



Minnesota Pollution Control Agency (MPCA) compliance audit checklists are designed to assist businesses and MPCA staff with the interpretation of Minnesota's environmental laws and rules. Because the laws and rules are numerous and often complicated, this checklist cannot be a complete guide to all your compliance obligations. If you have questions about the checklist, your obligations, or its conditions that you discover as you complete this evaluation, please contact:

Small Business Environmental Assistance Program (SBEAP)
651-282-6143 or 1-800-657-3938
<http://www.pca.state.mn.us/programs/sbap-sectors.html>

Nonmetallic Air Permit

Date of Audit: _____

Company Name: _____

Authorized
Representative Name: _____ Title: _____

You are an affected facility and must comply with all Subpart 000 requirements if your facility commenced construction, reconstruction, or modification *after August 31, 1983*.

1. Did your facility commence construction, reconstruction, or modification *after August 31, 1983*?

- ☐ **YES** Our aggregate facility did commence construction, reconstruction, or modification *after August 31, 1983*, thus we are an affected facility and must comply with all Subpart 000 requirements. Continue on to the next question.
- ☐ **NO** Our aggregate facility did not commence construction, reconstruction, or modification *after August 31, 1983*. You are not subject to the Subpart 000 requirements. Continue on to the next question.

You are an affected facility and must comply with Subpart 000 if you own or operate a fixed or portable nonmetallic mineral aggregate plant and operate on-site any of the following: crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station.

2. Do you own or operate a fixed or portable nonmetallic mineral aggregate plant and operate on-site any of the following: crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station?

- ☐ **YES** We do own or operate a fixed or portable nonmetallic mineral aggregate plant and operate on-site any of the following: crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Continue on to the next question.
- ☐ **NO** We do not own or operate a fixed or portable nonmetallic mineral aggregate plant and operate on-site any of the following: crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. No need to continue.

You are an affected facility and must comply with Subpart 000 if you own or operate a hot mix asphalt facility with any crushers and grinding mills that reduce the size of nonmetallic minerals (aggregate) embedded in recycled asphalt pavement.

3. Do you own or operate a fixed or portable aggregate plant with any crushers and grinding mills that reduce the size of nonmetallic minerals (aggregate) embedded in recycled asphalt pavement?

- ☐ **YES** We do own or operate a portable aggregate plant with crushers and grinding mills that reduce the size of nonmetallic minerals (aggregate) embedded in recycled asphalt pavement.
- ☐ **NO** We do not own or operate a portable aggregate plant with any crushers and grinding mills that reduce the size of nonmetallic minerals (aggregate) embedded in recycled asphalt pavement.

Exemptions to Subpart 000

You are exempt from the requirements of Subpart 000 if your nonmetallic minerals aggregate facility is located in underground mines and has stand-alone screening operations *without* crushers or grinding mills.

4. Is your nonmetallic minerals aggregate facility located in an underground mine and does it have a stand-alone screening operation *without* crushers or grinding mills?

- ☐ **YES** Our aggregate facility is located in an underground mine *and* has stand-alone screening operations *without* crushers or grinding mills. You are exempt from the requirements of Subpart 000. You can stop here.
- ☐ **NO** Our aggregate facility is not located in an underground mine. You are not exempt from the requirements of Subpart 000. Continue on to the next question.
- ☐ **NO** Our aggregate facility is located in an underground mine and has stand-alone screening operations *but does have* crushers or grinding mills. You are not exempt from the requirements of Subpart 000. Continue on to the next question

You are exempt from the requirements of Subpart 000 if your fixed sand and gravel plant and/or crushed stone plant has a capacity of 25 tons per hour or less.

5. Does your fixed sand and gravel plant and/or crushed stone plant have a capacity of 25 tons per hour or less?

- ☐ **YES** Our Fixed sand and gravel plant and/or crushed stone plant does have a capacity of 25 tons per hour or less. You can stop here.
- ☐ **NO** Our Fixed sand and gravel plant and/or crushed stone plant does not have a capacity of 25 tons per hour or less. You are subject to the requirements of Subpart 000. Continue on to the next question.

You are exempt from the requirements of Subpart 000 if your portable sand and gravel plant and crushed stone plant has a capacity of 150 tons per hour or less.

