



## **Summary of Requirements for General Compliance for Bulk Solid Materials**

1. Every owner or operator (O/O) of a facility must possess a certificate of operation issued by Buildings, Safety Engineering, and Environmental Department (BSEED). The O/O shall submit to BSEED an application for a certificate of operation. Upon the O/O providing evidence of compliance with the provisions of this article, including, where applicable, submitting an approved fugitive dust plan or an approved enclosure plan, or both. Also upon payment of the fee established by the BSEED Director pursuant to a schedule of fees, to cover the cost of application review and compliance inspections, BSEED shall issue a certificate of operation. In the case of a facility operating under all applicable permits issued by BSEED and subject to a certificate of operation issued by BSEED as of the effective date of the ordinance that added this section, BSEED may issue a temporary certificate of operation.
2. If any part of the facility's operation expands or changes, at least 30 days before the expansion or change in operation, the facility O/O shall notify the BSEED Director, submit an application to amend the certificate of operation, and submit a revised fugitive dust plan or establish to BSEED's satisfaction that the expanded or changed operation will be compliant with the existing fugitive dust plan.
3. BSEED shall conduct inspections for the purpose of monitoring compliance with this article on a semi-annual basis or in response to a complaint.
4. A facility O/O shall not cause or allow any fugitive dust that is visible beyond the property line of the facility. The facility O/O shall prevent the discharge into the atmosphere of visible fugitive dust.
5. An O/O shall not cause or allow the emission of fugitive dust which has an opacity greater than 5%. Opacity shall be determined by EPA reference test method 9d. The facility owner or operator shall, at least on a quarterly basis, periodically perform tests of visual fugitive dust and opacity according to the approved fugitive dust plan.
6. Every O/O of a facility must submit and follow a fugitive dust plan. The first fugitive dust plan shall be due within 180 days of the date BSEED begins accepting applications for a certificate of operation. For facilities that are constructed or become subject to this article after it is enacted, the first fugitive dust plan shall be submitted with the facility's application

for a certificate of operation and before the facility accepts any bulk solid materials. The fugitive dust plan shall contain all the items found in General Compliance Fugitive Dust Plan Requirements.

7. If there is any change, modification, or addition to any facility component described in an approved fugitive dust plan, the facility O/O shall submit an amended fugitive dust plan to BSEED for review and approval at least 30 days before such change, modification, or addition.
8. After April 30 and before July 1 of each year, the owner or occupant of the facility shall submit to BSEED an annual update to the fugitive dust plan for BSEED's review.
9. Unless the facility does not include carbonaceous bulk solid materials and is enclosed in accordance with Sec. 42-2-203 the O/O of the facility shall install, operate, and maintain around the perimeter of the facility, according to manufacturer's specifications, permanent, continuous Federal Equivalent Method (FEM) real-time PM10 monitors, or other sensors acceptable to BSEED and the Detroit Health Department that provide equivalent information, in accordance with the requirements specified below:
  - (a) During the first year of monitoring, at least two monitors must be located at opposite ends of the facility to monitor fugitive dust in the ambient air around the facility;
  - (b) During the second and subsequent years of monitoring, monitors must be placed at the facility in compliance with an approved fugitive dust monitoring plan for the facility based on data collected from monitors placed under subdivision (a);
  - (c) A data logger shall be attached to the monitors to record readings from the monitors, and the facility O/O shall notify BSEED, in writing within 24 hours, each time the monitors exceed the reportable action level set forth in the fugitive dust plan and any time monitoring equipment has malfunctioned preventing readings or logging of data; and
  - (d) The facility O/O shall maintain a log of all routine and non-routine maintenance and calibration activities associated with each fugitive dust monitor.
10. The O/O shall install, operate, and maintain, according to manufacturer's specifications, a weather station or other permanent device to monitor and log wind speed and wind direction at the facility at an unobstructed, unsheltered area, centrally positioned in relation to the storage piles, and at a minimum height of 15 feet above ground level. This requirement does not apply to bulk solid materials other than carbonaceous bulk solid materials if all handling and storage of the bulk solid materials is conducted within enclosed buildings, vehicles, and conveyors.
11. The O/O shall install, operate, and maintain conveyors and material transfer points in compliance with one or a combination of the following measures in order to ensure compliance with the opacity limit:

- (a) Total enclosure;
- (b) Water spray system sufficient to control fugitive dust emissions during operations;
- (c) Vented to air pollution control equipment which is in full operation; or
- (d) Transfer only moist material with a minimum moisture content of 8% by weight as determined by ASTM analysis, unless another standard is established by an applicable state law or rule, and conduct the transfer in a manner that minimizes the exposed drop.

