

POTPOURRI NOTICE

Department of Environmental Quality
Office of Environmental Assessment

Advance Notice of Proposed Rulemaking and
Solicitation of Comments on Abrasive Blasting Regulations, AQ249
(LAC 33:III.Chapter 13.Subchapter F)
(0504Pot1)

The Department of Environmental Quality is issuing an advance notice of proposed rulemaking in order to obtain early comments on issues associated with draft regulations regarding emissions from abrasive blasting. These will be new regulations in LAC 33:III.Chapter 13.Subchapter F (Log #AQ249).

The new regulations are intended to reduce particulate matter emissions from facilities that engage in abrasive blasting. This rule will establish the following standards of performance for abrasive blasting: prohibited materials that cannot be used as abrasive material; required control equipment; maintenance of control equipment; recordkeeping requirements; and housekeeping requirements. Abrasive blasting is a common practice in Louisiana and is not currently regulated in a consistent manner. Many of the complaints received by the department are related to abrasive blasting emissions. This situation can be ameliorated by setting performance standards that apply to all businesses that engage in abrasive blasting.

Public input is requested on the draft regulations regarding:

1. determination of the fiscal and economic impact of the proposed regulations;
2. clarification of required performance standards and best management practices plans requirements;
3. clarification of recordkeeping requirements; and
4. addition of new definitions.

All interested persons are invited to submit written comments on the advance draft regulations. Persons commenting should reference the draft regulation by AQ249. Such comments must be received no later than June 1, 2005, at 4:30 p.m., and should be sent to Jennifer Mouton, Office of Environmental Compliance, Surveillance Division, Box 4312, Baton Rouge, LA 70821-4312 or to FAX (225) 219-4083 or by e-mail to jennifer.mouton@la.gov. Copies of the draft regulation can be purchased by contacting the DEQ Public Records Center at (225) 219-3168. Check or money order is required in advance for each copy of AQ249. The draft regulation is available on the Internet at www.deq.louisiana.gov under Rules and Regulations.

The draft regulation is available for inspection at the following DEQ office locations from 8 a.m. until 4:30 p.m.: 602 N. Fifth Street, Baton Rouge, LA 70802; 1823 Highway 546, West Monroe, LA 71292; State Office Building, 1525 Fairfield Avenue, Shreveport, LA 71101; 1301 Gadwall Street, Lake Charles, LA 70615; 201 Evans Road, Building 4, Suite 420, New Orleans, LA 70123; 111 New Center Drive, Lafayette, LA 70508; 110 Baratavia Street, Lockport, LA 70374.

Wilbert F. Jordan, Jr.
Assistant Secretary

Title 33

ENVIRONMENTAL QUALITY

Part III. Air

Chapter 13. Emission Standards for Particulate Matter

Subchapter F. Abrasive Blasting

§1323. Emissions from Abrasive Blasting

A. Purpose. The purpose of this Subchapter is to reduce particulate matter emissions from facilities that engage in abrasive blasting.

B. Scope. This Subchapter applies to any facility in the state that engages in abrasive blasting.

C. Compliance. Compliance with these regulations does not eliminate the requirement to comply with any other state or federal regulation or any specific condition of a permit granted by the department.

1. Any new facility that was constructed after promulgation of these regulations shall comply with all of the requirements of this Subchapter before operation may commence.

2. Existing affected facilities shall comply with all of the requirements of this Subchapter as soon as practicable, but no later than one year after promulgation of these regulations.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054(B)(1).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, LR 31:**.

§1325. Definitions

A. Terms used in this Subchapter are defined in LAC 33:III.111 with the exception of those terms specifically defined below.

Abrasives (Abrasive Media, Abrasive Material)—any material used in abrasive blasting operations including, but not limited to, sand, slag, steel shot/grit, garnet, CO₂, or walnut shells.

Abrasive Blasting—the operation of cleaning or preparing a surface by forcibly propelling a stream of abrasive material against the surface.

Abrasive Blasting Equipment—any equipment utilized in abrasive blasting operations.

Emission Control Equipment—any device or contrivance, operating procedure, or abatement scheme including, but not limited to, filters, ventilation systems, shrouds, or best management practices, that prevents or reduces the emission of air contaminants from blasting operations.

Enclose—to place either tarps, shrouds, or a solid structure on all sides and the top of an area used for abrasive blasting, or to fully enclose a structure to be blasted.

