STANDARD

AIR CONTAMINANT DISCHARGE PERMIT

Department of Environmental Quality
Northwest Region
2020 SW 4th Avenue, #400
Portland, Oregon 97201
(503) 229-5554

This permit is being issued in accordance with the provisions of ORS 468A.040 and based on the land use compatibility findings included in the permit record.

ISSUED TO:

PCC Structurals, Inc
4600 SE Harney Drive
Portland, OR 97206-0898

INFORMATION RELIED UPON:

Application No.: 022246
Date Received: 06/04/2007

PLANT SITE LOCATION:

4600 SE Harney Drive
Portland, OR

LAND USE COMPATIBILITY FINDING:

Approving Authority: City of Portland
Approval Date: 05/12/1995

ISSUED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY

_____ _____

Ed Druback, Northwest Region Air Quality Manager — Dated

Source(s) Permitted to Discharge Air Contaminants (OAR 340-216-0020):

Table 1 Code	Source Description	SIC
Part B, 50.	Non-ferrous metal foundries 100 or more tons/yr of metal charged	3369

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1.0 GENERAL EMISSION STANDARDS AND LIMITS

1.1. Visible Emissions The permittee must comply with the following visible emission limits, as applicable:

a. Emissions from any fuel burning equipment air contaminant source must not equal or exceed 20% opacity for a period aggregating more than 3 minutes in any one hour.

b. Emissions from any air contaminant source installed, constructed, or modified after June 1, 1970 must not equal or exceed 20% opacity for a period aggregating more than 3 minutes in any one hour.

c. Emissions from any air contaminant source other than fuel burning equipment must not equal or exceed 20% opacity for a period aggregating more than 30 seconds in any one hour.

1.2. Particulate Matter Emissions The permittee must comply with the following particulate matter emission limits, as applicable:

a. Particulate matter emissions from any burning equipment must not exceed 0.1 grains per standard cubic foot, corrected to 12% CO_2 or 50% excess air.

b. Particulate matter emissions from any air contaminant source, other than fuel burning equipment, must not exceed 0.1 grains per standard cubic foot.

1.3. Fugitive Emissions The permittee must take reasonable precautions to prevent fugitive dust emissions by:

a. Treating vehicular traffic areas of the plant site under the control of the permittee.

b. Operating all air contaminant-generating processes so that fugitive type dust associated with the operation will be adequately controlled at all times.

c. Storing collected materials from air pollution control equipment in a covered container or other method equally effective in preventing the material from becoming airborne during storage and transfer.

1.4. Particulate Matter Fallout The permittee must not cause or permit the emission of any particulate matter larger than 250 microns in size at sufficient duration or quantity, as to create an observable deposition upon the real property of another person. The Department will verify that the deposition exists and will notify the permittee that the

deposition must be controlled.

1.5. Nuisance and Odors

The permittee must not cause or allow air contaminants from any source to cause a nuisance. Nuisance conditions will be verified by Department personnel.

1.6. Fuels and Fuel Sulfur Content

The permittee must not use any fuel other than natural gas, propane, butane, ASTM grade fuel oils, or on-specification used oil.

a. Fuel oils must not contain more than:

i. 0.3% sulfur by weight for ASTM Grade 1 distillate oil;

ii. 0.5% sulfur by weight for ASTM Grade 2 distillate oil;

b. The permittee is allowed to use on-specification used oil as fuel which contains no more than 0.5% sulfur by weight. The permittee must obtain analyses from the marketer or, if generated on site, have the used oil analyzed, so that it can be demonstrated that each shipment of oil does not exceed the used oil specifications contained in 40 CFR Part 279.11, Table 1.

2.0 SPECIFIC PERFORMANCE AND EMISSION STANDARDS

2.1. Emission Action Level – Visible Emissions

The permittee must immediately investigate and commence corrective action measures for any instance of observed visible emissions to ambient air (excluding uncombined water vapor), from any baghouse, the maintenance shop cyclone, the LPC-T cleaning cyclone, or their associated exhaust ductwork.

2.2. Baghouse Operation and Maintenance

The permittee must observe the following baghouse operation and maintenance requirements.

a. Each baghouse must achieve a minimum particulate matter removal efficiency of 99%.

b. The permittee must post the operating differential pressure design specification on each respective fabric filter baghouse at the facility.

c. The permittee must investigate and commence corrective action measures within 24 hours of an observed excursion of the designed differential pressure range of any fabric filter baghouse.

d. When replacing fabric filter bags in any baghouse, the permittee may not substitute a bag with lower control

efficiency specifications than 99%.

