

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

#### **DEPARTMENT ORDER**

Dragon Products Company, LLC Knox County Thomaston, Maine A-326-70-H-A Departmental
Findings of Fact and Order
Part 70 Air Emission License
Amendment #3

### FINDINGS OF FACT

After review of the Part 70 License amendment 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 (Department) finds the following facts:

### I. REGISTRATION

### A. Introduction

FACILITY	Dragon Products Company, LLC
LICENSE TYPE	Part 70 Significant License Modification
NAICS CODES	32731
NATURE OF BUSINESS	Cement Manufacturing
FACILITY LOCATION	US Route 1, Thomaston, Maine

Dragon Products Company, LLC (Dragon) manufactures portland cement using a dry process consisting of quarrying and crushing; raw materials grinding and blending; clinker production; and finish grinding, packing, and storage.

New Source Review (NSR) license A-326-77-10-A (issued 11/30/2017) addressed the replacement of an existing 140 HP Auxiliary Kiln Drive Engine with a new 139 HP Auxiliary Kiln Drive Engine. NSR A-326-77-11-A (issued 3/23/2018) addressed the modification of the Finish Mill System in order to separate the Pre-Grind Mill from the Finish Mill #1 circuit to operate as an independent grinding circuit. Dragon has requested that these NSR licenses be incorporated into their Part 70 license.

Dragon has the potential to emit more than 100 tons per year (TPY) of sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), and carbon monoxide (CO) and 50 TPY of volatile organic compounds (VOC) and 100,000 TPY of carbon dioxide equivalent (CO<sub>2</sub>e); therefore, the source is a major source for criteria pollutants. Dragon has the potential to emit 10 TPY or more of a single hazardous air pollutant (HAP) or 25 TPY or more of combined HAP; therefore, the source is a major source for HAP.

# **B.** Emission Equipment

The following emission units are addressed by this Part 70 License Amendment:

2

### **Engines**

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Output	Fuel Type, % sulfur	Mfr. Date	Install. Date
Auxiliary Kiln Drive Engine	1.0	8.0	139 hp	Distillate Fuel, 0.0015%	2011	2017

## **Process Equipment**

		<b>Pollution Control</b>
Equipment	Production Rate	Equipment
Finish Mill #1	85 ton/hr	Dust Collectors
Finish Mill #3*	40.6 ton/hr	Dust Collectors

<sup>\*</sup>Formerly designated Pre-Grind Mill

### C. Definitions

Distillate Fuel. For the purposes of this license, distillate fuel 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.

### D. Application Classification

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

Dragon has requested incorporation into their Part 70 Air License the relevant terms and conditions of 06-096 Code of Maine Rules (C.M.R.) ch. 115 NSR licenses A-326-77-10-A and A-326-77-11-A. Therefore, this amendment is considered to be a Part 70 Significant License Modification under *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140.

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Amendment #3

# II. BEST PRACTICAL TREATMENT (BPT) AND EMISSION STANDARDS

### 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 as well as for those sources located in designated non-attainment areas.

3

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 emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

### B. Auxiliary Kiln Drive Engine

In NSR License A-326-77-10-A (11/30/2017) Dragon was licensed to replace an existing 140 HP Auxiliary Kiln Drive Engine with a new 139 HP Auxiliary Kiln Drive Engine. The kiln drive engine is used to keep the kiln rotating in emergency situations such as a power outage or failure of the primary drive system. It is also used in non-emergency situations, such as during kiln startup and shutdown. The engine is used to rotate the kiln at slow speeds when there is no kiln feed and the kiln is not producing clinker. The rotation is required for periods of startup, shutdown, and malfunction to avoid thermal damage to the outer shell or internal refractory.

The new Kiln Drive Engine is a US EPA certified Tier 3, Caterpillar C4.4 ACERT engine, rated at 139 HP (approximately 1.0 MMBtu/hr), and manufactured in 2011.

### 1. New Source Performance Standards (NSPS)

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII is applicable to the Auxiliary Kiln Drive Engine since the unit was ordered after July 11, 2005, and manufactured after April 1, 2006. By meeting the requirements of 40 C.F.R. Part 60, Subpart IIII, the internal combustion engine (ICE) also meets the requirements found in National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ.

# Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #3

# a. Manufacturer Certification Requirement

The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in 40 C.F.R. § 60.4201. [40 C.F.R. § 60.4204(b)]

4

## b. Ultra-Low Sulfur Fuel Requirement

The distillate fuel fired in the engine shall not exceed 15 ppm sulfur (0.0015% sulfur), except that any existing distillate fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

[40 C.F.R. § 60.4207(b)]

### c. Operation and Maintenance Requirement

The engine shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by facility that are approved by the engine manufacturer. Dragon may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

# 2. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ is applicable to the Auxiliary Kiln Drive Engine. The unit is considered a stationary reciprocating internal combustion engine at a major HAP source. However, the unit is also subject to New Source Performance Standards. By meeting the requirements of Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII the unit also meet the requirements found in 40 C.F.R. Part 63, Subpart ZZZZ.