6. Does your portable sand and gravel plant and crushed stone plant have a capacity of 150 tons per hour or less?

- ☐ **YES** Our portable sand and gravel plant and crushed stone plant do have a capacity of 150 tons per hour or less. You can stop here.
- ☐ **NO** Our portable sand and gravel plant and crushed stone plant do not have a capacity of 150 tons per hour or less. Continue on to the next question.

You are exempt to the requirements of Subpart 000 if your common clay plant and pumice plant have a capacity of 10 tons per hour or less.

7. Does your common clay plant and pumice plant have a capacity of 10 tons per hour or less?

- ☐ **YES** Our common clay plant and pumice plant do have a capacity of 10 tons per hour or less. You can stop here.
- ☐ **NO** Our common clay plant and pumice plant do not have a capacity of 10 tons per hour or less. Continue on to the next question.

You are exempt from the requirements of Subpart 000 if your *existing* facility is replacing a piece of equipment of equal or smaller size, having the same function as the existing facility.

8. Is your *existing* facility replacing a piece of equipment of equal or smaller size, having the same function as the existing facility?

- ☐ **YES** Our existing facility is replacing a piece of equipment of equal or smaller size, having the same function as the existing facility. This checklist is complete.
- ☐ **NO** Our existing facility is not replacing a piece of equipment of equal or smaller size, having the same function as the existing facility. This checklist is complete.

NOTE: An owner or operator of an aggregate mining facility replacing all **existing** facilities in a production line with new facilities **does not** qualify for this exemption.

Minn. Stat. § 60.670 Applicability and designation of affected facility

- (a) (1) *Except as provided in paragraphs (a)(2), (b), (c), and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of this subpart.*
- (2) *The provisions of this subpart do not apply to the following operations: All facilities located in underground mines; and stand-alone screening operations at plants without crushers or grinding mills.*
- (b) *An affected facility that is subject to the provisions of subpart F or I or that follows in the plant process any facility subject to the provisions of subparts F or I of this part is not subject to the provisions of this subpart.*
- (c) *Facilities at the following plants are not subject to the provisions of this subpart:*
 - (1) *Fixed sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 23 megagrams per hour (25 tons per hour) or less;*
 - (2) *Portable sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 136 megagrams per hour (150 tons per hour) or less; and*
 - (3) *Common clay plants and pumice plants with capacities, as defined in §60.671, of 9 megagrams per hour (10 tons per hour) or less.*
- (d) (1) *When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in §60.671, having the same function as the existing facility, the new facility is exempt from the provisions of §§60.672, 60.674, and 60.675 except as provided for in paragraph (d)(3) of this section.*
- (2) *An owner or operator complying with paragraph (d)(1) of this section shall submit the information required in §60.676(a).*
- (3) *An owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in paragraph (d)(1) of this section and must comply with the provisions of §§60.672, 60.674 and 60.675.*
- (e) *An affected facility under paragraph (a) of this section that commences construction, reconstruction, or modification after August 31, 1983 is subject to the requirements of this part.*
- (f) *Table 1 of this subpart specifies the provisions of subpart A of this part 60 that apply and those that do not apply to owners and operators of affected facilities subject to this subpart.*

Minn. Stat. § 60.671 Definitions

All terms used in this subpart, but not specifically defined in this section, shall have the meaning given them in the Act and in subpart A of this part.

Bagging operation means the mechanical process by which bags are filled with nonmetallic minerals.

Belt conveyor means a conveying device that transports material from one location to another by means of an endless belt that is carried on a series of idlers and routed around a pulley at each end.

Bucket elevator means a conveying device of nonmetallic minerals consisting of a head and foot assembly which supports and drives an endless single or double strand chain or belt to which buckets are attached.

Building means any frame structure with a roof.

Capacity means the cumulative rated capacity of all initial crushers that are part of the plant.

Capture system means the equipment (including enclosures, hoods, ducts, fans, dampers, etc.) used to capture and transport particulate matter generated by one or more process operations to a control device.

Control device means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more process operations at a nonmetallic mineral processing plant.

Conveying system means a device for transporting materials from one piece of equipment or location to another location within a plant. Conveying systems include but are not limited to the following: Feeders, belt conveyors, bucket elevators and pneumatic systems.