2.3. Thermal Oxidizer Operating Temperature – General

All process thermal oxidizers must be maintained at a minimum operating temperature of 1400 degrees F for at least a 0.5 second retention time unless an alternate operating temperature and/or time parameter has been demonstrated and approved by the Department as being equal or more effective.

2.4. Thermal Oxidizer Operating Temperature – Emission Action Level

The operating temperatures of the LPC-T catalytic oxidizer and LPC-S thermal oxidizer must be maintained at no more than 50 degrees F below the average operating temperature recorded during the most recent valid source test based on a one hour average. If, based upon a one hour average, the operating temperature of either unit drops to more than 50 degrees F below the average operating temperature established during the most recent valid source test, the permittee must take expeditious action to return the temperature to the established operating range. The temperature falling below this emission action level is not a violation of this permit condition, however, it is a violation of this permit condition if the permittee fails to expeditiously take action to correct the operating temperature after it has fallen below the range.

2.5. Source Specific Reasonably Available Control Technology (RACT) Requirements

The permittee must comply with the following source specific RACT requirements:

a. The permittee must operate and maintain controls to reduce the VOC emissions from the Large Parts Campus Steel and Titanium (LPC-S and LPC-T) investment casting operations by a minimum of 90 percent.

Note: This condition is included in the Oregon State Implementation Plan (SIP). Any changes to this condition must be submitted as a SIP revision.

b. In order to calculate compliance with Condition 2.5a, the permittee may average the destruction and removal efficiency of all of its investing rooms using VOC containing slurries. Any investing room for which the VOC content of the slurries used is less than 2% (not including water) VOC on a weighted average basis shall be exempt from RACT and this condition's compliance calculation.

Note: This condition is included in the Oregon State

Implementation Plan (SIP). Any changes to this condition must be submitted as a SIP revision.

2.6. Investing Room Emission Capture Efficiency

a. The permittee must notify the Department prior to making any change to any Investing Room, its air inflow, or its emission exhaust system which may affect its emission capture efficiency. If capture efficiency is required to be verified by the Department, the permittee will do so by performing a test for total enclosure using the test method previously approved and on file at the Department.

3.0 PLANT SITE EMISSION LIMITS

3.1. Plant Site Emission Limits (PSEL)

Plant site emissions must not exceed the following:

Pollutant	Limit	Units
PM	83	tons per year
PM_{10}	54	tons per year
SO_2	39	tons per year
NO_X	58	tons per year
CO	99	tons per year
VOC	99	tons per year
Single HAP	9	tons per year
Combined HAPs	24	tons per year

3.2. Annual Period

The annual plant site emissions limits apply to any 12-consecutive calendar month period.

4.0 COMPLIANCE DEMONSTRATION

4.1. PSEL Compliance Monitoring

Compliance with the PSEL is determined for each 12-consecutive calendar months period based on the following calculations, performed for each pollutant:

$$E_{n\text{-}12Mo} = \sum[(P_{n\text{-}12Mo} \times Ef_n) + MB_n] \times K$$

Where,

$E_{n\text{-}12Mo}$ = pollutant emission in tons/yr for the respective 12-month period
n = the criteria or hazardous air pollutant of concern
$P_{n\text{-}12Mo}$ = monitoring parameter identified for each process in Condition 10.0 for the respective 12-month period.
Ef_n = emission factor identified for each respective process/monitoring parameter and pollutant in Condition 10.0
K = conversion constant (1 ton/2000 lbs)
MB_n = emission rate mass balance (criteria pollutant or HAP, as applicable), determined as follows:

$$MB_n = \sum[(U_n \times D_n \times C_n) - W] \times [1 - (CE \times DE^*)]$$

Where:
MB = 12-month pollutant emission in pounds by mass balance calculation
U = Material usage for the period in gallons
D = Material density in pounds per gallon
C = pollutant concentration expressed as a decimal
n = represents the criteria or hazardous air pollutant of concern
CE = pollutant capture efficiency expressed as a decimal (CE presumed to be 1.00, see review report)
DE = Destruction efficiency (per most recent source test)
W = Weight of pollutant shipped offsite
* - DE equals 0 at times of control device bypass or shutdown

4.2. Emission Factors

The permittee must use the default emission factors provided in Condition 10.0 for calculating pollutant emissions, unless alternative emission factors are approved by the Department. The permittee may request or the Department may require using alternative emission factors provided they are based on actual test data or other documentation (e.g., AP-42 compilation of emission factors) that has been reviewed and approved by the Department.

