

### STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

#### **DEPARTMENT ORDER**

Dayton Sand & Gravel Company, Inc. York County Dayton, Maine A-190-71-O-R/M Departmental
Findings of Fact and Order
Air Emission License
Renewal and Amendment

#### FINDINGS OF FACT

After review of the air emission license renewal application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (the Department) finds the following facts:

#### I. REGISTRATION

#### A. Introduction

Dayton Sand & Gravel Company, Inc. (Dayton S&G) has applied to renew their Air Emission License for the operation of their hot mix asphalt plant, concrete batch plant and crushed stone and gravel facility. Dayton S&G has also requested to remove one engine, Diesel #3, from their license.

The main office is located at 928 Goodwin Mills Road, Dayton, Maine.

#### B. Emission Equipment

The following equipment is addressed in this Air Emission License:

#### **Asphalt Plant**

Equipment	Emission Unit ID	Process Rate (tons/hour)	Design Capacity (MMBtu/hr)	Fuel Type	Control Device(s)	Date of Manuf.
Kiln (batch mix asphalt plant)	001	150	109.9	Distillate fuel Specification waste oil	Baghouse	Pre- 1973

#### **Heating Equipment**

Equipment	Emission Unit ID	Max. Capacity (MMBtu/hr)	Fuel Type	Maximum Firing Rate	Date of Manuf.
Heater #1 (asphalt tank heater)	002	1.7	Distillate fuel	12 gal/hr	Pre-1973
Heater #2 (hot water heater)	003	2.0	Distillate fuel	14 gal/hr	Pre-1973
Heater #3 (asphalt tank heater)	0013	1.7	Distillate fuel	12 gal/hr	2014

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#### **Concrete Plant**

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	Emission	Production Rate	Control
Equipment	Unit ID	(cubic yards/hour)	Device(s)
Concrete Batch Plant	007	60	baghouse

#### **Rock Crushers**

Equipment	Emission Unit ID	Powered	Process Rate (tons/hour)	Date of Manufacture	Control Device
Primary Portable Tracked Jaw	011	Diesel #2	880	2005	Spray Nozzles
Secondary Stationary Cone	008	Electrical	400	2007	Spray Nozzles
Tertiary Stationary Cone	010	Electrical	200	1980	Spray Nozzles
Primary Portable #2 Jaw	012	Diesel #3	200	1981	Spray Nozzles
Secondary Portable Cone	009	Electrical	200	1966	Spray Nozzles

#### **Engines**

Equipment	Emission Unit ID	Max. Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Fuel Type	Date of Manuf.
Diesel #2	004	2.8	20.4	Distillate fuel	2005
Diesel #3	005	1.4	10.0	Distillate fuel	1981
Diesel #4*	006	3.1	22.5	Distillate fuel	1970

<sup>\*</sup> to be removed

Dayton S&G may operate other nonmetallic mineral processing equipment not explicitly listed including grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck or railcar loading stations. Requirements for this equipment are included in sections of this license for Nonmetallic Mineral Processing Plants.

Dayton S&G may operate small stationary engines smaller than 0.5 MMBtu/hr. These engines are considered insignificant activities and are not required to be included in this license. However, they are still subject to applicable State and Federal regulations. More information regarding requirements for small stationary engines is available on the Department's website at the link below.

http://www.maine.gov/dep/air/publications/docs/SmallRICEGuidance.pdf

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Additionally, Dayton S&G may operate <u>portable</u> engines used for maintenance or emergency-only purposes. These engines are considered insignificant activities and are not required to be included in this license. However, they may still be subject to applicable State and Federal regulations.

Dayton S&G operates an aqueous-based parts washer. The cleaning solution contains less than 5% VOC, it does not meet the definition of solvent cleaning machine, and there are no applicable requirements in *Solvent Cleaners*, 06-096 C.M.R. ch. 130. Therefore, it is considered an insignificant activity and mentioned for completeness purposes only.

#### C. <u>Definitions</u>

<u>Distillate Fuel</u> means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- · Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- · Kerosene, as defined in ASTM D3699;
- · Biodiesel, as defined in ASTM D6751; or
- · Biodiesel blends, as defined in ASTM D7467.

<u>Nonmetallic mineral processing plant</u> 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 (not including concrete batch plants), or any other facility processing nonmetallic minerals.

<u>Portable or Non-Road Engine</u> means an internal combustion engine which is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. This definition does NOT include engines which remain or will remain at a location (excluding storage locations) for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. <u>A location is any single site</u> at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

An engine is <u>not</u> a non-road (portable) engine if it remains or will remain at a location for more than 12 consecutive months or for a shorter period of time if sited at a seasonal source. A seasonal source is a source that remains in a single location for two years or more and which operates for fewer than 12 months in a calendar year. If an engine operates at a seasonal source for one entire season, the engine does not meet the criteria of a non-road (portable) engine and is subject to applicable stationary engine requirements.

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<u>Records</u> or <u>Logs</u> mean either hardcopy or electronic records.

<u>Specification Waste Oil</u> means a petroleum-based oil which, through use or handling, has become unsuitable for its original purpose due to the presence of impurities or loss of original properties, and meets all of the following requirements:

- · It has sufficient liquid content to be free flowing;
- · It meets all of the constituent and property standards as specified in *Waste Oil Management Rules*, 06-096 C.M.R. ch. 860;
- · It does not otherwise exhibit hazardous waste characteristics; and
- It has not been mixed with a hazardous waste.

<u>Virgin oil</u> means any petroleum derived oil, including petroleum fuels, unused motor oils, hydraulic fluids, lubrication oils, and other industrial oils, that are not characterized as waste oil.

