

# GENERAL AIR CONTAMINANT DISCHARGE PERMIT

Department of Environmental Quality  
Air Quality Division  
811 SW Sixth Avenue  
Portland, OR 97204-1390  
Telephone: (503) 229-5359

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**This permit is issued in accordance with the provisions of ORS 468A.040 and incorporated into OAR 340-216-0060 by the Environmental Quality Commission on December 12, 2008 for the following source category:**

Clay ceramic manufacturing facilities subject to Part 63, Title 40 of Code of Federal Regulations, Subpart RRRRRR, as adopted under OAR 340-244-0220. NAICS 327111, 327112, 327122.

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## 1.0 PERMIT ASSIGNMENT

- 1.1. Qualifications** All of the following conditions must be met in order to qualify for assignment to this General Air Contaminant Discharge Permit (ACDP):
- a. The permittee is performing clay ceramic manufacturing activities listed on the cover page of this permit.
  - b. The source has an atomized glaze spray booth or kiln that fires glazed ceramic ware.
  - c. The source processes more than 50 tons per year of wet clay.
  - d. A Simple or Standard ACDP is not required for the source.
  - e. The source is not having ongoing, recurring or serious compliance problems.
- 1.2. Assignment** The Department will assign qualifying permittees to this permit that have and maintain a good record of compliance with the Department's Air Quality regulations and that the Department determines would be appropriately regulated by a General ACDP. The Department may rescind assignment of the permittee no longer meets the requirements of the permit.
- 1.3. Permitted Activities** The permittee is allowed 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air contaminant source(s) listed on the first page of this permit until this permit expires, is modified, revoked or rescinded as long as conditions of this permit are complied with. If there are other emissions activities occurring at the site besides those listed on the cover page of this permit, the permittee may be required to obtain a Simple or Standard ACDP or additional General ACDP(s), if applicable.
- 1.4. Relation to local land use laws** This permit is not valid in Lane County, or at any location where the operation of the permittee's processes, activities, and insignificant activities would be in violation of any local land use or zoning laws. For operation in Lane County, contact Lane Regional Air Protection Agency for any necessary permits at (541) 736-1056. It is the permittee's sole responsibility to obtain local land use approvals as, or where, applicable before operating this facility at any location.

## 2.0 GENERAL EMISSION STANDARDS AND LIMITS

- 2.1. Visible Emissions** The permittee must comply with the following visible emission limits, as applicable:
- a. In Clackamas, Columbia, Multnomah, or Washington Counties, emissions from any air contaminant source must not equal or exceed 20% opacity for a period aggregating more than 30 seconds in any one hour.
  - b. In all other areas of the state, emissions from any air contaminant source must not equal or exceed 20% opacity for a period aggregating more than 3 minutes in any one hour.
- 2.2. Fugitive Emissions** The permittee must take reasonable precautions to prevent fugitive dust emissions, such as but not limited to:
- 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.
- 2.3. 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.
- 2.4. 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.
- 2.5. 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 or on-specification used oil;
- b. The permittee is allowed to use on-specification used oil that 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 the used oil does not exceed the used oil specifications contained in 40 CFR Part 279.11, Table 1.

### 3.0 SPECIFIC PERFORMANCE AND EMISSION STANDARDS

- 3.1. **Glaze Kilns** For each kiln that fires glazed ceramic ware, the permittee must:
  - a. Maintain the peak temperature below 2800° F (1540° C).
  - b. Use natural gas or equivalent clean-burning fuel such as propane, or use an electric-powered kiln.
- 3.2. **Large Atomized Glaze Spray Booth** For each atomized glaze spray booth located at a facility that uses more than 250 tons per year of wet glaze, the permittee must comply with the equipment standard requirements in Condition 3.2.a or the management practice in Condition 3.2.b.
  - a. Equipment standard: Control the emissions from the atomized glaze spray booth with an air pollution control device (APCD). APCD means any equipment that reduces the quantity of a pollutant that is emitted to the air. Examples of APCD currently used on glaze spray booths include, but are not limited to, wet scrubbers, fabric filters, water curtains, and water-wash systems.
    - i. Operate and maintain the APCD in accordance with the equipment manufacturer's specifications; and
    - ii. Monitor the APCD according to the applicable requirements in Conditions 6.2 and 6.3.
  - b. Management practice: Use wet glazes containing less than 0.1 (weight) percent clay ceramic metal HAP.
- 3.3. **Small Atomized Glaze Spray Booth** For each atomized glaze spray booth located at a facility that uses 250 tons per year or less of wet glaze, the permittee must comply with the equipment standard requirements in Condition 3.3.a or the management practice in Condition 3.3.b.
  - a. Equipment standard: Comply with the equipment standard requirements described in Condition 3.2.a or the

management practice described Condition 3.2.b.