4.3. Testing Requirements

Within 36 months from the issue date of this permit, the permittee must perform a source test of each of the following emission units.

- LPC-T Cleaning Burn-off (Farr Tenkay) Baghouse

- LPC-S Investing Thermal Oxidizer Baghouse
- LPC-S Cleaning (Dustex) Baghouse
- LPC-S Cleaning (Fabri Jet) Baghouse
- LPC-T Investing Room catalytic oxidizer
- LPC-S Investing Room thermal oxidizer

Note: Source testing is not required for a referenced emission unit if a valid source test was performed within 6 months prior to the issuance date of this permit.

a. Baghouse testing - demonstrate that each baghouse identified above and its associated process, is capable of operating at its maximum normal operating capacity in compliance with Condition 1.2 by conducting a source test of the stack exhaust gas for particulate emissions using Oregon Method 5 (or 8 as approved by the Department). During each source test the following parameters must be monitored unless otherwise approved in the pretest plan:

   i. Identification of bag manufacturer, bag model number and bag performance design parameters for the bags used in the baghouse. If bags are from more than one manufacturer, supply the information for the bags most recently used as replacements;

   ii. exhaust gas flow rates;

   iii. pressure drop across baghouse;

   iv. production or level of operation for each respective baghouse.

   v. each test report should include grain loading results as well as particulate emission rates expressed in pounds per hour.

b. LPC-T Investing Room thermal oxidizer - demonstrate the thermal oxidizer is capable of operating at its maximum normal operating capacity in compliance with Condition 2.5.a by conducting a source test demonstrating VOC emission rate (lbs/hr) and destruction efficiency (%DE) using EPA Method 25A.

   i. Within 30 days of conducting the source test, perform a test to determine capture efficiency of the LPC-T Investing Room by performing a test for

total enclosure using the test method previously approved and on file at the Department. If testing demonstrates the room to meet the requirements for a total enclosure as stated in 40 CFR 60.711(a)(17), capture efficiency will be presumed to be 100%. If testing does not demonstrate the room to meet the requirements for a total enclosure, the permittee must either: retest and demonstrate total enclosure following the performance of appropriate corrective action; or perform an engineering analysis to quantify the room's capture efficiency.

ii. During the source test the following parameters must be monitored unless otherwise approved in the pretest plan:

4.3.b.(ii)(a) Operating temperature of the thermal oxidizer;

4.3.b.(ii)(b) hydrocarbon composition of VOC liquids used in the LPC-T Investing Room;

4.3.b.(ii)(c) LPC-T Investing Room production (molds in process/produced);

4.3.b.(ii)(d) exhaust gas flow rates at inlet and outlet;

4.3.b.(ii)(e) VOC concentration at the inlet and outlet of the thermal oxidizer measured as propane

c. LPC-S thermal oxidizer - demonstrate the thermal oxidizer is capable of operating at its maximum normal operating capacity in compliance with Condition 2.5.a by conducting a source test demonstrating VOC emission rate (lbs/hr) and %DE using EPA Method 25A.

i. Within 30 days of conducting the source test, perform a test to determine capture efficiency of the LPC-S Investing Room by performing a test for total enclosure using the test method previously approved and on file at the Department. If testing demonstrates the room to meet the requirements for a total enclosure as stated in 40 CFR 60.711(a)(17), capture efficiency will be presumed to be 100%. If testing does not demonstrate the room to meet the

requirements for a total enclosure, the permittee must either: retest and demonstrate total enclosure following the performance of appropriate corrective action; or perform an engineering analysis to quantify the room's capture efficiency.

ii. During the source test the following parameters must be monitored unless otherwise approved in the pretest plan:

4.3.c.(ii)(a) Operating temperature of the thermal oxidizer;

4.3.c.(ii)(b) hydrocarbon composition of VOC liquids used in the LPC-S Investing Room;

4.3.c.(ii)(c) LPC-S Investing Room production (molds in process/produced);

4.3.c.(ii)(d) exhaust gas flow rates at inlet and outlet;

