

RULE 363. PARTICULATE MATTER (PM) CONTROL DEVICES
(Adopted xx/xx/xxxx)

A. Applicability

This rule applies to any particulate matter (PM) air pollution control device that vents direct (non-combustion) PM emissions and that is located at an AB 617 Industrial Source. PM air pollution control devices include, but are not limited to, baghouses, high efficiency particulate air (HEPA) systems, bin vents, or other dust collectors using air filters, cyclones, and wet scrubbers.

B. Exemptions

1. This rule shall not apply to any spray booth and its associated filters.
2. With the exception of Section D.1, the following units are exempt from this rule:
 - a. Any baghouse for which the cumulative filter surface area is less than or equal to 100 square feet.
 - b. Any portable dust collector, fume extractor, or negative air machine with a manufacturer's maximum rated capacity of less than or equal to 3,000 cubic feet per minute.
 - c. High efficiency particulate air (HEPA) systems.
3. With the exception of Section H.1, this rule shall not apply to any equipment with an active permit to operate that is not in operation as of *[Date of Rule adoption]*. This exemption expires once operations commence.
4. The following equipment is exempt from the provisions of Section E.1:
 - a. Bin vents.
 - b. PM air pollution control devices that vent a non-continuous process.
 - c. PM air pollution control devices that operate and maintain a Bag Leak Detection System (BLDS) pursuant to Section E.2.
5. The provisions of Sections D.1, D.2, E.1, and E.2.e through E.2.f shall not apply during startup of the PM air pollution control device, including startup after a repair to fix an equipment breakdown or after a scheduled maintenance activity. For the purpose of this exemption, startup intervals shall not last longer than necessary to reach stable operating conditions and in no case shall be longer than 45 minutes. This exemption does not relieve the operator from complying with the PM concentration (grain loading) requirements of Rule 304, Particulate Matter – Northern Zone, Rule 305, Particulate Matter Concentration – Southern Zone, or the opacity requirements as specified in Rule 302, Visible Emissions.
6. For PM air pollution control devices connected in series, the provisions of Section E.1 shall only apply to the PM air pollution control device exhausting to the atmosphere. In the event a Tier 2 baghouse is not the last in the series to vent to the atmosphere, the provisions of Sections D.2, E.2, and F shall not apply.

C. Definitions

See Rule 102, Definitions, for definitions not limited to this rule. For the purposes of this rule, the following definitions shall apply:

“AB 617 Industrial Source” means any facility that, as of January 1, 2017, was subject to a market-based compliance mechanism adopted by the state board pursuant to Health and Safety Code §38562(c).

“Baghouse” means an air pollution control device designed to remove PM from a gas stream using fabric filters in the shape of a tube or an envelope, or other air filters that are built into a frame or cartridge. For the purpose of this rule, baghouses are separated into two types based on the following characteristics:

- (A) Tier 1: Baghouses for which the cumulative filter surface area is less than or equal to 7,500 square feet; or
- (B) Tier 2: Baghouses for which the cumulative filter surface area is greater than 7,500 square feet.

“Bag Leak Detection System (BLDS)” means a system that monitors electrical charge transfer based on triboelectricity or electrostatic induction to continuously monitor bag leakage and similar failures by detecting changes in particle mass loading in the exhaust.

“Bin Vent” means an air filtration dust collector designed to remove PM from the air that is displaced by materials filling silos and bins.

“Cyclone” means an air pollution control device designed to remove PM from a gas stream by inertia.

“High Efficiency Particulate Air (HEPA) System” means a filtration system with a throwaway, dry type filter with a rigid casing enclosing the full depth of the pleats. The filter shall exhibit a minimum efficiency of 99.97% when tested with an aerosol of 0.3 micrometer diameter.

“Non-continuous Process” means an emissions generating activity vented to a PM air pollution control device that:

- (A) Operates no more than once per week for a period of less than 20 hours; or
- (B) Operates for periods of less than one hour, not to cumulatively exceed 4 hours during any single day.

“Shaker Baghouse” means a baghouse that uses a shaking motion to remove the accumulated dust and particulate matter on the filter bags. For the purpose of this rule, shaker baghouses are separated into two types based on the following characteristics:

- (A) A manual shaker baghouse provides the shaking motion through physical human force; or
- (B) An automated shaker baghouse provides the shaking motion through an automated mechanical mechanism. The mechanism can be activated by a timer, system setting, or at the push of a button.

“Spray Booth” means a power ventilated structure of varying dimensions and construction provided to enclose or accommodate a spraying operation to confine and limit the escape of spray vapor and residue, and to exhaust the airflow safely.

“Visible Emissions” means any solid particulate matter that can be seen in the air without the aid of instruments other than corrective lenses. Visible emissions do include condensed water vapor.

“Wet Scrubber” means an air pollution control device designed to remove PM from a gas stream by using a finely atomized stream of liquid to capture particulate matter pollutants.