- b. Management practice: Employ procedures employed to minimize material losses and prevent unnecessary waste generation, for example, minimizing glaze overspray emissions using HVLP spray equipment (defined in 40 CFR 63.11444) or similar spray equipment; minimizing HAP emissions during cleanup of spray glazing equipment; operating and maintaining spray glazing equipment according to manufacturer's instructions; and minimizing spills through careful handling of HAP-containing glaze materials.

- 3.4. **Wet Glaze Usage** Surface applications (*e.g.*, wet glazes) containing less than 0.1 (weight) percent clay ceramics metal HAP do not have to be considered in determination of the 250 ton per year threshold for wet glaze usage.

#### 4.0 OPERATION AND MAINTENANCE REQUIREMENTS

- 4.1. **Startup, Shutdown, and Malfunction Provisions** At all times, including periods of startup, shutdown, and malfunction, the permittee must operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the permittee reduce emissions from the source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the permittee to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, the permittee must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.

#### 5.0 PLANT SITE EMISSION LIMITS

**5.1. Plant Site Emission Limits (PSEL)**

Plant site emissions must not exceed the following:

Pollutant	Limit	Units
PM	24	tons per year
PM <sub>10</sub>	14	tons per year
SO <sub>2</sub>	39	tons per year
NO <sub>x</sub>	39	tons per year
CO	99	tons per year
VOC	39	tons per year

**5.2. PM<sub>10</sub> PSEL for Medford-Ashland AQMA**

For sources operating in the Medford-Ashland AQMA, plant site emissions of PM<sub>10</sub> must not exceed the following:

Pollutant	Limit	Units
PM <sub>10</sub>	4.5	tons per year
	49	pounds per day

**5.3. Annual Period**

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

**6.0 COMPLIANCE DEMONSTRATION**

**6.1. Fuel Sulfur Monitoring**

If fuel oil is burned, the permittee must either obtain a certificate from the vendor stating that the fuel sulfur content complies with the limits in Condition 2.5 or have a sample of the fuel analyzed in accordance with the appropriate ASTM analytical procedures. If the permittee has samples analyzed for sulfur, a sample must be collected from the holding tank just after each shipment of oil is added to the tank.

**6.2. Initial Control Device Inspection**

For any wet spray glaze operation controlled by an APCD, the permittee must conduct an initial inspection of each particulate matter (PM) control device as follows prior to being assigned to this permit or within 60 days of startup, whichever is later:

- a. For each wet control system, the permittee must verify the presence of water flow to the control equipment; visually inspect ductwork and control equipment for leaks; and inspect the interior of the control equipment for structural integrity and the condition of the control system. An initial inspection of the internal components of a wet control system is not required if an inspection has been performed within the past 12 months.

- b. For each baghouse, the permittee must visually inspect the ductwork and baghouse unit for leaks, and inspect the inside of the baghouse for structural integrity and fabric filter condition. An initial inspection of the internal components of the baghouse is not required if an inspection has been performed within the past 12 months.

**6.3. Periodic Inspections and Maintenance**

The permittee must perform periodic inspections and maintenance of each PM control device following the initial control device inspection according to the requirements in Condition 6.3.a or 6.3.b.

- a. Wet control systems:
  - i. Daily inspection to verify the presence of water flow to the wet controls system;
  - ii. Weekly visual inspections of the system ductwork and control equipment for leaks; and
  - iii. Annual inspections of the system interior for structural integrity and to determine the condition of the equipment.
- b. Baghouses:
  - i. Weekly visual inspections of the system ductwork for leaks;
  - ii. Annual inspections of the system interior for structural integrity and to determine the condition of the fabric filter;
- c. As an alternative to Condition 6.3.a or 6.3.b, the permittee may conduct a daily 30-minute visible emissions test using EPA Method 22, or an approved alternative technique under 40 CFR 63.8(f).
- d. If the results of the visual inspection, visible emission test, or alternative monitoring technique indicate an exceedance, the permittee must take corrective action according to the manufacturer's specifications or instructions.

**6.4. Kiln Monitoring**

For each kiln firing glazed ceramic ware, the permittee must conduct a daily check of the peak firing temperature. If the peak temperature exceeds 2800 °F (1540 °C), the permittee must take corrective action according to the permittee's standard operating procedures.

**6.5. PSEL Compliance Monitoring**

Compliance with the PSEL is determined for each 12-consecutive calendar month period based on the following calculation for each

pollutant:

$$E = \Sigma(EF \times P)/2000$$

where,

- E = pollutant emissions (tons/yr);
- EF = pollutant emission factor (see Condition 6.6);
- P = process production (tons of fired product)

**6.6. Emission Factors**

The permittee must use the default emission factors provided below 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.