4.3.c.(ii)(e) VOC concentration at the inlet and outlet of the thermal oxidizer measured as propane

d. The following parameters must be monitored and recorded during each required source test:

i. Visible emissions as measured by EPA Method 9 for a period of at least six minutes during or within 30 minutes before or after each test run;

ii. other process/pollution control device operating parameters not identified above that are determined to be necessary by the Department and/or the permittee.

e. Only regular operating staff may adjust the combustion system or production processes and emission control parameters during the source test and within two hours prior to the source test. Any operating adjustments made during the source test, which are a result of consultation with source testing personnel, equipment vendors or consultants, may render the source test invalid.

f. All tests must be conducted in accordance with the Department's Source Sampling Manual and the approved pretest plan. The pretest plan must be submitted at least

15 days in advance and approved by the Regional Source Test Coordinator. Test data and results must be submitted for review to the Regional Source Test Coordinator within 45 days unless otherwise approved in the pretest plan.

5.0 MONITORING/RECORDKEEPING REQUIREMENTS

5.1.	**Continuous Monitoring**	The permittee must continuously monitor and maintain records of the operating temperatures of the LPC-T catalytic oxidizer and LPC-S thermal oxidizer during all hours of operation.
5.2.	**Baghouse Design Specification Records**	The permittee must keep readily accessible records documenting the engineering design specification s for all baghouses at the facility. These records must be dept for the life of each control device.
5.3.	**Baghouse Replacement Bag Records**	The permittee must keep readily accessible records documenting the design/performance specifications for all replacement fabric filter bags for use in baghouse control devices at the facility. This condition is applicable to replacement bags that are installed after issuance of this permit.
5.4.	**Weekly Monitoring**	The permittee must monitor and record the differential pressure across each fabric filter baghouse control device at least once each calendar week the plant is operating. The permittee must investigate and commence corrective action measures with in 24 hours of an observed excursion of the designed differential pressure range of any fabric filter baghouse. An excursion of the design differential pressure range is not a violation of this permit condition, however, it is a violation of this permit if the permittee fails to commence the required corrective action measures within 24 hours of an observed excursion.
5.5.	**Monthly Monitoring**	The permittee must monitor and maintain the following records related to the operation and maintenance of the plant and associated air contaminant control devices monthly: a. The permittee must monitor each baghouse, the maintenance shop cyclone, the LPC-T cleaning cyclone, and their associated exhaust ductwork for visible emissions at least monthly. If visible emissions are observed, the permittee must document the location, cause, and corrective action taken pursuant to the emissions

action level of Condition 2.1.

b. Quantity of natural gas combusted as reported monthly by gas company invoice (ft^3/month)

c. Quantity of natural gas combusted in the steam generating boiler. Fuel monitoring records for any boiler subject to 49 CFR Part 60, Subpart Dc – Standard of Performance for Small Industrial-Commercial-Institutional Steam Generating Units must be maintained on site for a period of not less than five (5) years from the generation of such record

d. Quantity of steel vacuum cast (tons)

e. Quantity of steel air cast (tons)

f. Quantity of titanium vacuum cast (tons)

g. Tons of metal (all types) cast into parts.

h. Quantity of individual-HAP metal vacuum cast (tons) for the individual HAP metal of highest usage.

i. Quantity of individual-HAP metal air cast (tons) for the individual HAP metal of highest usage

j. Quantity of combined-HAP metal vacuum cast (tons)

k. Quantity of combined-HAP metal air cast (tons)

l. Quality of baghouse dust (plant) collected (tons

m. Quantity of baghouse dust (maintenance shop) collected (tons)

n. Quantity of VOC used/emitted to the LPC-S thermal oxidizer (tons)

o. Quantity of VOC used/emitted to the LPC-T catalytic oxidizer (tons)

p. Quantity of plastic used at LPC-S (tons)

q. Quantity of plastic used at LPC-T (tons)

r. Quantity of miscellaneous VOC and VOC-HAP used (tons)

s. Quantity of latex flash-fired (tons)

t. Quantity of latex used and not flash-fired (tons)

u. Quantity of HCl used (tons)

v. Number of hours of operation for the Alpha-case removal process.

w. Quantity of non-emitted VOC waste collected. The quantity may be monitored by: % of initial VOCs in product; using information on the waste profile; analysis for VOC content; or an equivalent method of determination approved by the Department. If analyzed for VOC content, analysis must be based upon a test method approved by the Department.