D. Requirements – General

1. Beginning *[1 year after rule adoption]*, the operator of a facility shall not cause or allow any visible emissions from any PM air pollution control device. An operator shall not be considered in violation of this requirement if the operator is in the process of complying or has complied with the applicable requirements in Sections E.1.c and E.2.e.
2. No later than *[1 year after rule adoption]*, each Tier 2 baghouse shall meet an outlet PM concentration of less than or equal to 0.005 grains per dry standard cubic foot (gr/dscf).
3. An operator shall not install a manual shaker baghouse on or after *[date of rule adoption]*.
4. No later than *[2 years after rule adoption]*, the operator of an existing manual shaker baghouse shall upgrade or replace it with, at a minimum, an automated shaker baghouse.
5. No later than *[1 year after rule adoption]*, all PM air pollution control devices shall be operated and maintained in accordance with the manufacturer’s operation and maintenance manual or other similar written materials supplied by the manufacturer or distributor of a control device to ensure that the control device remains in proper operating condition. If such documents are not available, the operator shall provide and follow written operation and maintenance procedures for the PM control device(s). Such documentation shall be made available to the Control Officer immediately upon request.
6. When a new process is vented to a baghouse, the operator shall install and maintain a ventilation system that meets a minimum capture velocity requirement specified in the applicable standards of the most current edition of the U.S. Industrial Ventilation Handbook, American Conference of Governmental Industrial Hygienists, at the time of installation.
7. The operator shall discharge material collected in a PM air pollution control device in such a way to prevent fugitive emissions from being re-entrained in the atmosphere, including, but not limited to, the use of shrouding or the use of dust suppressants to stabilize the material.

E. Monitoring Requirements

1. No later than *[1 year after rule adoption]*, the operator shall have a minimum of one person trained in the reading of visible emissions pursuant to the most current version of Environmental Protection Agency (EPA) Method 22 – Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares. Beginning *[1 year after rule adoption]* and every calendar week thereafter, the operator shall have the trained person conduct a continuous six minute visible emissions observation on each PM air pollution control device using EPA Method 22.
 - a. Notwithstanding the above, a Method 22 observation is not required on a PM air pollution control device if it is not operated during the calendar week, as verified through the operational records maintained pursuant to Section G.3.

- b. To the extent that multiple Method 22 observations can be conducted simultaneously, the operator may observe multiple sources at the same time as long as all of the sources are located in the same field of view of the observer and appropriate records are kept for each observation. If the operator detects any visible emissions during the observation, the operator shall continue the observation on the source with visible emissions and stop the observation(s) on the additional source(s).
 - c. If the operator observes any visible emissions exiting a PM air pollution control device at any time, including during a scheduled Method 22 observation, the operator shall implement all necessary corrective actions to eliminate the visible emissions within 24 hours.
 - 1) To verify that the corrective actions were effective, the operator shall complete a new Method 22 observation to ensure no visible emissions are present.
 - 2) If the operator, after taking all corrective actions, subsequently observes visible emissions, the operator shall shut down the PM emitting equipment that vents into the control device until additional steps are taken to prevent the visible emissions.
 - d. If the activity being observed is consistently a duration of less than six minutes, then the Method 22 observation shall be for the period in which the activity takes place.
 - e. The operator shall maintain records for each observation, and any necessary subsequent action(s) taken to eliminate visible emissions, pursuant to Section G.1.
2. The operator of any Tier 2 baghouse shall install, operate, calibrate, and maintain a BLDS, pursuant to the manufacturer's written recommendations, to monitor baghouse performance and ensure compliance with Sections D.1 and D.2.
- a. The provisions of this section shall apply to any Tier 2 baghouse that is installed on or after *[date of rule adoption]*. The provisions of this section shall also apply to any existing Tier 2 baghouse on or after *[1 year after rule adoption]*.
 - b. Each BLDS shall meet the following minimum requirements:
 - 1) The BLDS sensor must provide an output of relative PM emissions; and
 - 2) The BLDS must have an alarm that will activate automatically when it detects a significant increase in relative PM emissions greater than a preset level and the presence of an alarm condition should be clearly apparent to the facility operator.
 - c. The operator shall install a BLDS that has been certified by the manufacturer to be capable of alarming automatically before visible emissions can be seen in the exhaust of a baghouse and shall set the BLDS to operate at such level. The baseline output for the system must be established as follows:
 - 1) Adjust and maintain the range and the averaging period of the device for the specific application per the manufacturer's written specifications and recommendations; and
 - 2) Establish and maintain the alarm set points and the alarm delay time per the manufacturer's written specifications and recommendations.
 - d. The operator shall perform adequate maintenance and inspections of a BLDS, according to the written specifications and recommendations of the manufacturer, to ensure that the monitor is operating properly at all times.