#### D. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the date this license was issued.

The application for Dayton S&G includes both the license renewal for existing equipment and the amendment as described in Section I(A). This amendment will not increase licensed emissions of any pollutant. Therefore, this license renewal and amendment is considered to be a renewal with a minor revision and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

#### E. Facility Classification

With the annual asphalt tonnage limit on the asphalt plant and the annual fuel limits on the engines, the facility is licensed as follows:

- · As a synthetic minor source of air emissions for criteria pollutants, because Dayton S&G is subject to license restrictions that keep facility emissions below major source thresholds for NO<sub>x</sub> and CO; and
- · As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

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#### II. BEST PRACTICAL TREATMENT

#### A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

#### B. Kiln (Batch Mix Asphalt Plant)

Dayton S&G operates the Kiln, which is a portable batch mix asphalt plant with a maximum hourly throughput of 150 ton/hr of asphalt and a 109.9 MMBtu/hr burner which fires distillate fuel and specification waste oil.

Emission factors for asphalt plants are based on tons of asphalt produced, and there is no linear relationship between plant output and burner firing rate. Therefore, to ensure annual emissions are limited to less than major source thresholds, asphalt produced is limited instead of fuel consumption. Accordingly, the annual asphalt produced shall not exceed 350,000 tons of asphalt per year on a 12-month rolling total basis.

#### 1. BPT Findings

The BPT emission limits for the Kiln were based on the following:

_	0.03 gr/dscf and the use of a baghouse pursuant to
	06-096 C.M.R. ch. 115, BPT
_	8.8 x 10 <sup>-2</sup> lb/ton based on AP-42 Table 11.1-5 dated 3/04
_	0.12 lb/ton based on AP-42 Table 11.1-5 dated 3/04
_	0.40 lb/ton based on AP-42 Table 11.1-5 dated 3/04
_	8.2 x 10 <sup>-3</sup> lb/ton based on AP-42 Table 11.1-6 dated 3/04
_	06-096 C.M.R. ch. 101, § 4(B)(1)
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**Emissions** 

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The BPT emission limits for the Kiln are the following:

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Kiln	3.18	3.18	3.18	13.20	18.00	60.00	1.23

Visible emissions from the Kiln baghouse shall not exceed 20% opacity on a six-minute block average basis.

General process emissions from the Kiln shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six-minute block average basis.

State statute directs that, with limited exceptions, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm) pursuant to 38 M.R.S. § 603-A(2)(A)(3). Therefore, the distillate fuel purchased or otherwise obtained for use in the Kiln shall not exceed 0.0015% by weight (15 ppm).

The sulfur content of the specification waste oil fired in the Kiln shall not exceed 0.7% sulfur by weight. At least once per calendar year, Dayton S&G shall have the specification waste oil analyzed to demonstrate compliance with the 0.7% sulfur content limit or maintain supplier certifications including sulfur content of the specification waste oil fired in the Kiln.

#### 2. New Source Performance Standards

The asphalt plant was manufactured before 1973 and is therefore not subject to the federal Environmental Protection Agency's (EPA) New Source Performance Standards (NSPS) *Standards of Performance for Hot Mix Asphalt Facilities*, 40 Code of Federal Regulation (C.F.R.) Part 60, Subpart I for facilities constructed or modified after June 11, 1973.

#### 3. Control Equipment

Emissions from the Kiln shall be controlled by a baghouse.

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#### 4. Periodic Monitoring

The performance of the baghouse shall be monitored by either one of the following at all times the Kiln is operating:

- a. Continuous PM detector: When the detector signals excessive PM concentrations in the exhaust stream, Dayton S&G shall take corrective action within 24 hours, or immediately if visible emissions exceed 20% opacity.
- b. Personnel available on-site with a current EPA 40 C.F.R. Part 60, Appendix A, Method 9 visible emissions certification: When any individual visible emissions reading exceeds 20% opacity, the hot mix asphalt plant is operating with insufficient control, and corrective action shall be taken immediately.

Dayton S&G shall keep records of baghouse failures, baghouse maintenance, and baghouse inspections.

To document maintenance of the baghouse, Dayton S&G shall keep records of the date and location of all bag failures, the date and a description of all routine maintenance, and the date and results of all inspections. These records shall be kept on-site at the asphalt plant location. Records shall also be maintained recording the quantity and analyzed test results of all specification waste oil fired in the unit.

#### 5. Contaminated Soils

The Department's Bureau of Remediation and Waste Management (BRWM) manages remediation of soils contaminated with petroleum substances. One method to address these contaminants is to process the contaminated soil through an aggregate dryer used in the production of hot mix asphalt, as authorized by M.R.S. § 608-A.

#### a. Soils Contaminated with Gasoline and Distillate Fuel

Dayton S&G may process up to 10,000 cubic yards per calendar year of soil contaminated by gasoline or distillate fuel without prior approval from the Department's Bureau of Air Quality.

This limit may be exceeded with prior written authorization from the Department's Bureau of Air Quality. Requests will be evaluated on a case-by-case basis taking into account the nature and amount of the contaminated soil to be processed, the location where the processing will occur, and the potential for fugitive emissions.

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#### b. General Requirements for Processing of Contaminated Soils

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Dayton S&G shall not process soils which are classified as hazardous waste, or which have unknown contaminants.

Dayton S&G shall notify the Department (regional air compliance inspector) at least 24 hours prior to processing the contaminated soil and specify the contaminating material and quantity, origin of the soil and contaminating material, and the disposition of the contaminated soil. This authorization to process contaminated soil does not absolve the facility of responsibility to comply with all other air emission license conditions and any other applicable state rules or statutes.

When processing contaminated soils, Dayton S&G shall maintain records which specify the quantity and type of contaminant in the soil as well as the origin and characterization of the contaminated soil. In addition, when processing contaminated soil, Dayton S&G shall maintain records on an hourly basis of processing temperature, asphalt feed rates, and dryer throughput.

Any approval from the Department's Bureau of Air Quality to process contaminated soil does not supersede requirements from other Department bureaus. Similarly, approvals to process contaminated soil granted by another Department bureau does not supersede the limits imposed by this air emission license.