Note: This monitoring is only required when parameter "W" is used to calculate VOC or organic HAP emissions for purpose of determining compliance with permitted emissions limit(s).

x. Revisions of the pollutant capture efficiency function used for compliance emissions calculations in Condition 4.2.

y. Calculate the PM, PM_{10}, SO_2, CO, NO_x, VOC, combined HAPs and highest individual HAP 12 month rolling emission rates for the previous 12 consecutive months. Emissions must be calculated using the formulae in Condition 4.2 and emission factors in Condition 10.0.

5.6. Pollutant Capture Efficiency The permittee must re-evaluate pollutant capture efficiency on any occurrence of an equipment modification or addition to the LPC-T and/or LPC-S Investing Rooms, their exhaust systems or catalytic/thermal oxidizers, that could potentially affect the demonstrated capture efficiency used for compliance emission calculations in Condition 4.2.

5.7. Used Oil Monitoring If used oil is combusted, the permittee must obtain analysis from the marketer or, if generated on site, have the used oil analyzed, so it can demonstrate that each shipment of oil received does not exceed the used oil specifications contained in 40 CFR Part 279.11, Table 1.

5.8. Excess Emissions The permittee must maintain records of excess emissions as defined in OAR 340-214-0300 through 340-214-0340 (recorded on occurrence). Typically, excess emissions are caused by process upsets, startups, shutdowns, or scheduled maintenance. In many cases, excess emissions are evident when visible emissions are greater than 20% opacity for 3 minutes or more in any 60-minute period.

5.9. Complaint Log The permittee must maintain a log of all written complaints and complaints received via telephone that specifically refer to air pollution concerns associated to the permitted facility. The log must include a record of the permittee's actions to investigate the validity of each complaint and record of actions taken for

complaint resolution.

5.10. Retention of Records Unless otherwise specified, all records must be maintained on site for a period of two (2) years and made available to the Department upon request.

6.0 REPORTING REQUIREMENTS

6.1. Excess Emissions The permittee must notify the Department of excess emissions events if the excess emission is of a nature that could endanger public health.

a. Such notice must be provided as soon as possible, but never more than one hour after becoming aware of the problem. Notice must be made to the regional office identified in Condition 7.4 by e-mail, telephone, facsimile, or in person.

b. If the excess emissions occur during non-business hours, the permittee must notify the Department by calling the Oregon Emergency Response System (OERS). The current number is 1-800-452-0311.

c. The permittee must also submit follow-up reports when required by the Department.

6.2. NSPS The permittee must report to the EPA Administrator at EPA Region 10, the use of any fuel other than pipeline quality natural gas in any boiler subject to 40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units within 60 days of such use.

6.3. Annual Report For each year this permit is in effect, the permittee must submit to the Department by **February 15** two (2) copies of the following information for the previous calendar year:

a. A letter stating the facility's compliance status with permit conditions for the calendar year. Any violations or exceedances must be explained in detail including corrective actions taken.

b. Operating parameters:

i. Quantity of natural gas combusted (ft3)

ii. Quantity of steel vacuum cast (tons)

iii. Quantity of steel air cast (tons)

iv. Quantity of titanium vacuum cast (tons)

v. Quantity of metal cast into parts (tons)

vi. Quantity of individual-HAP metal vacuum cast (tons) for the individual HAP metal of highest usage

vii. Quantity of individual-HAP metal air cast (tons) for each individual HAP metal of highest usage.

viii. Quantity of combined-HAP metal vacuum cast (tons)

ix. Quantity of combined-HAP air cast (tons)

x. Quantity of factory baghouse dust collected (tons)

xi. Quantity of maintenance shop baghouse dust collected (tons)

xii. Quantity of VOC used/emitted to the LPC-S thermal oxidizer (tons)

xiii. Quantity of VOC used/emitted to the LPC-T catalytic oxidizer (tons)

xiv. Quantity of plastic used at LPC-S (tons)

xv. Quantity of plastic used at LPC-T (tons)

xvi. Quantity of miscellaneous VOC and VOC-HAP used (tons)

xvii. Quantity of latex flash-fired (tons)

xviii. Quantity of latex used and not flash-fired (tons

xix. Quantity of HCl used (tons)

xx. The number of hours of operation for the Alpha-case removal process.

xxi. Quantity of non-emitted VOC waste collected. The quantity may be monitored by: % of initial VOCs in product; using information on the waste profile; analysis for VOC content; or an equivalent method of determination approved by the Department. If analyzed for VOC content, analysis must be based upon a test method approved by the Department.

