit condition pertaining to masking emissions	Addition of general permit condition in the regulations
N/A	Attachment 1	Removal of cross-referenced regulation numbers	New rule numbers have been adopted into the SIP making cross-reference numbers unnecessary

FACILITY DESCRIPTION

4. Gunderson LLC operates a railcar and marine barge manufacturing facility on Front Avenue in Portland Oregon. The primary processes occurring at this facility include cutting steel with plasma and gas flame burning machines; sandblasting steel with steel shot and grit blast media; welding using flux core, gas metal and shielded arc welding types; and painting and stenciling railcars using high-solids VOC compliant coatings. Gunderson LLC purchased the facility from FMC Corporation in 1985.
5. Existing air contaminant sources at the facility consist of the following:
 - 5.a. 2-BLF (Fugitive shot and grit blasting) - this emissions unit includes fugitive particulate emissions from sand, shot and grit blasting activities which are uncontrolled. Emissions from this emissions unit include PM, PM₁₀ and manganese. Blasting materials may include steel shot, grit and plastic pellets.
 - 5.b. 2-BLB123 (Controlled shot/grit blasting, pre-1970 baghouses BGHS1, BGHS2, BGHS3) - this emissions unit consists of emissions from the blasting of railcars or parts in enclosed areas where emissions are controlled by baghouses installed before 1970. Emissions from this emissions unit also include PM, PM₁₀ and manganese. Blasting materials may include steel shot, grit and plastic pellets.
 - 5.c. 2-BLB45 (Controlled shot/grit blasting, post 1970 baghouse BGHS4 and future BGHS5) - this emissions unit consists of emissions from the blasting of railcars in enclosed areas where emissions are controlled by baghouses installed after 1970. These units are subject to a lower particulate emissions standard than equipment installed before 1970. Emissions from this emissions unit also include PM, PM₁₀ and manganese. Blasting materials may include steel shot, grit and plastic pellets.
 - 5.d. 3-TC (Metal cutting) - this emissions unit consists of process emissions from the operation of wet and dry cutting tables. Combustion emissions from these devices are addressed in 4-NG. Process emissions from this emissions unit consist of PM, PM₁₀, and manganese.
 - 5.e. 4-NG (Natural gas combustion) - the facility operates electric cutting tables (some of which use natural gas for the cutting flame), infrared dryers, an Axle Wash Cleaning System and other miscellaneous sources (office space heaters, heat cleaning oven, two pressure washers, and two

evaporators). Emissions of the following combustion products occur from this emissions unit: PM, PM₁₀, SO₂, NO_x, CO, VOCs. The compounds benzene, formaldehyde, naphthalene, acetaldehyde, acrolein, toluene and xylene are by-products of combustion and are emitted in very small amounts.