Hydroblasting—any abrasive blasting using high-pressure liquid as the propelling force or as the active cleaning agent.

Indoor Abrasive Blasting—abrasive blasting conducted inside of a permanent building equipped with a particulate matter collection system.

Nuisance—any condition of the ambient air beyond the property line of the offending source that is offensive to the senses, or that causes or constitutes an obstruction to the free use of property, so as to unreasonably interfere with the comfortable enjoyment of life or property. In determining whether or not a nuisance exists, the department may consider factors including, but not limited to, the following:

- a. frequency of the emission;
- b. duration of the emission;
- c. intensity and offensiveness of the emission;
- d. number of persons impacted;
- e. extent and character of the detriment to complainants; and
- f. the source's ability to prevent or avoid harm.

Shade Factor—for shrouds, the percent of area impermeable to particles 100 grit or greater, or to sunlight.

Shroud (Tarp)—a device that is designed to enclose or surround the blasting activity to minimize the atmospheric dispersion of fine particulates and direct that material to a confined area for subsequent removal and disposal.

Surround—to place either tarps, shrouds, or a solid structure on all sides of an area used for abrasive blasting.

Wet Abrasive Blasting—any abrasive blasting using a suspension of abrasives in water.

Vacuum Blasting—any abrasive blasting in which a seal is maintained between the assembly and the blasting surface, thereby allowing the spent abrasive, surface material, and dust to be immediately collected by a vacuum device, equipped with a high efficiency (at least 95%) particulate filtration system.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054(B)(1).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, LR 31:**.

§1327. Blasting Operations

A. Abrasive Materials and Methods

1. Material derived from hazardous, toxic, medical, and/or municipal waste is prohibited from use as abrasive material.

2. Abrasives shall contain less than 1 percent (by weight) of fines that would pass through a No. 80 sieve as documented by the supplier. For the purpose of determining weight percent of fines from abrasive material, samples shall be taken according to ASTM standard ASTM D 75-87, reapproved 1992.

3. Abrasives shall not be reused unless they meet the requirements of Paragraph A.2 of this Section.

B. The following abrasives and blasting methods are exempt from the provisions of Paragraphs A.2 - 3 of this Section and LAC 33:III.1329.A:

1. iron or steel shot/grit;

2. CO₂;
3. other abrasives, as approved by the department;
4. hydroblasting or wet abrasive blasting; and
5. vacuum blasting.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054(B)(1).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, LR 31:**.

§1329. Performance Standard

- A. Affected facilities shall either:
 1. fully enclose the structure or item to be blasted; or
 2. prepare and implement a best management practices plan as described in LAC 33:III.1331.
- B. Abrasive blasting shall not be conducted when wind speeds render containment systems inoperable.
- C. The structure or item being blasted shall be blasted in a downward manner where practical.
- D. A windsock or other device or method for determining wind direction shall be installed and maintained on the property.
- E. Blast cabinet exhaust shall be re-circulated to the cabinet or vented to emission control equipment.
- F. If tarps are used to confine emissions due to abrasive blasting, the tarps shall:
 1. have overlapping seams to prevent leakage of particulate matter;
 2. have a shade factor of 80 percent or greater; and
 3. be repaired prior to use if any tears greater than 1 foot in length are present.
- G. If blasting is performed in a permanent building with a particulate matter collection system, the collection system shall be exhausted through effective control equipment with a particulate matter outlet grain loading of 0.30 g/dscf or less, as documented by the control equipment manufacturer.
- H. Abrasive blasting performed over waters of the state shall be fully contained. No blasting material or visible floating solids shall reach waters of the state unless such discharge is authorized according to the LPDES permit program.
- I. Abrasive blasting activities shall not create a nuisance. Moreover, additional controls may be needed even if applicable control requirements are implemented.
- J. All emission control equipment shall be used and diligently maintained in proper working order whenever any emissions are being generated that can be controlled by the facility, even if the ambient air quality standards in affected areas are not exceeded.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054(B)(1).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, LR 31:**.

§1331. Best Management Practices Plans

- A. When an affected facility determines that fully enclosing the structures or item

being blasted is not practical, the owner/operator shall clearly demonstrate such impracticality and develop and implement a best management practices (BMP) plan. Facilities that decide to use a BMP plan to comply with this Subchapter shall comply with all other requirements of this Subchapter.

B. A complete copy of the BMP plan shall be kept at the facility and be made available to authorized representatives of the department upon request. Plans need not be submitted to the department unless requested by an authorized representative of the department.