Note: This monitoring is only required when parameter “W” is used to calculate VOC or organic HAP emissions for purpose of determining compliance with permitted emissions limit(s).

xxii. Revisions of the pollutant capture efficiency function used for compliance emissions calculations in Condition 4.2.

xxiii. Calculate the PM, PM_{10}, SO_2, CO, NO_x, VOC, combined HAPs and highest individual HAP 12 month rolling emission rates for the previous 12 consecutive months. Emissions must be calculated using the formulae in Condition 4.2 and emission factors in Condition 10.0.

c. Records of all planned and unplanned excess emissions events.

d. Summary of complaints relating to air quality received by permittee during the year.

e. List permanent changes made in plant process, production levels, and pollution control equipment which affected air contaminant emissions.

f. List major maintenance performed on pollution control equipment.

6.4. Notice of Change of Ownership or Company Name

The permittee must notify the Department in writing using a Departmental "Permit Application Form" within 60 days after the following:

a. Legal change of the name of the company as registered with the Corporations Division of the State of Oregon; or

b. Sale or exchange of the activity or facility.

6.5. Construction or Modification Notices

The permittee must notify the Department in writing using a Departmental "Notice of Construction Form," or "Permit Application Form," and obtain approval in accordance with OAR 340-210-0205 through 340-210-0250 before:

a. Constructing, installing, or establishing a new stationary source that will cause an increase in any regulated pollutant emissions;

b. Making any physical change or change in operation of an existing stationary source that will cause an increase, on an hourly basis at full production, in any regulated pollutant emissions; or

c. Constructing or modifying any air pollution control equipment.

6.6. Where to Send Reports and Notices The reports, with the permit number prominently displayed, must be sent to the Permit Coordinator for the region where the source is located as identified in Condition 7.3.

7.0 ADMINISTRATIVE REQUIREMENTS

7.1. Permit Renewal Application The completed application package for renewal of this permit is due on 07/01/2012. Two (2) copies of the application must be submitted to the DEQ Permit Coordinator listed in condition 7.3

7.2. Permit Modifications Application for a modification of this permit must be submitted not less than **60** days prior to the source modification. A special activity fee must be submitted with an application for the permit modification. The fees and two (2) copies of the application must be submitted to the Business Office of the Department.

7.3. Permit Coordinator Addresses All reports, notices, and applications should be directed to the Permit Coordinator for the area where the source is located. The Permit Coordinator addresses are as follows:

Department of Environmental Quality
Northwest Region
2020 SW 4th Avenue, Suite 400
Portland, OR 97201-4987

Telephone: (503) 229-5582

7.4. Department Contacts Information about air quality permits and the Department's regulations may be obtained from the DEQ web page at www.deq.state.or.us. All inquiries about this permit should be directed to the regional office for the area where the source is located. The Department's regional offices are as follows:

Department of Environmental Quality
Portland Office
2020 SW 4th Avenue, Suite 400
Portland, OR 97201-4987

Telephone: (503) 229-5554

8.0 FEES

8.1. Annual The Annual Fee specified in OAR 340-216-0020, Table 2, Part 2

	Compliance Fee	for a Standard ACDP is due on **December 1** of each year this permit is in effect. An invoice indicating the amount, as determined by Department regulations, will be mailed prior to the above date.
8.2.	**Change of Ownership or Company Name Fee**	The non-technical permit modification fee specified in OAR 340-216-0020, Table 2, Part 3(a) is due with an application for changing the ownership or the name of the company.
8.3.	**Special Activity Fees**	The special activity fees specified in OAR 340-216-0020, Table 2, Part 3 (b through i) are due with an application to modify the permit.
8.4.	**Where to Submit Fees**	Fees must be submitted to: Department of Environmental Quality Business Office 811 SW Sixth Avenue Portland, Oregon 97204-1390