Processing of contaminated soils may also require a solid waste processing facility license under *Maine Solid Waste Management Rules*, 06-096 C.M.R. ch. 409, before processing of contaminated soils may occur. The material shall be handled in accordance with the requirements of the Department's Bureau of Remediation and Waste Management.

#### C. Heaters #1, #2, and #3

Dayton S&G operates Heaters #1, #2, and #3. Heaters #1 and #3 are asphalt tank heaters. Heater #2 is a hot water heater. Heaters #1 and #3 are each rated at 1.7 MMBtu/hr. Heater #2 is rated at 2.0 MMBtu/hr. Heaters #1 and #2 were each manufactured and installed before 1973. Heater #3 was manufactured and installed in 2014. Heaters #1, #2, and #3 are licensed to fire distillate fuel.

State statute directs that, with limited exceptions, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm) pursuant to 38 M.R.S. § 603-A(2)(A)(3). Therefore, the distillate fuel purchased or otherwise obtained for use in Heaters #1, #2, and #3 shall not exceed 0.0015% by weight (15 ppm).

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#### 1. BPT Findings

The BPT emission limits for the heaters were based on the following:

PM/PM<sub>10</sub>/PM<sub>2.5</sub> – 0.08 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT SO<sub>2</sub> – based on firing distillate fuel in with a maximum sulfur

content of 0.0015% by weight

NO<sub>x</sub> – 20 lb/1000 gal based on AP-42 Table 1.3-1 dated 5/10 CO – 5 lb/1000 gal based on AP-42 Table 1.3-1 dated 5/10 VOC – 0.34 lb/1000 gal based on AP-42 Table 1.3-3 dated 5/10

Visible – 06-096 C.M.R. ch. 101, § 4(A)(2)

**Emissions** 

The BPT emission limits for Heaters #1, #2, and #3 are the following:

	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Unit	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Heater #1	0.14	0.14	0.14	0.003	0.24	0.06	0.004
Heater #2	0.16	0.16	0.16	0.003	0.29	0.07	0.005
Heater #3	0.14	0.14	0.14	0.003	0.24	0.06	0.004

Visible emissions from Heaters #1, #2, and #3 shall not exceed 20% opacity on a six-minute block average basis.

#### 2. Recordkeeping

Documentation shall include the type of fuel used and sulfur content of the fuel.

#### 3. New Source Performance Standards

Due to their size, Heaters #1, #2, and #3 are not subject to the New Source Performance Standards (NSPS) *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

#### 4. National Emission Standards for Hazardous Air Pollutants

Heaters #1 and #3 do not heat water. They do not meet the definition of a "boiler" and therefore are not subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources,* 40 C.F.R. Part 63 Subpart JJJJJJ.

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Heater #2 is subject to 40 C.F.R. Part 63, Subpart JJJJJJ. The unit is considered an existing oil boiler rated less than 10 MMBtu/hr. [40 C.F.R. §§ 63.11193 and 63.11195]

Applicable federal 40 C.F.R. Part 63, Subpart JJJJJJ requirements include the following. Additional rule information can be found on the following website: <a href="https://www.epa.gov/stationary-sources-air-pollution/compliance-industrial-commercial-and-institutional-area-source">https://www.epa.gov/stationary-sources-air-pollution/compliance-industrial-commercial-and-institutional-area-source</a>.

- a. Compliance Dates, Notifications, and Work Practice Requirements
  - (1) Boiler Tune-Up Program
    - (i) Tune-ups shall be conducted every 5 years. [40 C.F.R. § 63.11223(a) and Table 2]
    - (ii) The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
      - 1. <u>As applicable</u>, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted, not to exceed 72 months from the previous inspection. [40 C.F.R. § 63.11223(b)(1)]
      - 2. Inspect the flame pattern, <u>as applicable</u>, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]
      - 3. Inspect the system controlling the air-to-fuel ratio, <u>as applicable</u>, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 72 months from the previous inspection. [40 C.F.R. § 63.11223(b)(3)]
      - 4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
      - 5. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 C.F.R. § 63.11223(b)(5)]
      - 6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up.

        [40 C.F.R. § 63.11223(b)(7)]

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- (iii)<u>Tune-Up Report</u>: A tune-up report shall be maintained onsite and, submitted to the Department and/or EPA upon request. The report shall contain the following information:
  - 1. The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
  - 2. A description of any corrective actions taken as part of the tune-up of the boiler; and
  - 3. The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]

#### (2) Compliance Report

For every five-year compliance period, Dayton S&G shall prepare a compliance report by March 1<sup>st</sup> of the following year to document the information below for the five-year period. The report shall be maintained by the source and submitted to the Department and/or to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

- (i) Company name and address;
- (ii) A statement of whether the source has complied with all the relevant requirements of this Subpart;
- (iii) A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- (iv) The following certifications, as applicable:
  - 1. "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
  - 2. "No secondary materials that are solid waste were combusted in any affected unit."
  - 3. "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

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#### b. Recordkeeping

- (1) Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJJ including the following [40 C.F.R. § 63.11225(c)]:
  - (1) Copies of notifications and reports with supporting compliance documentation;
  - (2) Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
  - (3) Records of the occurrence and duration of each malfunction of each applicable boiler; and
  - (4) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.
- (2) Records shall be in a form suitable and readily available for expeditious review. Each record must be kept for 5 years following the date of each recorded action. Each record must be kept on-site or be accessible from a central location by computer or other means that instantly provides access at the site for at least 2 years after the date of each recorded action. The records may be maintained off-site for the remaining 3 years. [40 C.F.R. § 63.11225(d)] Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the five-year record retention requirement of Subpart JJJJJJ shall be streamlined to the more stringent six-year requirement.

#### D. Concrete Batch Plant

The Concrete Batch Plant is rated at 60 cubic yards/hour and includes a silo.

All components of the Concrete Batch Plant shall be maintained so as to prevent PM leaks. To meet the requirements of BPT for particulate matter, emissions from the cement silo shall be vented through the cement silo baghouse designed for 99% removal efficiency.