C. Each facility shall have a designated person who is accountable for the implementation and effectiveness of the BMP plan.

D. Amendment of BMP Plans

1. After review of the plan by the department and/or upon receiving notice of a complaint, the department may require the owner/operator of the facility to amend the plan if there are indications that the plan does not adequately prevent nuisances and/or adverse off-site impacts.

2. The plan shall be amended whenever physical or operational modification of the facility renders the existing plan inadequate. The amendment shall be implemented prior to or concurrent with the facility modification.

E. Periodic Review of BMP Plans. Operators of facilities shall review the plan every three years to determine if the plan adequately reduces nuisances and adverse off-site impacts. If it is determined that the plan is not adequate, the plan shall be amended within 90 days of the review to include more effective emission prevention and control technology.

F. The BMP plan shall be prepared in accordance with sound engineering practices. The department recognizes that the designs of facilities differ and that in certain cases the appropriate methods for emission prevention and control must be site-specific. The plan information shall be presented in the following sequence:

1. name, mailing address, and location of the facility;
2. name of the operator of the facility;
3. date and year of initial facility operation;
4. a brief but adequate description of the facility including an indication of any nearby recreational areas, residences, or other structures not owned or used solely by the facility, and their distance and direction from the facility;
5. a brief but accurate description of any nearby waters of the state that may be affected, and their distance and direction from the facility;
6. facility capability and procedures for taking corrective actions and/or countermeasures when nuisances and/or adverse off-site impacts occur;
7. facility procedures for preventing nuisances and/or adverse off-site impacts including a description of any emission control equipment;
8. written procedures for self-monitoring and annual self-inspection of the facility;
9. personnel training records as required by this Subchapter; and
10. signatures of responsible officials.

G. Personnel training shall be included in the BMP plan.

1. Any employee and/or contractor conducting abrasive blasting shall be trained on proper abrasive blasting methods, proper handling of abrasive and spent material, floatable solids, the facility's plan, and good housekeeping practices for the facility.

2. Employees and contractors shall receive training pertaining to the plan at

least once a year or when significant changes are made to the plan that affect their activities.

3. Contractors shall be notified of and required to perform in accordance with the plan applicable to activities related to their contract.

4. Employees, contractors, and customer representatives shall be instructed not to dispose of abrasive, spent, and floatable materials to air and water bodies or to drains, drainage channels, or trenches that lead to water bodies.

H. Inspections and Records

1. The BMP plan shall provide for annual self-inspections in accordance with written procedures developed for the facility. Inspection records shall be signed or initialed by the inspector, appropriate supervisor, or the facility designee, and shall be retained for a minimum of three years.

2. In addition to other recordkeeping and reporting requirements of this Section, the following records should be maintained on the facility premises:

- a. annual self-inspection reports;
- b. documentation of employee and contractor training including dates, subjects, and hours of training and a list of attendees with signatures.

I. Verification by the Department. Facilities for which this Subchapter applies may be inspected by an authorized representative of the department to ensure implementation and adequacy of the BMP plan.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054(B)(1).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, LR 31:**.

§1333. Recordkeeping and Reporting

A. The facility owner/operator shall maintain the following records on the facility premises at all times, and present them to an authorized representative of the department upon request:

1. application approval records and permit to construct/operate, where applicable;
2. type of *emission control equipment* as defined in LAC 33:III.1325;
3. description and diagram showing the location of blasting operations on-site;
4. observations of wind direction recorded hourly when abrasive blasting is being performed;
5. visual observations for particulate matter emissions recorded hourly during occurrences of abrasive blasting activity;
6. daily record of actual operating times when blasting is performed, based on a 24-hour clock;
7. monthly record of abrasive material usage including weight percent of fines in abrasive material per the manufacturer or per sampling, if abrasive material is being reused. For the purpose of determining weight percent of fines from abrasive material, samples shall be taken according to ASTM standard ASTM D 75-87, reapproved 1992;
8. applicable test results and data derived from containment, ventilation, air, soil, fines, and other monitoring results; and
9. records of how spent material is handled, recycled, reused, or disposed of

including the name of, and any manifests or receipts from, any off-site facilities that accept the spent material.

B. Records required by this Subchapter or any BMP plan used to attain compliance with this Subchapter shall be maintained on a rolling three-year retention period.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054(B)(1).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, LR 31:**.