9.0 GENERAL CONDITIONS AND DISCLAIMERS

9.1.	**Permitted Activities**	This permit allows the permittee to discharge air contaminants from processes and activities related to the air contaminant source(s) listed on the first page of this permit until this permit expires, is modified, or is revoked.
9.2.	**Other Regulations**	In addition to the specific requirements listed in this permit, the permittee must comply with all other legal requirements enforceable by the Department.
9.3.	**Conflicting Conditions**	In any instance in which there is an apparent conflict relative to conditions in this permit, the most stringent conditions apply.
9.4.	**Masking of Emissions**	The permittee must not cause or permit the installation of any device or use any means designed to mask the emissions of an air contaminant that causes or is likely to cause detriment to health, safety, or welfare of any person or otherwise violate any other regulation or requirement.
9.5.	**Department Access**	The permittee must allow the Department's representatives access to the plant site and pertinent records at all reasonable times for the purposes of performing inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant emissions discharge records and conducting all necessary functions related to this permit in accordance with ORS 468-095.
9.6.	**Permit**	The permittee must have a copy of the permit available at the

	Availability	facility at all times.
9.7.	**Open Burning**	The permittee may not conduct any open burning except as allowed by OAR 340 Division 264.
9.8.	**Asbestos**	The permittee must comply with the asbestos abatement requirements in OAR 340, Division 248 for all activities involving asbestos-containing materials, including, but not limit to, demolition, renovation, repair, construction, and maintenance.
9.9.	**Property Rights**	The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
9.10.	**Termination, Revocation, or Modification**	The Department may modify or revoke this permit pursuant to OAR 340-216-0082 and 340-216-0084.

10.0 EMISSION FACTORS

Process	Pollutant	Monitoring Parameter (Pn)	Emission Factor (Efn)	EF units	EF Reference
Natural Gas Fired Equipment	PM	MM ft^3 of natural gas	2.5	lbs/MM ft^3	DEQ
	PM_{10}	MM ft^3 of natural gas	2.5	lbs/MM ft^3	DEQ
	NO_x	MM ft^3 of natural gas	100	lbs/MM ft^3	AP-42
	CO	MM ft^3 of natural gas	84	lbs/MM ft^3	AP-42
	VOC	MM ft^3 of natural gas	5.5	lbs/MM ft^3	AP-42
LPC-S Air Casting	PM	Tons of metal poured	4.8	lbs/ton	AP-42
	PM_{10}	Tons of metal poured	2.4	lbs/ton	AP-42- 50% PM
	PM HAP	Tons of metal poured, % HAP	4.8	lbs/ton	AP-42
	Total HAP	Tons of metal poured, % HAP	4.8	lbs/ton	AP-42
LPC-S Vacuum Casting	PM	Tons of metal poured	0.21	lbs/ton	Source EF
	PM_{10}	Tons of metal poured	0.21	lbs/ton	Source EF
	PM HAP	Tons of metal poured, % HAP	0.21	lbs/ton	Source EF
	Total HAP	Tons of metal poured, % HAP	0.21	lbs/ton	Source EF
LPC-T Vacuum Casting	PM	Tons of metal poured	0.21	lbs/ton	Source EF
	PM_{10}	Tons of metal poured	0.21	lbs/ton	Source EF
	PM HAP	Tons of metal poured, % HAP	0.21	lbs/ton	Source EF
	Total HAP	Tons of metal poured, % HAP	0.21	lbs/ton	Source EF
Baghouses	PM	Tons baghouse dust collected	20	lbs/ton	Bag mfr. Spec.
	PM_{10}	Tons baghouse dust collected	20	lbs/ton	Bag mfr. Spec.
	PM HAP	Tons baghouse dust collected, %HAP	20	lbs/ton	Bag mfr. Spec.
	Total HAP	Tons baghouse dust collected, %HAP	20	lbs/ton	Bag mfr. Spec.
LPC-T Cleaning Cyclone	PM	Tons of metal poured	0.7	lbs/ton	Source Test
	PM_{10}	Tons of metal poured	0.36	lbs/ton	Source test 50%PM
Wax Burnout	PM	Tons of metal poured in parts	0.027	lbs/ton	Source EF
	PM_{10}	Tons of metal poured in parts	0.027	lbs/ton	Source EF