- 5.f. 5-WLD (Welding) - this emissions unit consists of facility-wide welding operations. Emissions from welding include PM, PM₁₀, cobalt, chromium, manganese, and nickel.
- 5.g. 6-COAT (Coating line) - this emissions unit includes a painting line for railcars. Reasonably Available Control Technology (RACT) compliance for railcar coatings will be demonstrated at this emission unit; RACT does not apply to marine vessel coatings, inorganic zinc coatings, or stencil coatings, in accordance with the permit. For PSEL purposes, emissions from evaporation of VOCs and VOC-HAPs contained in railcar coatings are accounted for in 9-VOC.
- 5.h. 7-SMCT (Shipbuilding and Ship Repair surface coating) - emissions from this emissions unit result from the evaporation of VOCs in the solvents and paints (excluding spray cans) used in operations associated with marine vessel painting. These operations include coating application and solvent usage. These coatings are not subject to RACT, and paint overspray emissions from this coating application are addressed in 8-OSPRYM. Much of the emissions from this emissions unit are Hazardous Air Pollutants (HAPs) as well as VOCs. For PSEL purposes, emissions from evaporation of VOCs and VOC-HAPs contained in marine vessel coatings are accounted for in 9-VOC.
- 5.i. 8-OSPRY - emissions from this unit include particulate matter from paint overspray from paint applied in spray booths. Paint overspray is generated when paint particles do not adhere to or miss the intended surface. Emissions from this emissions unit include PM and PM₁₀.
- 5.j. 8-OSPRYM - emissions from this unit include particulate matter from paint overspray from coatings applied outside of the spray booths. Paint overspray is generated when paint particles do not adhere to or miss the intended surface. Emissions from this emissions unit include PM and PM₁₀.
- 5.k. 9-VOC (Plant-wide VOC usage) - this emissions unit is used for compliance with the daily tracking of VOC emissions and the annual Plant Site Emissions Limit, and includes all VOC emissions from the facility except for aggregate and categorically insignificant activities. RACT compliance and compliance with the Shipbuilding and Repair MACT are addressed in 6-COAT and 7-SMCT respectively. Compounds emitted from this emissions unit include the following: VOCs, MEK, MIBK, toluene, methanol, glycol ethers, ethyl benzene and xylene. If and when DEQ delists MEK as a hazardous air pollutant, Gunderson LLC may discontinue monitoring for MEK from that point forward.
- 5.l. 10-SCMP (Surface Coating of Miscellaneous Metal Parts and Products) – emissions from this emissions unit pertain to all surface coatings used in all miscellaneous metal parts and products which contain hazardous air pollutants (HAP). These HAP emissions from the surface coating operations are covered by this Subpart M NESHAP.
- 5.m. 11-PSELdiff – This fictitious emission unit is included in the permit solely to account for the difference between actual emissions and the rule requirement to set minimum PSELs at the Generic PSEL level as set out in OAR 340-222-0041(1).

6. Gunderson LLC has the following aggregate insignificant activities onsite:
- 6.a. Metal grinding
 - 6.b. Fugitive dust from vehicle traffic on unpaved areas.
 - 6.c. Heat cleaning oven used to clean stainless steel paint filters
 - 6.d. Spray paint can use.

Emissions Unit	EU ID	Source Classification Code
Shot and grit blasting (fugitive)	2-BLF	grit - 3-09-002-05 shot - 3-09-002-07
Shot blasting, (baghouses 1, 2, 3)	2-BLB123	shot - 3-09-002-07
Grit blasting, (new Baghouses 4, 5)	2-BLB45	grit - 3-09-002-05
Wet metal cutting devices	3-TC	NG cutting - 3-09-046-00 Plasma cutting - 3-09-030-08
Natural gas combustion devices	4-NG	NG use 3-09-900-03
Welding	5-WLD	FCAW - 3-09-053-55 SAW - 3-09-054-10 GMAW - 3-09-052-00
RACT Coatings	6-COAT	4-02-025-01
Ship MACT Coatings	7-SMCT	topcoat - 4-02-023-06
Overspray particulate	8-OSPRY and 8-OSPRYM	4-02-025-01
Facility wide VOCs (for PSELS)	9-VOC	coat - 4-02-025-01 clean - 4-02-025-02

Gunderson LLC has the following categorically insignificant activities onsite:

- 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
- Evaporative and tail pipe emissions from on-site motor vehicle operation
- Distillate oil, kerosene, and gasoline fuel burning equipment rated at less than or equal to 0.4 million Btu/hr
- Natural gas and propane burning equipment rated at less than or equal to 2.0 million Btu/hr
- Office activities
- Food service activities
- Janitorial activities
- Personal care activities
- Grounds keeping activities including, but not limited to building painting and road and parking lot maintenance
- On-site laundry activities
- On-site recreational facilities
- Instrument calibration
- Maintenance and repair shop
- Automotive repair shops or storage garages
- Air cooling or ventilating equipment not designed to remove air contaminants generated by or released from associated equipment