### 3. Emission Limits

In NSR license A-326-77-10-A (issued 11/30/2017) BACT limits were determined to be the following:

Unit	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Auxiliary Kiln Drive Engine (1.0 MMBtu/hr) Distillate fuel	0.12	0.12	0.01	4.41	0.95	0.35

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

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Amendment #3

# C. Finish Mill System

Dragon currently operates a Finish Mill System consisting of two Finish Mills (Finish Mill #1 and Finish Mill #2) and a Pre-Grind Mill. Finish Mill #2 is not currently operational, and there are no plans to renovate it to bring it back into operational condition. The Pre-Grind Mill is operated in series with Finish Mill #1, and together they have an average throughput of 105 ton/hr for Type I/II portland cement. In the current configuration, the Finish Mill #1 circuit is able to operate at a lower capacity without the Pre-Grind Mill, but the Pre-Grind Mill is not able to operate independently of Finish Mill #1.

5

The Finish Mill System is used in the production of several products. The average mill turnover time when switching products is approximately 30 minutes which correlates to lost production of Type I/II cement and the production of approximately 52.5 tons of material that does not meet required specifications.

In NSR License A-326-77-11-A (3/23/2018), Dragon was licensed to separate the Pre-Grind Mill (renamed to Finish Mill #3) from the Finish Mill #1 circuit so that the two can operate independently. This will allow Finish Mill #1 to continuously produce primary products (Type I/II portland cement) while Finish Mill #3 produces secondary products. This will reduce the amount of off-specification material produced during product changeovers. It will also add a level of redundancy by allowing production to continue if Finish Mill #1 is ever inoperable.

Finish Mill #3 will primarily be processing slag. A new screw conveyor and bucket elevator will be installed outside the storage silos that will be used to transfer material from the slag drying building to an existing chute that feeds Silo Interstice #9. Silo Interstice #9 feeds the equipment that was previously used to transfer material to Finish Mill #2. This equipment will remain unchanged up to the belt transfer point inside the finish mill building.

A new belt conveyor will be installed within the mill building to transfer material from the Finish Mill #2 feed point to the Finish Mill #3 feed belt. This will need to be installed in an elevated position to allow routing across the building. A new bucket elevator will be installed to move material from the Finish Mill #2 feed belt to the new belt conveyor.

The material handling arrangement at the outlet of the mill will be revised to allow for feeding the material via airslide to an existing bucket elevator that is not currently in use. The bucket elevator will bring the material to the elevation of a new separator. The separator will be fed via a new airslide with reject material entering the mill head chute by way of a chute through an impact flow meter. The separator will utilize an existing dust collector located in line with Finish Mill #2 which will be modified to accommodate the operation of the upgraded mill system.

# Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #3

The increase in finish grinding capacity will not increase operation of the Kiln System. The modification of the Pre-Grind Mill is designed to increase the production of ground slag, a material not produced using the Kiln System. In addition, Dragon's current Kiln System production capacity is limited by the current kiln configuration and other equipment associated with the feed and discharge of the kiln, not the Finish Mill System. Accordingly, no increase in kiln production will result from this Finish Mill project.

6

1. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

The Finish Mill System, conveying system transfer points, bagging systems, and bulk loading and unloading systems are subject to 40 C.F.R. Part 63, Subpart LLL, National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry, and are subject to the following requirements:

- a. Visible emissions from each affected Finish Mill, conveying system transfer point, bagging system, and bulk loading and unloading system shall not exceed 10% opacity on a 6-minute block average basis. [40 C.F.R. § 63.1345]
- b. Dragon shall conduct an initial performance test for opacity in accordance with 40 C.F.R. § 63.1349(b)(2) and 40 C.F.R. Part 60, Appendix A, Method 9 within 180 days after startup. The duration of the performance test must be three hours (30, 6-minute averages), except that the duration of the performance test may be reduced to one hour if both of the following conditions are met:
  - (1) There are no individual readings greater than 10% opacity;
  - (2) There are no more than three readings of 10% opacity for the first one-hour period.

[40 C.F.R. §§ 63.7(a)(2), 63.1348(a)(2), and 63.1349(b)(2)]

- c. Dragon shall demonstrate continuous compliance with the opacity standard in accordance with 40 C.F.R. § 63.1350(f), summarized below:
  - (1) Conduct a monthly 10-minute visible emission test of each affected source in accordance with 40 C.F.R. Part 60, Appendix A, Method 22.
    - (i) If no visible emissions are observed in six consecutive monthly tests for any affected source, the frequency of performance testing may be reduced from monthly to semi-annually for that source. If visible emissions are observed during a semi-annual test, monthly testing must be resumed.
    - (ii) If no visible emissions are observed during the semi-annual test for any affected source, the frequency of performance testing may be reduced from semi-annually to annually for that source. If visible emissions are observed during an annual test, monthly testing must be resumed.

# Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #3

(iii)If visible emissions are observed during any Method 22 performance test, 30 minutes of opacity observations, recorded at 15 second intervals, must be conducted in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 within one hour of observing visible emissions.

7

- (iv)Method 22 visible emissions monitoring is not required for any totally enclosed conveying system transfer point.
- (2) Conduct daily 6-minute visible emissions observations in accordance with 40 C.F.R. Part 60, Appendix A, Method 22 of the dust collectors associated with the mill sweep and air separator of the affected finish mills.
  - (i) If visible emissions are observed, a follow up Method 22 performance test of each stack from which visible emissions were observed must be conducted within 24 hours.
  - (ii) If visible emissions are observed during the follow up Method 22 performance test, a 30-minute opacity test must be conducted in accordance with 40 C.F.R. Part 60, Appendix A, Method 9.
- (3) If visible emissions are observed during any Method 22 visible emissions test, corrective actions must be initiated within one hour.
- (4) The above requirements to conduct Method 22 visible emissions testing do not apply to any finish mill equipped with a Continuous Opacity Monitoring System (COMS) or Bag Leak Determination System (BLDS).
  - (i) If a COMS is installed in lieu of conducting daily visible emissions testing of a finish mill, the COMS must be installed at the outlet of the PM control device, and installed, maintained, calibrated, and operated as required by the general provisions in 40 C.F.R. Part 63, Subpart A, and in accordance with 40 C.F.R. Part 60, Appendix B.
  - (ii) If a BLDS is installed in lieu of conducting daily visible emissions testing of a finish mill, it must meet the requirements of 40 C.F.R. § 63.1350(m).

[40 C.F.R. §§ 63.1348(b)(3) and 63.1350(f)]

d. Dragon shall comply with the recordkeeping requirements as specified in 40 C.F.R. § 63.1355 and license A-326-70-E-R/A (issued March 3, 2016).

### 2. Control Equipment

Particulate matter from the Finish Mill System shall be controlled by the use of dust collectors (fabric filters).

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Amendment #3

# D. Facility Annual Emissions

### 1. Total Annual Emissions

Dragon is licensed for the following annual emissions, based on a 12-month rolling total. The tons per year limits were calculated based on 8,760 hours/year operation for the PM emissions from the Kiln System and Clinker Cooler; previous tpy limits for SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOC from the Kiln System and Clinker Cooler (established in the licensing of the wet-to-dry process modification); 100 hours/year operation for each emergency generator; 8,760 hours/year operation for the Auxiliary Kiln Drive; and a maximum annual production limit of 75,000 tons of slag through the Slag Dryer:

8

# Total Licensed Annual Emissions for the Facility Tons/year

(used to calculate the annual license fee)

	PM	PM <sub>10</sub>	SO <sub>2</sub>	NOx	CO	VOC	NH <sub>3</sub>
Kiln System	41.2	41.2	306.6	1,533.0	843.2	57.5	32.9
Clinker Cooler	40.1	40.1					
Emergency Generator	0.02	0.02	0.0003	0.8	0.2	0.1	
Quarry #1 Pump	0.01	0.01	0.0001	0.4	0.1	0.03	
Auxiliary Kiln Drive Engine	0.53	0.53	0.01	19.32	4.16	1.53	
Slag Dryer			0.02	2.8	2.4	0.2	
Total TPY	81.9	81.9	306.6	1,556.3	850.1	59.4	32.9

# III.AMBIENT AIR QUALITY ANALYSIS

Dragon previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards (see license A-326-71-U-A/R, issued on November 19, 2002). An additional ambient air quality analysis is not required for this Part 70 License.

### **ORDER**

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

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

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Amendment #3

The Department hereby grants the Part 70 License Amendment A-326-70-H-A pursuant to 06-096 C.M.R. 140 and the preconstruction permitting requirements of *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115 and subject to the conditions found in Air Emission License A-326-70-E-R/A, in amendments A-326-70-F-A and A-326-70-G-A, and the following conditions.

9

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in 06-096 C.M.R. ch. 115 for making such changes and pursuant to the applicable requirements in 06-096 C.M.R. ch. 140.

For each specific condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

<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.