	VOC	Tons of metal poured in parts	2.7	lbs/ton	Source EF
	VOC HAP	Tons of metal poured in parts	1	lbs/ton	Source EF
	Total HAP	Tons of metal poured in parts	1	lbs/ton	Source EF
Autoclave (shell de-wax)	PM	Tons of metal poured in parts	0.14	lbs/ton	Source Test
	PM_{10}	Tons of metal poured in parts	0.07	lbs/ton	Source Test 50%PM
	VOC	Tons of metal poured in parts	0.09	lbs/ton	Source EF
	VOC HAP	Tons of metal poured in parts	0.09	lbs/ton	Source EF
	Total HAP	Tons of metal poured in parts	0.09	lbs/ton	Source EF
LPC-T Misc. Metal Processing	PM	Tons of metal poured in parts	1.32	lbs/ton	Source EF
	PM_{10}	Tons of metal poured in parts	0.7	lbs/ton	Source EF
	PM HAP	Tons of metal poured in parts, %HAP	1.32	lbs/ton	Source EF
	Total HAP	Tons of metal poured in parts, %HAP	1.32	lbs/ton	Source EF
LPC-S Misc. Metal Processing	PM	Tons of metal poured in parts	1.53	lbs/ton	Source EF
	PM_{10}	Tons of metal poured in parts	0.8	lbs/ton	Source EF
	PM HAP	Tons of metal poured in parts, %HAP	1.53	lbs/ton	Source EF
	Total HAP	Tons of metal poured in parts, %HAP	1.53	lbs/ton	Source EF
Maintenance Shop Cyclone	PM	Tons of dust collected	200	lbs/ton	Source EF
	PM_{10}	Tons of dust collected	200	lbs/ton	Source EF
LPC-S Plastic	VOC	Tons of plastic used	100	lbs/ton	Source EF
	VOC HAP	Tons of plastic used	100	lbs/ton	Source EF
LPC-T plastic	VOC	Tons of plastic used	2000	lbs/ton	Source EF(1)
	VOC HAP	Tons of plastic used	2000	lbs/ton	Source EF(1)
Misc. VOC Use	VOC	Tons of VOC containing material usage	2000	lbs/ton	Material Balance
	VOC HAP	Tons of VOC containing material usage	2000	lbs/ton	Material Balance
	Total HAP	Tons of VOC containing material usage	2000	lbs/ton	Material Balance
Latex (flash-fired)	VOC	Tons of latex used	40	lbs/ton	Source EF
	VOC HAP	Tons of latex used	40	lbs/ton	Source EF
	Total HAP	Tons of latex used	40	lbs/ton	Source EF
Latex (not flash-fired)	VOC	Tons of latex used	800	lbs/ton	Source EF
	VOC HAP	Tons of latex used	800	lbs/ton	Source EF
	Total HAP	Tons of latex used	800	lbs/ton	Source EF
Misc. HAP	HCl	Tons HCl used	100	lbs/ton	Source EF
	HF	Hours of operation	0.27	lbs/hr	Source EF

(1) Emission factor provided by permittee. Although a thermal oxidizer is used on the LPC-T burnout furnace that accepts molds with plastic in them, no emission control is assumed in the compliance calculation.

11.0 ABBREVIATIONS, ACRONYMS, AND DEFINITIONS

ACDP	Air Contaminant Discharge Permit
ASTM	American Society for Testing and Materials
AQMA	Air Quality Maintenance Area
calendar year	The 12-month period beginning January 1st and ending December 31st
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Oregon Department of Environmental Quality
dscf	dry standard cubic foot
EPA	US Environmental Protection Agency
FCAA	Federal Clean Air Act
gal	gallon(s)
gr/dscf	grains per dry standard cubic foot
HAP	Hazardous Air Pollutant as defined by OAR 340-244-0040
I&M	inspection and maintenance
lb	pound(s)
MMBtu	million British thermal units
NA	not applicable
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NO_X	nitrogen oxides
NSPS	New Source Performance Standard
NSR	New Source Review
O_2	oxygen
OAR	Oregon Administrative Rules
ORS	Oregon Revised Statutes
O&M	operation and maintenance
Pb	lead
PCD	pollution control device
PM	particulate matter
PM_{10}	particulate matter less than 10 microns in size
ppm	part per million
PSD	Prevention of Significant Deterioration
PSEL	Plant Site Emission Limit
PTE	Potential to Emit
RACT	Reasonably Available Control Technology
scf	standard cubic foot
SER	Significant Emission Rate
SIC	Standard Industrial Code
SIP	State Implementation Plan
SO_2	sulfur dioxide
Special Control Area	as defined in OAR 340-204-0070
VE	visible emissions
VOC	volatile organic compound
year	A period consisting of any 12-consecutive calendar months

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