- 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
- 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
- Temporary construction activities
- Warehouse activities
- Accidental fires
- Air vents from air compressors
- Air purification systems
- Continuous emissions monitoring vent lines
- Demineralized water tanks
- Electrical charging stations
- Instrument air dryers and distribution
- Process raw water filtration systems
- Pharmaceutical packaging
- Blueprint making
- 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
- Electric motors
- Storage tanks, reservoirs, transfer and lubricating equipment used for ASTM grade distillate or residual fuels, lubricants, and hydraulic fluids
- On-site storage tanks not subject to any New Source Performance Standards (NSPS), including underground storage tanks (UST), storing gasoline or diesel used exclusively for fueling of the facility's fleet of vehicles
- Natural gas, propane, and liquefied petroleum gas (LPG) storage tanks and transfer equipment
- Pressurized tanks containing gaseous compounds
- Vacuum sheet stacker vents
- Emissions from wastewater discharges to publicly owned treatment works (POTWs) provided the source is authorized to discharge to the POTW, not including on-site wastewater treatment and/or holding facilities
- Storm water settling basins
- Fire suppression and training
- 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
- Health, safety, and emergency response activities
- Emergency generators and pumps used only during loss of primary equipment or utility service
- Non-contact steam vents and leaks and safety and release valves for boiler steam distribution systems
- Non-contact steam condensate flash tanks
- Non-contact steam vents on condensate receivers, deaerators and similar equipment
- Boiler blow down tanks
- Industrial cooling towers that do not use chromium-based water treatment chemicals
- Ash piles maintained in a wetted condition and associated handling systems and activities
- Oil/water separators in effluent treatment systems
- Combustion source flame safety purging on startup

APPLICABLE REQUIREMENTS (EMISSIONS LIMITS AND STANDARDS)

7. The following state and federally enforceable rule requirements have been determined to be applicable to this facility:

- 7.a. Division 208: 0110*; establishes a visible emissions limit.
0210; establishes requirements to prevent particulate matter from becoming airborne.
- 7.b. Division 226: 0210; establishes particulate concentration emissions limits for fuel burning equipment.
- 7.c. Division 228: 0210**; establishes particulate concentration emissions limits for non fuel burning equipment.
- 7.d. Division 232: 0160; establishes limits on the VOC content of coatings used on metal parts.
- 7.e. Division 242: 0730; requires the use of compliant spray can coatings.
- 7.f. Division 206: 0050; requires large sources located in a nonattainment area to file a Source Emission Reduction Plan.
- 7.g. Division 222: 0020; requires Plant Site Emission Limits.
- 7.h. 40 CFR 63.780 - 788: requires compliance with the Shipbuilding and Repair NESHAP.
- 7.i. 40 CFR 63.3880 – 3981: requires compliance with the Surface Coating of Miscellaneous Metal Part and Products NESHAP.

* OAR 340-208-0110 is included because it is federally enforceable for all air contaminant sources, and because OAR 340-208-0600 only applies to non-fuel burning equipment and is only enforceable by the State. OAR 340-208-0600 is a county specific rule for non fuel burning equipment which is more stringent than the general opacity rule (OAR 340-208-0110).

** OAR 340-228-0210 is included because it is federally enforceable and because OAR 340-208-0610 is only enforceable by the State. OAR 340-208-0610 is a county specific rule, which is equally as stringent as OAR 340-228-0210 in this case.

8. The following federal rule requirements have been determined to be applicable to this facility:

- 40 CFR 63:
 - 63.780 – 788 Subpart II; establishes limits for VOHAP contents of coatings used in shipbuilding and repair and other requirements for their use.
 - 63.3880 – 63.3981 Subpart MMMM; establishes limit for organic HAP emissions of coatings used in surface coating of miscellaneous metal parts and products.

9. The following state only enforceable rule requirements have been determined to be applicable to this facility:

- Division 208:
 - 0600; establishes a visible emissions limit.
 - 0610; establishes a particulate concentration emissions limit.
 - 0670; establishes a particulate emission size limitation.
 - 0630; establishes limits on the emission of SO₂.
 - 0660; establishes limits on the emission of odorous matter.

10. Compliance Assurance Monitoring (CAM) applicability.
This facility is subject to the requirements of 340-212-0200 for EU ID 2BLB45. The facility operates a Dust-Hog Supra-I.Q. Diagnostic Cleaning system control device for PM and PM₁₀ emissions.