To meet the requirements of BPT for particulate matter, the loading dock garage, where cement is loaded from the silo into trucks, operates a vacuum system and baghouse. Each truck backs into the loading garage, which has walls on all sides except the front, and the vacuum system collects the displaced dust while the cement is being loaded into the truck. The dust collected from the vacuum is vented through the loading dock baghouse, which is a pulse jet baghouse. Emissions vent through the loading dock baghouse that is designed for 99% removal efficiency.

Visible emissions from the cement silo baghouse and the loading dock baghouse are limited to no greater than 10% opacity on a six-minute block average basis.

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To document maintenance of the cement silo baghouse and the loading dock baghouse and vacuum, Dayton S&G shall keep a maintenance record recording the date and location of all bag and vacuum failures as well as all routine maintenance and inspections. The maintenance and inspection record shall be kept on-site at the concrete batch plant location.

#### E. Nonmetallic Mineral Processing Plants

Dayton S&G operates five rock crushers. The Primary Portable Tracked Jaw, Primary Portable #2 Jaw, and Secondary Portable Cone are portable crusher units that were manufactured in 2005, 1981, and 1966, respectively, with rated capacities of 880 tons/hr, 200 tons/hr, and 200 tons/hr, respectively. The Secondary Stationary Cone and Tertiary Stationary Cone are stationary crusher units that were manufactured in 2007 and 1980 with rated capacities of 400 tons/hr and 200 tons/hr, respectively. The nonmetallic mineral processing plants also consist of other equipment associated with the rock crushers, such as screens and belt conveyors.

#### 1. BPT Findings

The regulated pollutant from nonmetallic mineral processing plants is particulate matter. To meet the requirements of BPT for control of particulate matter emissions, Dayton S&G shall install and maintain water sprays on the nonmetallic mineral processing plants and operate as needed, when the units are in operation, to control visible emissions.

#### 2. Visible Emissions

Visible emissions from the Primary Portable Tracked Jaw, Primary Portable #2 Jaw, Secondary Portable Cone, Secondary Stationary Cone, and Tertiary Stationary Cone crusher units shall each be limited to no greater than 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(2)]

Visible emissions from nonmetallic mineral processing plant equipment other than crushers (transfer points on belt conveyors, screening operations, etc.) shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

#### 3. New Source Performance Standards

The federal regulation Standards of Performance for Nonmetallic Mineral Processing Plants, 40 C.F.R. Part 60, Subpart OOO, applies to equipment at nonmetallic mineral processing plants with capacities greater than 25 ton/hr for fixed plants and 150 ton/hr for portable plants. The requirements of Subpart OOO apply to any crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, or enclosed truck or railcar loading station at a nonmetallic mineral processing

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plant greater than the sizes listed above which commenced construction, modification, or reconstruction after August 31, 1983.

The Primary Portable #2 Jaw, Secondary Portable Cone, and Tertiary Station Cone crusher units were manufactured prior to August 31, 1983, and have not undergone modification or reconstruction as defined in 40 C.F.R. Part 60, Subpart OOO. Therefore, this equipment is not subject to this Subpart. [40 C.F.R. § 60.670(e)]

The Primary Portable Tracked Jaw and Secondary Stationary Cone crusher units are part of a nonmetallic mineral processing plant with a maximum capacity of greater than 25 ton/hr and 150 ton/hr, respectively, and were both manufactured after August 31, 1983. These crushers are therefore affected facilities subject to 40 C.F.R. Part 60, Subpart OOO. Any grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, or enclosed truck or railcar loading station associated with these crushers are also affected facilities subject to 40 C.F.R. Part 60, Subpart OOO. [40 C.F.R. §§ 60.670(c) and (e)]

#### a. Standards

Subpart OOO, Table 3 contains applicable visible emission requirements for affected facilities.

Visible emissions from the Primary Portable Tracked Jaw and Secondary Stationary Cone crusher units shall not exceed 15% opacity on a six-minute block average basis. [40 C.F.R. Part 60, Subpart OOO, Table 3]

The Department has determined that the visible emission limit in 06-096 C.M.R. ch. 101 applicable to the rock crushers is more stringent than the applicable limit in 40 C.F.R. Part 60, Subpart OOO. Therefore, the visible emission limit for the Primary Portable Tracked Jaw and Secondary Stationary Cone crusher units has been streamlined to the more stringent limit, and only this more stringent limit shall be included in the air emission license.

Visible emissions from any affected facility other than rock crushers, including transfer points on belt conveyors, portable screens, etc., which commenced construction, modification, or reconstruction before April 22, 2008, shall not exceed 10% opacity on a six-minute block average basis. [40 C.F.R. Part 60, Subpart OOO, Table 3]

Visible emissions from any affected facility other than rock crushers, including transfer points on belt conveyors, portable screens, etc., which commenced construction, modification, or reconstruction on or after April 22, 2008, shall not

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exceed 7% opacity on a six-minute block average basis. [40 C.F.R. Part 60, Subpart OOO, Table 3]

The Department has determined that the visible emission limit in 40 C.F.R. Part 60, Subpart OOO applicable to affected equipment other than rock crushers is more stringent than the applicable limit in 06-096 C.M.R. ch. 101. Therefore, the visible emission limit for has been streamlined to the more stringent limit, and only this more stringent limit shall be included in the air emission license.

#### b. Monitoring Requirements

Dayton S&G shall maintain records detailing the maintenance on particulate matter control equipment including spray nozzles. Dayton S&G shall perform monthly inspections of any water sprays to ensure water is flowing to the correct locations and initiate corrective action within 24 hours if water is found to not be flowing properly. Records of the date of each inspection and any corrective action required shall be included in the maintenance records. The maintenance records shall be kept on-site at the rock crushing location. [40 C.F.R. §§ 60.674(b) and 60.676(b)(1)]

#### F. Engines

Diesels #2 and #3 are portable engines used to power Primary Portable Track Jaw and Primary Portable #2 Jaw crusher units, respectively. Diesel #2 has a maximum capacity of 2.8 MMBtu/hr (425 hp), firing distillate fuel. This engine was manufactured in 2005 and is a CAT C13. Diesel #3 has a maximum capacity of 1.4 MMBtu/hr (120 hp), firing distillate fuel. This engine was manufactured in 1981 and is a Detroit 471. The fuel fired in the engines combined shall be limited to 80,000 gallons/year on a calendar year total basis of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight). This fuel limit shall apply regardless of where the units are operated.