12. When transport is by truck, the facility O/O shall ensure that:

- (a) All vehicles and off-road mobile heavy equipment handling or transporting bulk solid material shall adhere to the posted speed limit within the facility, which shall be no more than 8 miles per hour;
- (b) Except for existing facilities, material is received or transferred only in truck beds or trailers that, within one quarter mile of the perimeter of the facility, are driven only on paved roads;
- (c) Unless the approved fugitive dust plan specifies an aggressive street sweeping plan or other measures to ensure that the trucks will not cause any unaddressed track-out of materials onto the public way, all outgoing material transport trucks, whether loaded or empty, are cleaned so that:
  - (i) Any part of any tractor, bed, trailer or tire exterior surface, excluding the inside of the beds or trailer, are free of all loose material; and
  - (ii) The material removed by the truck cleaning operation is collected and recycled or otherwise disposed of so that it does not result in fugitive dust emissions.
- (d) All outgoing material transport trucks, whether loaded or empty, pass over rumble strips that will vibrate the trucks and shake off loose material and dust.
- (e) Unless the approved fugitive dust plan specifies an aggressive street sweeping plan or other measures in addition to the rumble strips to ensure that the trucks will not cause any unaddressed track-out of materials onto the public way, all outgoing material transport trucks, whether loaded or empty, pass through a wheel wash station.

13. The facility O/O shall not load material into any truck bed or trailer, railcar, or vessel unless measures are in place to prevent material from escaping from the vehicle as follows:

- (a) Truck beds and trailers must be immediately covered before leaving the facility in one of the following manners:
  - (i) A solid sliding cover or stackable cover on the top of the truck bed or trailer that is kept completely closed except during loading; or
  - (ii) A continuous tarp that completely covers the truck bed or trailer and that is installed or constructed to prevent wind from entering over the leading edge of the bed or trailer rim into the interior of the bed or trailer.
- (b) Railcars and vessels must be loaded in a manner that will control dust through the use of best management practices such as, but not limited to, the use of solid covers, the application of dust suppression agents and/or water, and the profiling of materials to prevent wind erosion.

14. Facility O/O shall not load material into truck beds or trailers, railcars, or vessels such that a vehicle leaks material or liquid that contains material onto internal roads or into waterways. If a vehicle leaks material or liquid that contains material onto an internal road or into a waterway, the facility owner or operator shall clean the affected road within one hour with a street sweeper or water and shall clean the affected waterway immediately.
15. For enclosed carbonaceous bulk solid material storage piles, the facility O/O shall conduct material truck loading and unloading only in an enclosed structure that is either equipped with a water spray system to be used as needed to prevent visible dust emissions or vented to permitted air pollution control equipment that is operated during loading and unloading activities. The ends of the structure shall have overlapping flaps that reduce the opening, sliding doors which shall remain closed except to allow the trucks to enter and leave, or other equally effective devices. For outdoor bulk solid material storage, the facility owner or operator shall ensure that truck loading and unloading occurs in compliance with the requirements for transfer points specified in item 11 above.
16. For enclosed carbonaceous bulk solid material storage piles, the facility O/O shall conduct railcar material loading and unloading only in an enclosed structure that is either equipped with a water spray system operated to prevent visible dust emissions, or vented to permitted air pollution control equipment that is operated during loading and unloading activities. The ends of the structure shall have overlapping flaps, sliding doors or other equally effective devices, which shall remain closed except to allow the railcars to enter and leave. For outdoor bulk solid material storage, the facility owner or operator shall ensure that railcar loading and unloading occurs in compliance with the requirements for transfer points specified in item 11 above.
17. The facility O/O shall conduct vessel material loading only through an enclosed chute that uses a water spray system, or an air pollution control system or other mechanism described in the approved fugitive dust plan, in order to control fugitive dust emissions during operations. Vessel unloading shall be conducted in a manner that will minimize dust in accordance with measures set forth in the fugitive dust plan and in compliance with the requirements for transfer points specified in item 11 above.
18. In order to clean roads of spilled and tracked material, the facility O/O shall use a street sweeper to clean any paved road that is used to transport material inside or within one quarter mile of the perimeter of the facility and shall comply with all of the following requirements:
  - (a) The street sweeper shall be equipped with a water spray for use during nonfreezing weather, and a vacuum system to prevent fugitive dust during street sweeping;
  - (b) The street sweeping shall be sufficient so that not more than 8 hours elapses between each street sweeper cleaning or after every 100 truck material receipts or dispatches, but not less than one time daily when the facility is open for business, unless the roads are free and clear of any material transported to or from the facility; and
  - (c) Each day, the facility owner or operator shall document whether for that day the

facility owner or operator is street sweeping every eight hours or every 100 trucks, or whether the roads are free and clear of any material transported to or from the facility. The record shall show the date and time when street sweeping was performed and the truck count, as applicable.