- e. If the operator receives an alarm from the BLDS, the operator shall investigate the baghouse and the BLDS, observe if there are any visible emissions from the baghouse exhaust, and take all necessary corrective actions to eliminate the cause of the alarm and any visible emissions. Corrective actions to eliminate the cause of the alarm and any visible emissions shall be performed within 3 hours.
 - 1) The District may allow the operator more than 3 hours to alleviate a specific alarm condition if the operator identifies the issue in the Compliance Plan, adequately explains why it is not feasible to alleviate the condition within 3 hours, and demonstrates that the condition will be fixed as expeditiously as practicable.
- f. The operator shall maintain the filters and operate the baghouse such that the BLDS alarm activation is minimized and the cumulative number of hours of alarm activation within any continuous six-month rolling period do not exceed more than five percent of the total operating hours in that period. If cumulative alarm time exceeds five percent of the total operating hours based on any continuous six-month rolling period, the operator shall shut down the equipment that vents into the baghouse until necessary actions are taken to eliminate the elevated emissions.
- g. The operator shall maintain records for each BLDS pursuant to Section G.2.

F. Requirements – Source Testing

1. The facility operator shall conduct an initial source test on each Tier 2 baghouse no later than *[1 year after rule adoption]* to demonstrate compliance with the requirements of Section D.2. Subsequent source tests shall be conducted every five years thereafter.
2. In lieu of the initial source test requirements in Section F.1, the facility operator may use the results of a District-approved source test that was performed within the last four years to demonstrate that the Tier 2 baghouse meets the requirements of Section D.2. Subsequent source tests shall still be conducted every five years thereafter.
3. The facility operator shall submit a Source Test Plan to the District and obtain District written approval prior to the start of any source test. The Source Test Plan shall be filed with the District at least 30 days before the start of each source test. The District shall be notified of the date of source testing at least 10 days prior to testing to arrange a mutually agreeable test date.
4. Source tests conducted to demonstrate compliance with Section D.2 shall be performed by a source test contractor certified by the California Air Resources Board using the following test methods, as applicable:
 - a. Environmental Protection Agency Method 5 – Particulate Matter, or
 - b. Environmental Protection Agency Method 17 – Determination of Particulate Matter from Stationary Sources.
5. The Control Officer may approve in writing an alternative source test method provided that such method is comparable in accuracy to the procedures in Section F.4 and has been approved by the California Air Resources Board or the Environmental Protection Agency.
6. At a minimum, three 40 minute test runs shall be performed, and the average concentration from the three runs shall be used for determining compliance unless alternative provisions are specified in the approved Source Test Plan.

7. For each source test performed, a Source Test Report shall be submitted to the District within 45 days of completing the test. PM concentrations shall be reported in grains per dry standard cubic feet (gr/dscf).

G. Requirements – Recordkeeping

All owners or operators of units subject to this rule shall keep the records listed below onsite for a period of five years and the records shall be made readily available to the District upon request:

1. For the purposes of Section E.1, records kept shall include, but not be limited to:
 - a. Observer’s name and affiliation;
 - b. Date and time of observation;
 - c. Process unit(s) being observed;
 - d. Observer’s position relative to the source;
 - e. Observation duration;
 - f. Whether visible emissions occurred and cumulative amount of time visible emissions occurred during the observation; and
 - g. The date, time, and description of the corrective action taken to eliminate any visible emissions and the name of the person performing the corrective action.
2. For the purposes of Section E.2, records kept shall include, but not be limited to:
 - a. Manufacturer specifications for each BLDS;
 - b. Facility representative responsible for maintaining each BLDS;
 - c. Date and time of routine maintenance and inspections conducted on each BLDS;
 - d. The date and time of any alarm, including length of the alarm time, cause of the alarm, and visible emissions observations during and after the alarm;
 - e. The date and time corrective action is completed to eliminate the cause of the alarm and the name of the person performing the corrective action; and
 - f. Cumulative alarm time for each BLDS based on the previous six-month rolling period;
3. For each PM air pollution control device, records kept shall include, but not be limited to:
 - a. Daily records indicating the date of occurrence and duration of all startups and shutdowns, including startups after a repair to fix an equipment breakdown or after a scheduled maintenance activity, and
 - b. Annual hours of operation.

H. Requirements – Compliance Plan

1. No later than [6 months after rule adoption], the operator of a facility shall submit a *Rule 363 Compliance Plan* to the District for review and approval. The Compliance Plan shall include the following:
 - a. A list of all PM air pollution control devices subject to this rule with their District Device ID number;
 - b. A description of each baghouse, including, but not limited to:
 - 1) The number of bags used,
 - 2) The dimensions of the bags,
 - 3) The cumulative filter surface area of the baghouse,
 - 4) The type of filter fabric material used,
 - 5) The filter cleaning method, and
 - 6) The maximum rated airflow capacity of the baghouse system;

- c. A description of all remaining PM air pollution control devices subject to this rule;
- d. For each PM air pollution control device, identify:
 - 1) The applicable rule requirements,
 - 2) The proposed process changes or source tests needed to comply with the rule requirements, and
 - 3) If any of the exemptions in Section B.3, B.4, or B.6 will be used.