CHANGES TO THE PERMIT

11. The permit condition language has been revised in some conditions. This has been done to make the conditions more clear. These changes do not affect applicability or standards.
12. Some general permit conditions were added in this renewal permit to reflect additional regulations that have been adopted since the prior permit. These additions do not affect applicability or standards.
13. The facility is subject to NESHAP MACT standard 40 CFR Part 63 Subpart M because the facility performs surface coating of miscellaneous metal parts and products that is located at a major source of HAP emissions. All applicable regulations were included in this renewal permit.
14. The permit includes the addition of EU ID 11-PSEL_{diff} to account for the difference in Generic PSEL levels and actual emissions (OAR 340-222-0041(1)) from the facility. Since the rule requires minimum PSELs be set at the Generic PSEL level, the NO_x PSEL has been set at 39 tons/12 months. However, if the facility does not exceed 3.9 tons/12 months of emissions for NO_x, then the facility may pay the emissions fee for that quantity only. If the facility NO_x emissions exceed 3.9 tons/12 months, then the facility shall pay emission fees based on the entire PSEL amount of 39 tons/12 months.

BASELINE EMISSION RATE

15. The facility production for the baseline year was 5004 railcars and 2 barges manufactured, and 58 railcars refurbished.
16. The normal operating schedule for the plant for the baseline year 1978 was 24 hrs/day x 5 days /week x 52 weeks/yr = 6240 hrs/yr.
17. 437,773 lbs of blasting material was used for manufacturing barges in the baseline year.
18. The natural gas usage for the baseline year was estimated by the source to be 23.4 MMcf.
19. The welding rod usage for the baseline year was estimated by the source to be 388,539 lbs of E71 T-1 welding rod, 35,841 lbs of EL 12 welding rod, and 11,932 lbs of EM12K welding rod.
20. The amount of paint used in the baseline year was 313,762 gallons (as applied) for railcar coating, and 35,130 gallons (as applied) for barge coating. In addition, 7305 gallons of caulking was used in the baseline year for caulking railcars.

21. Particulate, PM₁₀, and gaseous emissions for the baseline year 1977 are estimated as follows:

Source		TSP	PM ₁₀	SO ₂	NO _x	CO	VOC
2-BLB1	lbs/mon.	152	152	---	---	---	---
	tons/yr	0.8	0.8	---	---	---	---
2-BLB2&3	lbs/mon.	4,320	4,320	---	---	---	---
	tons/yr	21.6	21.6	---	---	---	---
2-BLB4	lbs/mon.	3,000	858	---	---	---	---
	tons/yr	15.0	4.29	---	---	---	---
2-BLBF	lbs/mon.	9,640	2,750	---	---	---	---
	tons/yr	19.3	5.51	---	---	---	---
3-TC	lbs/mon.	737.8	737.8	---	332	---	---
	tons/yr	3.67	3.67	---	1.5	---	---
4-NG	lbs/mon.	A.I.	A.I.	A.I.	390	A.I.	A.I.
	tons/yr	A.I.	A.I.	A.I.	1.2	A.I.	A.I.
5-WLD	lbs/mon.	4,800	4,800	---	---	---	---
	tons/yr	25.2	24.0	---	---	---	---
8-OSPRY	lbs/mon.	5,340	5,340	---	---	---	---
	tons/yr	26.7	26.7	---	---	---	---
8-OSPRYM	lbs/mon.	11,000	5,520	---	---	---	---
	tons/yr	22.1	11.3	---	---	---	---
9-VOC	lbs/day	---	---	---	---	---	6,352
	tons/yr	---	---	---	---	---	640 *
Aggregate Insignificant Activities	tons/yr	1	1	1	---	1	1
TOTAL	tons/yr	135	98.6	1	2.7	1	641
	lbs/mon.	39,000	24,500	---	722	---	---
	lbs/day	---	---	---	---	---	6,352

A.I. included in the aggregate insignificant total of 1 ton per year.

* Adjusted from baseline year actual emissions in accordance with Department rules (RACT).

Calculations are included in the Plant Site Emissions Detail Sheets.