#### 1. BPT Findings

The BPT emission limits for Diesels #2 and #3 were based on the following:

PM/PM<sub>10</sub>/PM<sub>2.5</sub> - 0.12 lb/MMBtu from 06-096 C.M.R. ch. 115, BPT

SO<sub>2</sub> – Combustion of distillate fuel with a maximum sulfur content

not to exceed 15 ppm (0.0015% sulfur by weight)

NO<sub>x</sub> – 4.41 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96 CO – 0.95 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96 VOC – 0.36 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96

Visible – 06-096 C.M.R. ch. 101, § 4(A)(4)

**Emissions** 

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The BPT emission limits for the generators are the following:

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Diesel #2	0.34	0.34	0.34	0.004	12.35	2.66	1.01
Diesel #3	0.17	0.17	0.17	0.002	6.17	1.33	0.50

Visible emissions from each of the engines shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time Dayton S&G shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

- a. The duration of the startup shall not exceed 30 minutes per event;
- b. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
- c. Dayton S&G shall keep records of the date, time, and duration of each startup.

Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

#### 2. New Source Performance Standards

Diesels #2 and #3 are <u>not</u> subject to *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, 40 C.F.R. Part 60, Subpart IIII.

The definition in 40 C.F.R. § 1068.30 states that a non-road engine is an internal combustion engine that meets certain criteria, including: "Portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform." The regulation further states at 40 C.F.R. § 1068.30 that an engine is not a non-road engine if it remains or will remain at a location for more than 12 consecutive months or for a shorter period of time if sited at a seasonal source. A seasonal source is a source that remains in a single location for two years or more and which operates for fewer than 12 months in a calendar year. If an engine operates at a seasonal source for one entire season, the engine does not meet the criteria of a non-road engine and is subject to applicable stationary engine requirements. [40 C.F.R. § 60.4200]

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Diesels #2 and #3 are each considered a non-road engine, as opposed to a stationary engine, since the generators are portable and will be moved to various sites with their respective rock crusher units.

#### 3. National Emission Standards for Hazardous Air Pollutants

Diesels #2 and #3 are <u>not</u> subject to *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ.

The definition in 40 C.F.R. § 1068.30 states that a non-road engine is an internal combustion engine that meets certain criteria, including: "Portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform." The regulation further states at 40 C.F.R. § 1068.30 that an engine is not a non-road engine if it remains or will remain at a location for more than 12 consecutive months or for a shorter period of time if sited at a seasonal source. A seasonal source is a source that remains in a single location for two years or more and which operates for fewer than 12 months in a calendar year. If an engine operates at a seasonal source for one entire season, the engine does not meet the criteria of a non-road engine and is subject to applicable stationary engine requirements. [40 C.F.R. § 63.6585]

Diesels #2 and #3 are each considered a non-road engine, as opposed to a stationary engine, since Diesels #2 and #3 are each portable and will be moved to various sites with their respective rock crusher units.

#### G. General Process Emissions

Visible emissions from any general process that is not part of a nonmetallic mineral processing plant shall not exceed 20% opacity on a six-minute block average basis.

#### H. Fugitive Emissions Including Stock Piles and Roadways

Dayton S&G shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

Dayton S&G shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary

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of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

#### I. Emission Statements

Dayton S&G is subject to emissions inventory requirements contained in *Emission Statements*, 06-096 C.M.R. ch. 137. Dayton S&G shall maintain the following records in order to comply with this rule:

- 1. The tons of asphalt processed in the Kiln on a monthly basis;
- 2. The amount of distillate fuel fired in the Kiln, Heaters #1, #2, and #3, and Diesels #2 and #3 (each) on a monthly basis;
- 3. The sulfur content of the distillate fuel fired in the Kiln, Heaters #1, #2, and #3, and Diesels #2 and #3;
- 4. The amount of specification waste oil fired in the Kiln on a monthly basis;
- 5. The sulfur content of the specification waste oil fired in the Kiln; and
- 6. Hours each emission unit was active or operating on a monthly basis.

Every third year, or as requested by the Department, Dayton S&G shall report to the Department emissions of hazardous air pollutants as required pursuant to 06-096 C.M.R. ch. 137, § (3)(C). The next report is due no later than May 15, 2027, for emissions occurring in calendar year 2026. The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. Dayton S&G shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3).

[38 M.R.S. § 353-A(1-A)]

J. Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations. Maximum potential emissions were calculated based on the following assumptions:

- Processing 350,000 ton/year of asphalt;
- Operating Heaters #1, #2, and #3 for 8,760 hr/yr, each;
- Firing 80,000 gal/year of distillate fuel in Diesels #2 and #3.

This information does not represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

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### Total Licensed Annual Emissions for the Facility Tons/year

(used to calculate the annual license fee)

	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Kiln	10.3	10.3	10.3	15.4	21.0	70.0	1.4
Heater #1	0.6	0.6	0.6		1.1	0.3	
Heater #2	0.7	0.7	0.7		1.3	0.3	
Heater #3	0.6	0.6	0.6		1.1	0.3	
Diesels #2 and #3	0.7	0.7	0.7		24.2	5.2	2.0
Total TPY	12.9	12.9	12.9	15.4	48.7	76.1	3.4

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

#### III.AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source to demonstrate that Ambient Air Quality Standards (AAQS) will not be exceeded is determined by the Department on a case-by-case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	Tons/Year
$PM_{10}$	25
$PM_{2.5}$	15
$SO_2$	50
$NO_x$	50
CO	250

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

This determination is based on information provided by the applicant regarding licensed emission units. If the Department determines that any parameter (e.g., stack size, configuration, flow rate, emission rates, nearby structures, etc.) deviates from what was included in the application, the Department may require Dayton S&G to submit additional information and may require an ambient air quality impact analysis at that time.