Crusher means a machine used to crush any nonmetallic minerals, and includes, but is not limited to, the following types: jaw, gyratory, cone, roll, rod mill, hammermill, and impactor.

Enclosed truck or railcar loading station means that portion of a nonmetallic mineral processing plant where nonmetallic minerals are loaded by an enclosed conveying system into enclosed trucks or railcars.

Fixed plant means any nonmetallic mineral processing plant at which the processing equipment specified in §60.670(a) is attached by a cable, chain, turnbuckle, bolt or other means (except electrical connections) to any anchor, slab, or structure including bedrock.

Fugitive emission means particulate matter that is not collected by a capture system and is released to the atmosphere at the point of generation.

Grinding mill means a machine used for the wet or dry fine crushing of any nonmetallic mineral. Grinding mills include, but are not limited to, the following types: hammer, roller, rod, pebble and ball, and fluid energy. The grinding mill includes the air conveying system, air separator, or air classifier, where such systems are used.

Initial crusher means any crusher into which nonmetallic minerals can be fed without prior crushing in the plant.

Nonmetallic mineral means any of the following minerals or any mixture of which the majority is any of the following minerals:

- (a) Crushed and Broken Stone, including Limestone, Dolomite, Granite, Traprock, Sandstone, Quartz, Quartzite, Marl, Marble, Slate, Shale, Oil Shale, and Shell.*
- (b) Sand and Gravel.*
- (c) Clay including Kaolin, Fireclay, Bentonite, Fuller's Earth, Ball Clay, and Common Clay.*
- (d) Rock Salt.*
- (e) Gypsum.*
- (f) Sodium Compounds, including Sodium Carbonate, Sodium Chloride, and Sodium Sulfate.*
- (g) Pumice*
- (h) Gilsonite.*
- (i) Talc and Pyrophyllite.*
- (j) Boron, including Borax, Kernite, and Colemanite.*
- (k) Barite.*
- (l) Fluorospars.*
- (m) Feldspar.*
- (n) Diatomite.*
- (o) Perlite.*
- (p) Vermiculite.*
- (q) Mica.*
- (r) Kyanite, including Andalusite, Sillimanite, Topaz, and Dumortierite.*

Nonmetallic mineral processing plant means any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located, including lime plants, power plants, steel mills, asphalt concrete plants, portland cement plants, or any other facility processing nonmetallic minerals except as provided in §60.670 (b) and (c).

Portable plant means any nonmetallic mineral processing plant that is mounted on any chassis or skids and may be moved by the application of a lifting or pulling force. In addition, there shall be no cable, chain, turnbuckle, bolt or other means (except electrical connections) by which any piece of equipment is attached or clamped to any anchor, slab, or structure, including bedrock that must be removed prior to the application of a lifting or pulling force for the purpose of transporting the unit.

Production line means all affected facilities (crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck and railcar loading stations) which are directly connected or are connected together by a conveying system.

Screening operation means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series, and retaining oversize material on the mesh surfaces (screens).

Size means the rated capacity in tons per hour of a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station; the total surface area of the top screen of a screening operation; the width of a conveyor belt; and the rated capacity in tons of a storage bin.

Stack emission means the particulate matter that is released to the atmosphere from a capture system.

Storage bin means a facility for storage (including surge bins) or nonmetallic minerals prior to further processing or loading.

Transfer point means a point in a conveying operation where the nonmetallic mineral is transferred to or from a belt conveyor except where the nonmetallic mineral is being transferred to a stockpile.

Truck dumping means the unloading of nonmetallic minerals from movable vehicles designed to transport nonmetallic minerals from one location to another. Movable vehicles include but are not limited to: trucks, front end loaders, skip hoists, and railcars.

Vent means an opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying particulate matter emissions from one or more affected facilities.

Wet mining operation means a mining or dredging operation designed and operated to extract any nonmetallic mineral regulated under this subpart from deposits existing at or below the water table, where the nonmetallic mineral is saturated with water.

Wet screening operation means a screening operation at a nonmetallic mineral processing plant which removes unwanted material or which separates marketable fines from the product by a washing process which is designed and operated at all times such that the product is saturated with water