PLANT SITE EMISSION LIMITS

Previous Plant Site Emission Limits:

22. The normal operating schedule for the plant was determined to be the same as the baseline year and was 24 hrs/day x 5 days /week x 52 weeks/yr = 6240 hrs/yr.
23. The facility previously estimated the maximum facility production as 26 rail cars per day, 7240 rail cars and 3 barges per year.
24. The facility previously estimated the maximum amount of shot and grit blasting material used in the manufacture railcars and barges as 116,785 lbs per month and 1,167,851 lbs per year.
25. The source previously estimated the maximum amount of natural gas used as 30 MCF per month and 33.6 MCF per year.

Gunderson LLC chose to participate in a voluntary emissions reduction program to help the Department maintain Air Quality in the Portland AQMA. Gunderson LLC entered into a Mutual Agreement and Order in which they accepted a temporary reduction of 88 tons per year in the Plant Site Emission Limit (PSEL). The temporary reduction lasted for a period of five years, until this current permit renewal. The temporary reduction did not affect the Baseline Emissions Rate for New Source Review purposes.

Emissions Unit ID number	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
FACILITY TOTALS	148	112	1 (A.I)	3.9	1 (A.I)	641

Plant Site Emission Limits:

26. The 12-month PSEL (tons/year) for calendar year (CY) 2007 and beyond: [OAR 340-222-0045 and 340-222-0020]

Emissions Unit ID number	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
FACILITY TOTALS	148	112	----	39	----	460

Calculations are included in the Plant Site Emissions Detail Sheets.

The Plant Site Emissions Limit is based on maximum possible output by the facility for CY 2007 and beyond.

27. Plant Site Emission Limits are not required for SO₂ and CO since they will be emitted at less than the de minimis emission level for the source as set out in OAR 340-222-0020(3)(a). The NO_x PSEL has been set at 39 tons/12 months since the rule in OAR 340-222-0041(1) requires minimum PSELs be set at the Generic PSEL level. The VOC PSEL has been adjusted from 641 tons/12 months to 460 tons/12 months due to forecasted baseline emission reductions for CY 2007 and beyond as set out in unassigned emission regulation, OAR 340-222-0045(5). The facility has agreed to voluntarily reduce their VOC PSEL to 460 tons/12 months with the understanding that the 181 tons/12 months of VOC unassigned emissions may not be banked and are removed from the netting basis. Upon renewal, these unassigned emissions will not be available and the facility's VOC PSEL will not increase above 460 tons/12 months.
28. The normal operating schedule of the plant forecasted for CY 2007 and beyond is based on the average number of work days per year, 252 days.
29. The maximum output forecasted for the plant for CY 2007 and beyond is 18 maxi-stack cars per day, or 4536 maxi cars per year; 6 boxcars per day, or 1512 boxcars per year; and 9 marine barges per year.
30. Potential VOC emissions for CY 2007 and beyond include enamel coatings for the finish coating and primer on railcars, which have a higher VOC content per gallon than typically used water-borne coatings. By including this assumption that a shift in finish coatings may occur in the future, the calculations provide a worst case scenario values for the VOC content per gallon.

31. Potential emissions for PM and PM₁₀ for CY 2007 and beyond will increase due to an estimated increase in the length of hulls by 400 feet. The calculations demonstrate an increase in PM emissions of 59.29 tpy, which in addition to the facility's current PM emissions (based on the 2005 Annual report) of 59.43 tpy emissions equals 118.71 tpy, which does not exceed the current 147 tpy PM PSEL. The calculations for PM₁₀ emissions demonstrate an increase of 25.89 tpy, which in addition to the facility's current PM₁₀ emissions (based on the 2005 Annual report) of 45.26 tpy equals 71.15 tpy, which does not exceed the current 111 tpy PM₁₀ PSEL.
32. Potential emissions for CY 2007 and beyond for SO_x and CO remain the same as previous PSEL limits and are therefore unchanged. In all cases, the capacity to emit exceeds the netting basis and therefore, no further calculations were needed.

