 Abrasive Blasting

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| **Related Industries:****S**teel fabrication, shipbuilding, metal cleaning and any activity that uses abrasives blasting to clean, polish or condition a surface.**Current Regulations that apply to Abrasive Blasting:**Louisiana State regulation LAC 33:III.1323 addresses particulate matter emissions from facilities that engage in abrasive blasting.Water quality regulations require a stormwater permit, Stormwater Pollution Prevention Plan, and possibly a Spill Prevention Plan for the site. **Guidelines for Abrasive Blasting:*** **Outdoors**
	+ *Abrasives shall contain less than 10 percent (by weight) of fines which would pass through a No. 80 sieve. Supplier documentation or analysis must be kept in support of this data.*
	+ Use abrasives with dust suppression additives or water injection whenever possible.
	+ Material derived from hazardous, toxic, medical, and/or municipal waste should not be used as abrasive material
	+ Controls should be in use at all times when abrasive blasting is being conducted
	+ A shroud should be used to confine emissions due to outdoor abrasive blasting. The shroud should:
		- Be placed as close to immediate blast area as possible to prevent dispersion of dust before it meets the shroud.
		- Have overlapping seams to prevent leakage of particulate matter, and
		- Have a shade factor of 80 percent or greater; and
		- Be repaired if there are any tears that are greater than one foot in length before blasting commences.
* **Indoors**
	+ Indoor systems should be exhausted through control equipment with a particulate matter outlet grain loading of 0.05 gdscf or less, as documented by the control equipment manufacturer.
	+ Blast cabinet exhaust should be recirculated to the cabinet or vented to emission control equipment.

**Permits, Reporting and Record Keeping:**An Air Quality Permit is required for any operation conduction outdoor abrasive blasting.Exceptions from permitting may be allowed when minor sandblasting is part of miscellaneous equipment maintenance.  Act 547 may also apply.Records required by this Subchapter or any BMP plan used to attain compliance with this Subchapter shall be maintained on a 36-month rolling basis. The facility owner/operator should maintain the following records on the facility premises at all times, and present them to an authorized representative of the Department of Environmental Quality upon request:* permit application approval records and the facility's permit to construct/operate, where applicable;
* a description of the type of *emission control equipment,* as defined in LAC 33:III.1325, employed at the facility;
* descriptions and diagrams showing the locations of blasting operations on-site;
* a monthly record of abrasive material usage, including:
	+ for new material, weight percent of fines in abrasive material *per*the manufacturer;
	+ if abrasive material is being reused, weight percent of fines as determined by sampling. For the purpose of determining weight percent of fines in abrasive material, samples shall be taken according to ASTM standard ASTM D 75-03;
* applicable results, and data derived from results, of containment, ventilation, air, soil, fines, and other monitoring activities;
* records of how spent material is handled, recycled, reused, or disposed of, including the names of, and any manifests or receipts from, any off-site facilities that accept the spent material; and
* for abrasive blasting that is performed outside of a full enclosure or a blast cabinet, the following:
	+ visual observations of particulate matter emissions, recorded at commencement of, and prior to ending of, operations less than four hours in duration, and every four hours for operations greater than four hours in duration;
	+ observations of wind direction, recorded simultaneously with the observations required in Subparagraph A.7.a of this Section;
	+ a daily record of actual operating times when such blasting is performed, based on a 24-hour clock.

I**mportant Dates:*** None for businesses engaged in abrasive blasting and painting only.

**Housekeeping Suggestions:*** Clean blasting area of spent abrasive as often as possible.
* Cover piles of spent abrasives.
* Keep tight seals on solvent containers.

**Pollution Prevention Suggestions:*** Manage blasting operation to minimize abrasive use by:
* Maintaining optimum air pressure levels during blasting;
	+ Replacing worn blasting nozzles;
	+ Educating personnel to use the most effective blasting techniques;
	+ Minimize contamination of abrasive material when blasting items that may contain leaded paints or hazardous materials;
	+ Remove uncontaminated spent abrasives from blasting area before blasting items that may contain lead or other hazardous material.
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