<b>Emissions device or activity</b>	<b>Pollutant</b>	<b>Emission Factor (EF)</b>	<b>Emission factor units</b>
Crushing and Screening	PM/PM10	0.12	lb/ton of fired product
Dryer	PM/PM <sub>10</sub>	2.3	lb/ton of fired product
Cooler	PM/PM <sub>10</sub>	0.11	lb/ton of fired product
Granulation Spray Dryer	PM/PM <sub>10</sub>	0.19	lb/ton of fired product
Kiln	PM/PM <sub>10</sub>	0.56	lb/ton of fired product
	SO <sub>2</sub>	44 x S*	lb/ton of fired product
	NO <sub>x</sub>	0.54	lb/ton of fired product
	CO	3.3	lb/ton of fired product
	VOC	0.43	lb/ton of fired product
Glaze Spray Booth	PM/PM <sub>10</sub>	19	lb/ton of fired product

Forming – Tape Casters	VOC	58	lb/ton of formed product
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\*Sulfur content of raw materials in percent

## 7.0 RECORDKEEPING REQUIREMENTS

- 7.1. Notifications** The permittee must keep a copy of each Initial Notification and each Notification of Compliance Status that was submitted to comply with Clay Manufacturing NESHAP, including all documentation supporting any Initial Notification or Notification of Compliance Status.
- 7.2. Operation and Maintenance** The permittee must maintain records related to the following activities.
- a. Amount of product fired – tons per month;
  - b. Amount of product formed – tons per month;
  - c. Amount of wet glaze used – tons per month;
  - d. Amount of natural gas used – cubic feet per month;
  - e. Certificate of analysis for used oil fuel demonstrating that fuel is on-specification – per shipment or batch;
  - f. Fuel oil sulfur content – per shipment;
  - g. Daily kiln peak temperature checks;
  - h. The results of visual inspections required in Conditions 6.2 through 6.3, as applicable;
  - i. The results of visible emission tests or approved alternative monitoring techniques required in Condition 6.3.c;
  - j. The records required in Conditions 7.2.g through 7.2.i must include:

- i. Date, place, time;
- ii. Person conducting the activity;
- iii. Technique or method used;
- iv. Operating conditions during the activity;
- v. Results, including any remedial actions taken.

**7.3. 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 a record of actions taken for complaint resolution.

**7.4. Retention of Records** All records must be maintained for a period of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee must hold the records on site for a period of two (2) years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, and make them available to the Department upon request.

## 8.0 REPORTING REQUIREMENTS

**8.1. 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. Operating parameters:
  - i. Highest peak operating temperature in each kiln;
  - ii. Amount of product fired, in tons;
  - iii. Amount of product formed, in tons;
  - iv. Amount of wet glaze used, in tons;
  - v. Amount of natural gas used, in cubic feet per month;
  - vi. Summary of the results of the visual inspections required in Condition 6.3. At a minimum, report any inspection which resulted in remedial actions.
- b. Summary of complaints relating to air quality received by permittee during the year.
- c. List permanent changes made in plant process, production

levels, and pollution control equipment which affected air contaminant emissions.

- d. List major maintenance performed on pollution control equipment.

**8.2. 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.

**8.3. 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 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.

**8.4. 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 9.2.

**9.0 ADMINISTRATIVE REQUIREMENTS**

**9.1. Permit Renewal Application**

A complete application for reassignment to this permit is due within 60 days after the permit is reissued. The Department will notify the permittee when the permit is reissued. The application must be sent to the appropriate regional office.

- a. The permittee may submit an application for either a Simple or Standard ACDP at any time, but the permittee must continue to comply with the General ACDP until DEQ takes final action on the application.
- b. If a complete application for reassignment to the General permit, or application made for a Simple or Standard permit in a timely manner, the permit will not be deemed to expire until final action has been taken on the

application.

**9.2. 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:

<b>Counties</b>	<b>Permit Coordinator Address and Telephone</b>
Clackamas, Clatsop, Columbia, Multnomah, Tillamook, and Washington	Department of Environmental Quality Northwest Region 2020 SW 4th Avenue, Suite 400 Portland, OR 97201-4987 Telephone: (503) 229-5582
Benton, Coos, Curry, Douglas, Jackson, Josephine, Lincoln, Linn, Marion, Polk, and Yamhill	Department of Environmental Quality Western Region 750 Front Street NE, Suite 120 Salem, OR 97301-1039 Telephone: (503) 378-5305
Baker, Crook, Deschutes, Gilliam, Grant, Harney, Hood River, Jefferson, Klamath, Lake, Malheur, Morrow, Sherman, Umatilla, Union, Wallowa, Wasco, Wheeler	Department of Environmental Quality Eastern Region 475 NE Bellevue Dr., Suite 110 Bend, OR 97701 Telephone: (541) 633-2021