Proposed Plant Site Emissions Limits (PSEL), Netting Basis and Baseline Emissions Rate:

Pollutant	Baseline Emission Rate (tons/12-mo)	Netting Basis		Plant Site Emission Limit (PSEL)			Significant Emission Rate (tons/12-mo)
		Previous (tons/12-mo)	Proposed (tons/12-mo)	Previous PSEL (ton/12-mo)	Proposed PSEL (tons/12-mo)	Change in PSEL (tons/12-mo)	
PM	135	135	135	147	147	no change	25
PM ₁₀	99	99	99	111	111	no change	15
CO	1	1	1	1 (A.I.)	----	no change	100
NO _x	2.7	2.7	2.7	3.9	39	+36.3	40
SO ₂	1	1	1	1 (A.I.)	----	no change	40
VOC	641*	553	460	641	460	[181]	40

[] decreases in brackets

* Baseline adjusted for RACT compliance pursuant to Department rules

Netting Basis

33. The Netting Basis is equal to the Baseline Emission Rate minus any rule required or voluntary reductions, plus any emissions increases approved through New Source Review. The VOC Netting Basis was previously decreased by 88 tons/year from the Baseline Emission Rate of 641 to 553 tons/year through a voluntary Mutual Agreement and Order (MAO) with Gunderson LLC. For this permit renewal term, in accordance with OAR 340-222-0045, the VOC unassigned emissions in the amount of 181 tons/year are not included in the netting basis for the facility. Therefore, Gunderson LLC's netting basis and VOC PSEL is set to 460 tons/year. There have been no emissions increases approved through New Source Review for this facility.

Proposed Plant Site Emission Limit (PSEL)

34. The PSEL levels for PM and PM₁₀ remain the same as the previous permit. The PSEL for SO₂ and CO have been adjusted to zero to reflect updated regulation language regarding de minimis amounts as set out in OAR 340-222-0020(3)(a). The regulation states that PSELs are not required if emissions will be less than the de minimis emission level. The PSEL for NO_x is being set at the generic PSEL level as set out in OAR 340-222-0041(1) and has been adjusted to 39 tons/12 months, which is 1 ton/12 months less than the Significant Emission Rate. This is being done to reduce the paperwork requirements for approval of emissions increases that are less than the level of significance.

HAZARDOUS AIR POLLUTANT EMISSIONS

35. The estimated emissions of Hazardous Air Pollutants for the current normal year, estimated by the source, are as follows:

CAS Number	Pollutant	Potential to Emit (tons/yr)
75070	Acetaldehyde	0.012
107028	Acrolein	0.005
71432	Benzene	0.006
-----	Chromium Compounds	0.01
-----	Cobalt Compounds	0.003
100414	Ethyl Benzene	3.03
50000	Formaldehyde	0.014
-----	Glycol Ethers	0.94
-----	Manganese Compounds	3.4
108101	Methyl Isobutyl Ketone	0.08
67561	Methanol	3.26
91203	Napthalene	0.084
-----	Nickel Compounds	0.01
-----	Polycyclic Organic Matter	0.092
108883	Toluene	66.8
1330207	Xylene	81

TOXIC SUBSTANCE USAGE

36. The annual usage of Toxic Substances as estimated by the source, for the current normal year is as follows:

CAS Number	Chemical Name	Insignificant	1,000-10,000	10,001-20,000	20,001-50,000	> 50,000
1330-20-7	Xylene					X
108-88-3	Toluene					X
108-10-1	MIBK	X				
67-56-1	Methanol		X			
100-41-4	Ethyl Benzene			X		

Facility Wide Compliance Monitoring Requirements

37. A log of complaints will be used to monitor for odor nuisance conditions (condition 5), and the particulate fallout size standard (condition 4). The permittee shall maintain a log recording all written complaints, or complaints received via telephone or in person by the responsible official or a designated appointee, that specifically refer to a complaint of odor or particulate fallout nuisance conditions caused by this facility. The permittee will also record the permittee's actions to investigate, make a determination as to the validity of the complaint, and resolve the nuisance problem, if possible, within two working days of receiving the complaint, but no later than 10 days after receiving the complaint. The log will be submitted to the Department annually, along with the annual report.