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#### **ORDER**

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License Renewal and Amendment A-190-71-O-R/M, subject to the following conditions.

<u>Severability</u>. The invalidity or unenforceability of any provision of this License or part thereof shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

#### STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S. § 347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to beginning actual construction of a modification, unless specifically provided for in 06-096 C.M.R. ch. 115. [06-096 C.M.R. ch. 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 C.M.R. ch. 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 C.M.R. ch. 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115]

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- (6) The license does not convey any property rights of any sort or any exclusive privilege. [06-096 C.M.R. ch. 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 C.M.R. ch. 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 C.M.R. ch. 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 C.M.R. ch. 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 C.M.R. ch. 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department, the licensee shall:
  - A. Perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
    - 1. Within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring, or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
    - 2. Pursuant to any other requirement of this license to perform stack testing.
  - B. Install or make provisions to install test ports that meet the criteria of 40 C.F.R. Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
  - C. Submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 C.M.R. ch. 115]

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- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
  - A. Within thirty (30) days following receipt of the written test report by the Department, or another alternative timeframe approved by the Department, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department; and
  - B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
  - C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

    [06-096 C.M.R. ch. 115]
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or license requirement. [06-096 C.M.R. ch. 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 C.M.R. ch. 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records; make such reports; install, use, and maintain such monitoring equipment; sample such emissions in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe; and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 C.M.R. ch. 115]

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(16) The licensee shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S. § 605). [06-096 C.M.R. ch. 115]

#### **SPECIFIC CONDITIONS**

- (17) Kiln (Batch Mix Asphalt Plant)
  - A. Fuel Use [06-096 C.M.R. ch. 115, BPT]
    - 1. The Kiln is licensed to fire distillate fuel and specification waste oil.
    - 2. The facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm).
    - 3. The sulfur content of the specification waste oil fired in the Kiln shall not exceed 0.7% sulfur by weight.
    - 4. At least once per calendar year, Dayton S&G shall have the specification waste oil analyzed to demonstrate compliance with the 0.7% sulfur content limit or maintain supplier certifications including sulfur content of the specification waste oil fired in the Kiln.
    - 5. Dayton S&G shall keep records of fuel use and tons of asphalt produced for the Kiln, as well as the quantity and analyzed test results of all specification waste oil fired in the unit. Records shall be maintained for at least six years and made available to the Department upon request.
  - B. Dayton S&G shall maintain records which demonstrate that the Kiln is relocated and operated on a basis which maintains its classification of portable. [06-096 C.M.R. ch. 115, BPT]
  - C. Annual asphalt produced by the Kiln shall not exceed 350,000 tons per year on a 12-month rolling total basis. Records of asphalt production shall be kept on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]
  - D. Emissions from the Kiln shall vent to a baghouse, and all components of the Kiln shall be maintained so as to prevent PM leaks. [06-096 C.M.R. ch. 115, BPT]
  - E. The performance of the baghouse shall be monitored by either one of the following at all times the Kiln is operating: [06-096 C.M.R. ch. 115, BPT]

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- 1. Continuous PM detector: When the detector signals excessive PM concentrations in the exhaust stream, Dayton S&G shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
- 2. Personnel available on-site with a current EPA Method 9 visible emissions certification: When any individual visible emissions reading exceeds 20% opacity, the Kiln is operating with insufficient control, and corrective action shall be taken immediately.
- F. To document maintenance of the baghouse, Dayton S&G shall keep records of the date and location of all bag failures, the date and a description of all routine maintenance, and the date and results of all inspections. These records shall be kept on-site at the asphalt plant location. [06-096 C.M.R. ch. 115, BPT]
- G. Emissions from the Kiln's baghouse shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Pollutant	grs/dscf	lb/hr
PM	0.03	3.18
$PM_{10}$	_	3.18
$PM_{2.5}$	_	3.18
$SO_2$	_	13.20
$NO_x$	_	18.00
CO	_	60.00
VOC	_	1.23

- H. Visible emissions from the baghouse is limited to no greater than 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(1)]
- I. General process emissions from the Kiln shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

#### J. Contaminated Soils

1. Soils Contaminated with Gasoline and Distillate Fuel

Dayton S&G may process up to 10,000 cubic yards per calendar year of soil contaminated by gasoline or distillate fuel without prior approval from the Department's Bureau of Air Quality.

This limit may be exceeded with prior written authorization from the Department's Bureau of Air Quality. Requests will be evaluated on a case-by-case basis taking

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into account the nature and amount of the contaminated soil to be processed, the location where the processing will occur, and the potential for fugitive emissions.

#### 2. General Requirements for Contaminated Soils

- a. Dayton S&G shall not process soils which are classified as hazardous waste or which have unknown contaminants.
- b. Dayton S&G shall notify the Department (regional air compliance inspector) at least 24 hours prior to processing the contaminated soil and specify the contaminating material and quantity, origin of the soil and contaminating material, and the disposition of the contaminated soil. This authorization to process contaminated soil does not absolve the facility of responsibility to comply with all other air emission license conditions and any other applicable state rules or statutes.
- c. When processing contaminated soils, Dayton S&G shall maintain records which specify the quantity and type of contaminant in the soil as well as the origin and characterization of the contaminated soil. In addition, when processing contaminated soil, Dayton S&G shall maintain records on an hourly basis of processing temperature, asphalt feed rates, and dryer throughput.
- d. Processing of contaminated soils may also require a solid waste processing facility license under *Maine Solid Waste Management Rules*, 06-096 C.M.R. ch. 409, before processing of contaminated soils may occur. The material shall be handled in accordance with the requirements of the Department's Bureau of Remediation and Waste Management.