**9.3. Department Contacts**

Information about air quality permits and the Department's regulations may be obtained from the DEQ web page at <http://www.oregon.gov/DEQ/>. 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:

<b>Counties</b>	<b>Office Address and Telephone</b>
Clackamas, Clatsop, Columbia, Multnomah, Tillamook, and Washington	Department of Environmental Quality Portland Office 2020 SW 4th Avenue, Suite 400 Portland, OR 97201-4987 Telephone: (503) 229-5554
Benton, Lincoln, Linn, Marion, Polk, and Yamhill	Department of Environmental Quality Salem Office 750 Front Street NE, Suite 120 Salem, OR 97301-1039 Telephone: (503) 378-8240

Counties	Office Address and Telephone
Coos and Curry	Department of Environmental Quality Coos Bay Office 381 N Second Street Coos Bay, OR 97420-2270 Telephone: (541) 269-2721
Douglas, Jackson, and Josephine	Department of Environmental Quality Medford Office 221 W Stewart Avenue, Suite 201 Medford, OR 97501-3647 Telephone: (541) 776-6010
Crook, Deschutes, Harney, Hood River, Jefferson, Klamath, Lake, Sherman, Wasco, and Wheeler	Department of Environmental Quality Bend Office 475 NE Bellevue Dr., Suite 110 Bend, OR 97701 Telephone: (541) 388-6146
Baker, Gilliam, Grant, Malheur, Morrow, Umatilla, Union, and Wallowa	Department of Environmental Quality Pendleton Office 700 SE Emigrant Avenue, Suite 330 Pendleton, OR 97801-2597 Telephone: (541) 276-4063

## 10.0 FEES

- 10.1. Annual Compliance Fee** The Annual Fee specified in OAR 340-216-0020, Table 2, Part 2 for a Fee Class One General 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.
- 10.2. 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.
- 10.3. 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.
- 10.4. Where to Submit Fees** Fees must be submitted to:  
 Department of Environmental Quality  
 Business Office  
 811 SW Sixth Avenue  
 Portland, Oregon 97204-1390

## 11.0 GENERAL CONDITIONS AND DISCLAIMERS

- 11.1. 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.
- 11.2. Conflicting Conditions** In any instance in which there is an apparent conflict relative to conditions in this permit, the most stringent conditions apply.
- 11.3. 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.
- 11.4. 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.
- 11.5. Permit Availability** The permittee must have a copy of the permit available at the facility at all times.
- 11.6. Open Burning** The permittee may not conduct any open burning except as allowed by OAR 340 Division 264.
- 11.7. 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.
- 11.8. 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.
- 11.9. Termination, Revocation, or Modification** The Department may modify or revoke this permit pursuant to OAR 340-216-0082 and 340-216-0084.

## 12.0 ABBREVIATIONS, ACRONYMS, AND DEFINITIONS

ACDP	Air Contaminant Discharge Permit	and Materials
ASTM	American Society for Testing	AQMA Air Quality Maintenance Area calendar The 12-month period

year	beginning January 1st and ending December 31st	OAR	Oregon Administrative Rules
CFR	Code of Federal Regulations	ORS	Oregon Revised Statutes
CO	carbon monoxide	O&M	operation and maintenance
DEQ	Oregon Department of Environmental Quality	Pb	lead
dscf	dry standard cubic foot	PCD	pollution control device
EPA	US Environmental Protection Agency	PM	particulate matter
FCAA	Federal Clean Air Act	PM <sub>10</sub>	particulate matter less than 10 microns in size
gal	gallon(s)	ppm	part per million
gr/dscf	grains per dry standard cubic foot	PSD	Prevention of Significant Deterioration
HAP	Hazardous Air Pollutant as defined by OAR 340-244-0040	PSEL	Plant Site Emission Limit
I&M	inspection and maintenance	PTE	Potential to Emit
lb	pound(s)	RACT	Reasonably Available Control Technology
Metal HAP	chromium, manganese, lead, nickel	scf	standard cubic foot
MMBtu	million British thermal units	SER	Significant Emission Rate
NA	not applicable	SIC	Standard Industrial Code
NESHAP	National Emissions Standards for Hazardous Air Pollutants	SIP	State Implementation Plan
NO <sub>x</sub>	nitrogen oxides	SO <sub>2</sub>	sulfur dioxide
NSPS	New Source Performance Standard	Special Control Area	as defined in OAR 340-204-0070
NSR	New Source Review	VE	visible emissions
O <sub>2</sub>	oxygen	VOC	volatile organic compound
		year	A period consisting of any 12-consecutive calendar months

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