Compliance Monitoring Requirements for EU IDs 2-BLF, 3-TC, 5-WLD and 8-OSPRYM

38. These are sources of fugitive particulate emissions and are subject to the visible air contaminant limitations (opacity limits) of Divisions 21 and 30. The 20% opacity limit in Division 30 allows only 30 seconds of emissions over 20% per hour and is more restrictive than the statewide limit in Division 21, which allows up to 3 minutes per hour (aggregate) above 20%. Both limits must be in the permit because only the Division 21 limit is federally enforceable - the Division 30 limit is only enforceable by the State. Under normal operations none of these sources would be likely to cause a violation of the opacity limits. Monitoring will be a monthly visible emission survey. One time per month a representative of the permittee will tour the facility and record sources of visible emissions. If visible emissions are recorded, corrective action will be taken to reduce or minimize these emissions. The emission source will then be observed again. If visible emissions are still present an EPA Method 9 test will be performed to determine if the emissions are in compliance. Because these are fugitive sources their particulate emission concentrations cannot easily be measured. Therefore, they are not subject to the particulate concentration limitations.

Compliance Monitoring for SERP Requirements

39. The permittee will monitor compliance by keeping records of actions taken in the event of an Air Pollution episode.

Compliance Monitoring Requirements for EU IDs BLB123 and BLB45

40. These baghouses will easily meet the particulate emissions standards and the visible emissions limitations if they are properly maintained. Therefore, the compliance assurance monitoring is a monthly inspection and maintenance requirement. Although the monitoring is the same for all of the baghouses, baghouse 4, and future baghouse 5 are subject to a lower particulate emission standard because they are installed after 1971. The ACDP permit previously required that the shot blast baghouses meet a 0.03 gr/dscf limit. This limit was imposed to assure that the baghouses were operated at the Highest and Best practicable level of control. Highest and Best practicable control will now be assured by the inspection and maintenance requirement, but the general particulate emissions standard (0.1 gr/dscf for baghouses 4 and 5, and 0.2gr/dscf for 1, 2, and 3) still applies.

Compliance Monitoring Requirements for EU ID 4-NG

41. The natural gas combustion devices of emissions unit 4-NG pipeline quality natural gas only. This assures compliance with the opacity limit and particulate emission limit because the combustion of natural gas is very unlikely to cause a violation of any opacity or particulate emission limit. The only monitoring necessary is for the PSEL requirements.

Compliance Monitoring Requirements for EU ID 6-COAT

42. The RACT condition requires that compliance with the RACT limits be determined on a daily average basis. Therefore, for each day the facility must monitor compliance using one of the following two methods. On days when all coatings used which are subject to the RACT are "compliance coatings" (compliance coatings are designed by the manufacturer to be compliant with the RACT limitations, and are mixed in accordance with the manufacturers specifications), recordkeeping showing that the coatings used during that day are RACT compliant is sufficient to monitor compliance. On days that any of the RACT coatings used at the facility exceed the applicable RACT limit individually, the permittee must make the RACT calculation. The calculation methodology in the permit provides the source maximum flexibility to use any coating type, as long as they meet the daily average VOC content requirement.

Compliance Monitoring Requirements for EU ID 7-SMCT

43. The compliance monitoring options for this emissions unit are taken directly from the Shipbuilding and Repair NESHAP (MACT). The permittee shall demonstrate that each application of any coating to a ship does not exceed the applicable limit of VOHAP. The permittee must demonstrate compliance with the standard through a series of calculations and/or testing for all coatings to which a thinning solvent is not added, a coating-by-coating basis in which a thinning solvent is added to coatings, and group compliance in which the same thinning solvent is added to coatings.

Compliance Monitoring Requirements for EU ID 8-OSPRY

44. The spray booths will easily meet the particulate emissions standards and the visible emissions limitations if they are properly maintained. Therefore, the compliance assurance monitoring is a monthly inspection and maintenance requirement.