[06-096 C.M.R. ch. 115, BPT]

#### (18) Heaters #1, #2, and #3

#### A. Fuel [06-096 C.M.R. ch. 115, BPT]

- 1. Heaters #1, #2, and #3 are licensed to fire distillate fuel.
- 2. The facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm).
- 3. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier, a statement from the supplier that the fuel delivered meets Maine's fuel sulfur content standards, certificate of analysis, or testing of fuel in the tank on-site.

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- 4. Dayton S&G shall keep records of fuel use for Heaters #1, #2, and #3. Records shall be maintained for at least six years and made available to the Department upon request.
- B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Heater #1	0.14	0.14	0.14	0.003	0.24	0.06	0.004
Heater #2	0.16	0.16	0.16	0.003	0.29	0.07	0.005
Heater #3	0.14	0.14	0.14	0.003	0.24	0.06	0.004

- C. Visible emissions from Heaters #1, #2, and #3 shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(2)]
- D. Dayton S&G shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJJ applicable to Heater #2 including, but not limited to, the following: [incorporated under 06-096 C.M.R. ch. 115, BPT]
  - 1. The facility shall implement a boiler tune-up program. [40 C.F.R. § 63.11223]
    - a. Each tune-up shall be conducted every 5 years. [40 C.F.R. § 63.11223(a) and Table 2]
    - b. The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
      - (1) As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted, not to exceed 72 months from the previous inspection. [40 C.F.R. § 63.11223(b)(1)]
      - (2) Inspect the flame pattern, <u>as applicable</u>, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F..R § 63.11223(b)(2)]
      - (3) Inspect the system controlling the air-to-fuel ratio, <u>as applicable</u>, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 72 months from the previous inspection. [40 C.F.R. § 63.11223(b)(3)]
      - (4) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
      - (5) Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis,

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as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

[40 C.F.R. § 63.11223(b)(5)]

- (6) If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 C.F.R. § 63.11223(b)(7)]
- c. <u>Tune-Up Report</u>: A tune-up report shall be maintained onsite and submitted to the Department and EPA upon request. The report shall contain the following information:
  - (1) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
  - (2) A description of any corrective actions taken as part of the tune-up of the boiler; and
  - (3) The types and amounts of fuels used over the 12 months prior to the tuneup of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]

### 2. Compliance Report

For every five-year compliance period, Dayton S&G shall prepare a compliance report shall be prepared by March 1<sup>st</sup> of the following year to document the information below for the five-year period. The report shall be maintained by the source and submitted to the Department and/or to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

- a. Company name and address;
- b. A statement of whether the source has complied with all the relevant requirements of this Subpart;
- c. A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- d. The following certifications, as applicable:
  - (1) "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
  - (2) "No secondary materials that are solid waste were combusted in any affected unit."
  - (3) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and

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shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

#### 3. Recordkeeping

- a. Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJJ including the following [40 C.F.R. § 63.11225(c)]:
  - (1) Copies of notifications and reports with supporting compliance documentation;
  - (2) Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned:
  - (3) Records of the occurrence and duration of each malfunction of each applicable boiler; and
  - (4) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.
- b. Records shall be in a form suitable and readily available for expeditious review. Each record must be kept for 5 years following the date of each recorded action. Each record must be kept on-site or be accessible from a central location by computer or other means that instantly provides access at the site for at least 2 years after the date of each recorded action. The records may be maintained off-site for the remaining 3 years. [40 C.F.R. § 63.11225(d)] Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the five-year record retention requirement of Subpart JJJJJJ shall be streamlined to the more stringent six-year requirement.

#### (19) Concrete Batch Plant

- A. Particulate emissions from the cement silo shall be vented through a baghouse and all components of the Concrete Batch Plant shall be maintained so as to prevent PM leaks. [06-096 C.M.R. ch. 115, BPT]
- B. To document maintenance of the cement silo baghouse and the loading dock baghouse and vacuum, the licensee shall keep a maintenance record recording the date and location of all bag and vacuum failures as well as all routine maintenance and inspections. The maintenance and inspection record shall be kept on-site at the Concrete Batch Plant location. [06-096 C.M.R. ch. 115, BPT]

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- C. Visible emissions from the cement silo baghouse and the loading dock baghouse are limited to no greater than 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(3)]
- D. PM emissions from the concrete batching operation shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

### (20) Nonmetallic Mineral Processing Plants (Primary Portable Tracked Jaw, Primary Portable #2 Jaw, Secondary Portable Cone, Secondary Stationary Cone, and Tertiary Stationary Cone Crusher Units)

- A. Dayton S&G shall install and maintain spray nozzles for control of particulate matter on the nonmetallic mineral processing plants and operate as needed to control visible emissions when the units are in operation. [06-096 C.M.R. ch. 115, BPT]
- B. Dayton S&G shall maintain records detailing and quantifying the hours of operation on a daily basis for all of the rock crusher units. The operation records shall be kept on-site at the rock crushing location. [06-096 C.M.R. ch. 115, BPT]
- C. Visible emissions from the Primary Portable Tracked Jaw, Primary Portable #2 Jaw, Secondary Portable Cone, Secondary Stationary Cone, and Tertiary Stationary Cone crusher units shall each be limited to no greater than 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(2)]
- D. For the Primary Portable #2 Jaw, Secondary Portable Cone, and Tertiary Station Cone crushers units, visible emissions from nonmetallic mineral processing plant equipment other than crushers (transfer points on belt conveyors, screening operations, etc.) shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

#### E. NSPS Subpart OOO Requirements

Dayton S&G shall comply with all requirements of 40 C.F.R. Part 60, Subpart OOO applicable to Primary Portable Tracked Jaw and Secondary Stationary Cone crusher units and each associated affected facility including any grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, and enclosed truck or railcar loading station including but not limited to, the following.