19. The facility O/O shall maintain all areas within the facility not regularly used for storage of bulk solid material free of any spilled or misplaced material by removing such material by the end of each work shift.
20. The facility owner or operator shall keep and maintain facility logs as follows:
  - (a) Record daily all cleaning and street sweeping;
  - (b) Record the application of water and/or chemical stabilizers, as applicable, and note any instances when such application is suspended for any reason, including but not limited to, weather conditions;
  - (c) Record any instances when activities are suspended due to high winds ;
  - (d) Record the results of the continuous monitoring for fugitive dust as required in section 42-2-180; indicate any instances when a monitor detects fugitive dust that exceeds the reportable action level set forth in the fugitive dust plan; and record the action taken to respond to the detection of fugitive dust;
  - (e) Record quarterly the results of the tests of visual fugitive dust and opacity as required in section 42-2-177;
  - (f) Maintain a schedule for routine inspection, maintenance, and testing of all control measures, devices, and technologies, including a schedule for inspection of bulk solid material piles, inspection of any monitors, and inspection of off-site areas for the presence of dust; and identify the person or persons responsible for such inspections, maintenance, and testing;
  - (g) All records required to be kept pursuant to this article shall be submitted to BSEED on a quarterly basis and kept and maintained at the facility and be available for inspection for a minimum of three years from the date the record is created.
21. Bulk solid material storage piles shall be located in accordance with setback requirements established in the Detroit Zoning Ordinance, being Chapter 50 of the City Code.
22. The vertical distance from grade immediately adjacent to a pile to the highest point of that pile shall be no greater than 50 feet. The facility owner or operator shall install and maintain, or otherwise have available at the facility, equipment or devices used to measure the height of each pile, with the equipment or devices available for use by an inspector during any inspection or use by the owner or operator of the facility to demonstrate compliance with the height limit to the satisfaction of the BSEED inspector during any inspection. Piles shall be screened from view of adjacent rights-of-way and from view of properties adjacent to the facility at the level of the right-of-way or separated from the facility by a right-of-way if the properties are located in districts zoned residential, SD4, or PR, in conformance with Chapter 50 , Article XIV, Division 2, Subdivision D, in particular Secs. 50-14-365 and 50-14-367.
23. Outdoor storage piles shall be set back at least 25 feet from any waterway, except that material in the process of being unloaded from or loaded to a vessel may be located within

25 feet of a waterway for a period of time not to exceed 24 hours so long as no materials are allowed to fall, erode, be thrown, discharged, dumped, disposed of, or deposited in the waterway at any time. BSEED may reduce the 25 feet setback requirement upon receipt and verification of information that a shorter setback satisfies runoff and engineering requirements specific to the site.

24. Disturbance of outdoor bulk solid material piles, including but not limited to outdoor loading, unloading, and any other processing, shall be suspended during high wind conditions unless alternate measures are implemented to effectively control dust in accordance with the approved fugitive dust plan.
  
25. BSEED shall require the facility owner or operator to apply chemical stabilizers and/or maintain and operate wind screens, water spray bars, a misting system, water spray systems, and/or water trucks to prevent fugitive dust emissions in violation of section 42-2-176 and 42-2-177, in accordance with the following requirements:
  - (a) Except pursuant to subsection (c), the dust suppressant system shall be operable and able to dispense water, water-based solutions, and/or chemical stabilizers at all times unless all bulk storage material piles are covered or protected by wind screens.
  - (b) When the temperature falls below 32 degrees Fahrenheit, the facility must use chemical stabilizers and/or water heating systems to ensure that dust suppression continues.
  - (c) If any part of the dust suppressant system is undergoing maintenance or otherwise becomes inoperable, the facility owner or operator must suspend disturbance of bulk solid material piles that would be controlled by the inoperable portion of the dust suppressant system until such time as the system becomes operable again.
  
26. The facility owner or operator shall install and maintain storm water management, erosion, and sediment controls, pursuant to a written plan, sufficient to:
  - (a) Prevent runoff from the pile onto neighboring parcels, public ways, or any water bodies;
  - (b) Prevent runoff from entering into public sewers or any entry points into the storm water collection system, unless such discharges are in compliance with all applicable discharge permits;
  - (c) Address timely and effective ways to respond to spills and/or visible migration of pollutants that could occur onsite or offsite;
  - (d) Demonstrate that the site is graded in such a way as to ensure proper drainage and to prevent pooling of water.
  
27. Inspections for the purpose of monitoring compliance with this article shall be conducted by BSEED on at least a semi-annual basis and in response to a complaint received by BSEED.