Compliance Monitoring Requirements for EU ID 10-SCMP

45. The permittee shall demonstrate compliance with the standard by using the compliant methods option so that no coatings are used for which the organic HAP content determined through calculations exceeds the applicable limit of organic HAP during each rolling 12-month compliance period. As well, no thinner and/or other additive, or cleaning material that contains organic HAP is used.

Insignificant Activities Compliance Monitoring Requirements

46. No monitoring is required for Insignificant Activities.

Compliance Monitoring for the PSELS

47. Monitoring for long term PSELS will be done by recordkeeping as described within the permit. Compliance with the 12-month PSELS for PM, PM₁₀, SO₂, NO_x, CO, and VOC will be determined by recordkeeping as described in the permit.

ADDITIONAL REQUIREMENTS

48. The source is required to submit reports to the Department semi-annually.
49. This source is not subject to requirements under federal regulations for New Source Review.
50. This source is not subject to requirements under federal regulations for Prevention of Significant Deterioration (PSD).
51. This source is now subject to federal regulations for National Emissions Standards for Hazardous Air Pollutants (NESHAPS) for surface coating of miscellaneous metal parts and products, 40 CFR PART 63 Subpart M, which was promulgated in 2004. The NESHAP applies to each new or existing affected source at that uses 946 liters (250 gallons) per year, or more, of coatings that contain hazardous air pollutants (HAP) in the surface coating of miscellaneous metal parts and products and that is a major source of emissions of HAP. [40 CFR 63.3881(b)]
 - 51.a. The facility is located at a major source of HAP emissions. Miscellaneous metal parts and products include, but are not limited to, metal components of the following types of products as well as the products themselves: motor vehicle parts and accessories, bicycles and sporting goods, recreational vehicles, extruded aluminum structural components, railroad cars, heavy duty trucks, medical equipment, lawn and garden equipment, electronic equipment, magnet wire, steel drums, industrial machinery, metal pipes, and number other industrial, household, and consumer products. [40 CFR 63.3881(a)]
 - 51.b. The permittee performs general use coating operations.
 - 51.c. The affected source consists of all coating operations as defined in 40 CFR 63.3981; all storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed; all manual and automated equipment and containers used for conveying coatings, thinners, and/or other additives, and cleaning materials; and all storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation. [40 CFR 63.3882(b)(1-4)]
 - 51.d. For the purposes of the NESHAP, an existing affected source is any affected source that is not a new or reconstructed source. [40 CFR 63.3882(e)]

GENERAL BACKGROUND INFORMATION

52. This source is located in a designated maintenance area for CO and Ozone, and is classified as an area that is in attainment for PM, PM₁₀, SO₂, NO_x. VOC and NO_x are precursors of Ozone. Gunderson LLC is a major source of PM, PM₁₀ and VOC, and is a minor source of SO₂, NO_x, and CO.
53. A Land Use Compatibility Statement was signed by the City of Portland on July 14, 1995, granting unconditional approval of the existing use.
54. This facility is registered as a generator of hazardous waste (ID# 009 027 368), and the facility has an NPDES storm water pollution control permit 1200L file #30386. Operation of the facility in compliance with this permit will be verified by the Department.
55. This facility was last inspected on September 26, 2006 and was found to be in compliance with all permit terms and conditions. The facility was also inspected on April 30, 2004 and was found to be in compliance with all conditions of the permit.

56. On March 9, 2007, the Department issued warning letter, WL-AQ-2007-0003, to Gunderson LLC for violating permit condition 18.a. and federal regulation 40 CFR Part 63.7983(a). Gunderson LLC used a paint that exceeded the allowable VOHAP limit of a coating under the federal NESHAP 40 CFR Part 63 Subpart II, as required by the Shipbuilding and Ship Repair (Surface Coating) Operations standard. The Department referred the violation to the Department's Enforcement Office.
57. The permit is a renewal Oregon Title V Operating Permit.

PUBLIC NOTICE

This permit will be on public notice from **date** to **date**. Comments may be submitted until **5 pm** on **date**.

PH
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October 2006