1. Visible emissions from any affected facility other than rock crushers, including transfer points on belt conveyors, portable screens, etc., which commenced construction, modification, or reconstruction <u>before</u> April 22, 2008, shall not

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exceed 10% opacity on a six-minute block average basis. [40 C.F.R. Part 60, Subpart OOO, Table 3]

- 2. Visible emissions from any affected facility other than rock crushers, including transfer points on belt conveyors, portable screens, etc., which commenced construction, modification, or reconstruction on or after April 22, 2008, shall not exceed 7% opacity on a six-minute block average basis. [40 C.F.R. Part 60, Subpart OOO, Table 3]
- 3. Dayton S&G shall maintain records detailing the maintenance on particulate matter control equipment including spray nozzles. Dayton S&G shall perform monthly inspections of any water sprays to ensure water is flowing to the correct locations and initiate corrective action within 24 hours if water is found to not be flowing properly. Records of the date of each inspection and any corrective action required shall be included in the maintenance records. The maintenance records shall be kept on-site at the rock crushing location. [40 C.F.R. §§ 60.674(b) and 60.676(b)(1)]

#### (21) Engines (Diesels #2 and #3)

#### A. Fuel Use

- 1. Diesels #2 and #3 are licensed to fire distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight). Compliance shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of fuel in the tank on-site. [06-096 C.M.R. ch. 115, BPT]
- 2. Total fuel use for Diesels #2 and #3 combined shall not exceed 80,000 gal/yr of distillate fuel, regardless of where the units are operated. Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of fuel delivered. Records of annual fuel use shall be kept on a monthly and calendar year total basis. [06-096 C.M.R. ch. 115, BPT]
- B. Dayton S&G shall maintain records which demonstrate that the generators are relocated and operated on a basis which maintains their classification of non-road (portable) engine(s). [06-096 C.M.R. ch. 115, BPT]
- C. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Diesel #2	0.34	0.34	0.34	0.004	12.35	2.66	1.01
Diesel #3	0.17	0.17	0.17	0.002	6.17	1.33	0.50

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#### D. Visible Emissions

Visible emissions from each of the engines shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time Dayton S&G shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

- 1. The duration of the startup shall not exceed 30 minutes per event;
- 2. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
- 3. Dayton S&G shall keep records of the date, time, and duration of each startup.

Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

[06-096 C.M.R. ch. 101, § 4(A)(4)]

#### **General Process Sources** (22)

Visible emissions from any general process that is not part of a nonmetallic mineral processing plant shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

#### **Fugitive Emissions Including Stockpiles and Roadways** (23)

Dayton S&G shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

Dayton S&G shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22. [06-096 C.M.R. ch. 101, § 4(C)]

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- (24) Equipment Relocation [06-096 C.M.R. ch. 115, BPT]
  - A. Dayton S&G shall notify the Bureau of Air Quality, by a written notification, prior to relocation of any equipment addressed in the facility's air emission license. It is preferred for notice of relocation to be submitted through the Department's on-line e-notice at: <a href="https://www.maine.gov/dep/air/compliance/forms/relocation">www.maine.gov/dep/air/compliance/forms/relocation</a>

Written notice may also be sent by mail. Notification sent by mail shall be sent to the address below:

Attn: Relocation Notice Maine DEP Bureau of Air Quality 17 State House Station Augusta, ME 04333-0017

The notification shall include the license number the equipment is covered under, identification of the equipment moved, the address of the equipment's new location, the date the equipment will be moved.

- B. Written notification shall also be made to the municipality where the equipment will be relocated, except in the case of an unorganized territory where notification shall be made to the respective county commissioners. The notification to the Department shall include the date the municipality was notified.
- (25) Dayton S&G shall keep a copy of this Order on site and ensure the operator(s) are familiar with the terms of this Order. [06-096 C.M.R. ch. 115, BPT]

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#### (26) Annual Emission Statements

- A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, Dayton S&G shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.
- B. Dayton S&G shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:
  - 1. The tons of asphalt processed in the Kiln on a monthly basis;
  - 2. The amount of distillate fuel fired in the Kiln, Heaters #1, #2, and #3, and Diesels #2 and #3, (each) on a monthly basis;
  - 3. The sulfur content of the distillate fuel fired in the Kiln, Heaters #1, #2, and #3, and Diesels #2 and #3;
  - 4. The amount of specification waste oil fired in the Kiln on a monthly basis;
  - 5. Hours each emission unit was active or operating on a monthly basis.

[06-096 C.M.R. ch. 137]

C. Every third year, or as requested by the Department, Dayton S&G shall report to the Department emissions of hazardous air pollutants as required pursuant to 06-096 C.M.R. ch. 137, § (3)(C). The next report is due no later than May 15, 2027, for emissions occurring in calendar year 2026. Dayton S&G shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

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(27) If the Department determines that any parameter value pertaining to construction and operation of the emissions units, including but not limited to stack size, configuration, flow rate, emission rates, nearby structures, etc., deviates from what was submitted in the application or ambient air quality impact analysis for this air emission license, Dayton S&G may be required to submit additional information. Upon written request from the Department, Dayton S&G shall provide information necessary to demonstrate AAQS will not be exceeded, potentially including submission of an ambient air quality impact analysis or an application to amend this air emission license to resolve any deficiencies and ensure compliance with AAQS. Submission of this information is due within 60 days of the Department's written request unless otherwise stated in the Department's letter. [06-096 C.M.R. ch. 115, § 2(O)]

DONE AND DATED IN AUGUSTA, MAINE THIS 12<sup>th</sup> DAY OF SEPTEMBER, 2024.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:

MELANIE LOYZIM, COMMISSIONER

The term of this license shall be ten (10) years from the signature date above.

[Note: If a renewal application, determined as complete by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 M.R.S. § 10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the license renewal application.]

for

#### PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: May 30, 2024

Date of application acceptance: May 30, 2024

Date filed with the Board of Environmental Protection:

This Order prepared by Kendra Nash, Bureau of Air Quality.

**FILED** 

SEP 12, 2024

State of Maine Board of Environmental Protection