The following shall replace condition (19) of license Air Emission License A-326-70-E-R/A and add condition (33):

# (19) Internal Combustion Engines

## A. Allowable Operation and Fuels

- 1. The Emergency Generator, Auxiliary Kiln Drive Engine, and Quarry #1 Pump are licensed to fire distillate fuel. [06-096 C.M.R. ch. 140, BPT]
- 2. The Emergency Generator and Quarry #1 Pump shall each be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 C.M.R. ch. 140, BPT]

### B. Fuel Sulfur Content

- 1. The fuel oil sulfur content for the Emergency Generator, Auxiliary Kiln Drive Engine, and Quarry #1 Pump shall be limited to 0.0015% sulfur. [06-096 C.M.R. ch. 140, BPT]
- 2. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [06-096 C.M.R. ch. 140, BPT]

# C. Emissions shall not exceed the following limits:

Pollutant	Licensed Emission Limits and Standards	Unit	Origin and Authority		
Ponutant			06-096 C.M.R. ch. 103		
	0.12 lb/MMBtu	Emergency Generator	00-096 C.M.R. ch. 103		
	0.45 lb/hr	Emergency Generator	06-096 C.M.R. ch. 140,		
PM	0.20 lb/hr	Quarry #1 Pump			
	0.12 lb/hr	Auxiliary Kiln Drive	BPT		
		Engine			
	0.12 lb/MMBtu	Emergency Generator	06-096 C.M.R. ch. 103		
	0.45 lb/hr	Emergency Generator			
$PM_{10}$	0.20 lb/hr	Quarry #1 Pump	06-096 C.M.R. ch. 140,		
	0.10.11.71	Auxiliary Kiln Drive	BPT		
	0.12 lb/hr	Engine			
	0.006 lb/hr	Emergency Generator			
	0.003 lb/hr	Quarry #1 Pump	06-096 C.M.R. ch. 140,		
$SO_2$	0.01.11.7	Auxiliary Kiln Drive	BPT		
	0.01 lb/hr	Engine			
	16.51 lb/hr	Emergency Generator			
NO	7.42 lb/hr	Quarry #1 Pump	06-096 C.M.R. ch. 140,		
NO <sub>X</sub>	4.41 lb/hr	Auxiliary Kiln Drive Engine	BPT		
	3.56 lb/hr	Emergency Generator			
СО	1.60 lb/hr	Quarry #1 Pump	06-096 C.M.R. ch. 140,		
	0.95 lb/hr	Auxiliary Kiln Drive Engine	BPT		
VOC	1.35 lb/hr	Emergency Generator			
	0.61 lb/hr	Quarry #1 Pump	06-096 C.M.R. ch. 140,		
	0.35 lb/hr	Auxiliary Kiln Drive Engine	BPT		

# D. Visible Emissions

Visible emissions from each of the distillate fuel-fired engines shall not exceed 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a three-hour period. [06-096 C.M.R. ch. 101]

- E. The Emergency Generator and Quarry #1 Pump shall meet the applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ, including the following:
  - 1. Dragon shall meet the following operational limitations for each of the compression ignition emergency engines (Emergency Generator and Quarry #1 Pump):
    - a. Change the oil and filter every 500 hours of operation or annually, whichever comes first;
    - b. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
    - c. Inspect the hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Records shall be maintained documenting compliance with the operational limitations.

[40 C.F.R. § 63.6602 and Table 2(c) and 06-096 C.M.R. ch. 140, BPT]

# 2. Oil Analysis Program Option

Dragon has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, Dragon must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 C.F.R.§ 63.6625(i)]

### 3. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 63.6625(f)]

- 4. Maintenance, Testing, and Non-Emergency Operating Situations
  - a. The Emergency Engine and Quarry #1 Pump shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written logs) of all engine operating hours.

[40 C.F.R. § 63.6640(f) and 06-096 C.M.R. ch. 140, BPT]

# Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #3

b. Dragon shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. §§ 63.6655(e) and (f)]

## 5. Operation and Maintenance

The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or Dragon shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 63.6625(e)]

6. Startup Idle and Startup Time Minimization

During periods of startup the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 C.F.R. § 63.6625(h) & 40 C.F.R. Part 63, Subpart ZZZZ Table 2c]

- F. The Auxiliary Kiln Drive Engine shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart IIII, including the following:
  - 1. Manufacturer Certification

The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in § 60.4201. [40 C.F.R. § 60.4204(b)]

2. Ultra-Low Sulfur Distillate Fuel

The distillate fuel fired in the engine shall not exceed 15 ppm sulfur (0.0015% sulfur by weight), except that any existing distillate fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. Compliance with the fuel sulfur content limit shall be based on fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [40 C.F.R. § 60.4207(b) and 06-096 C.M.R. ch. 140, BPT]

# 3. Operation and Maintenance

The engine shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by the facility that are approved by the engine manufacturer. Dragon may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

12

# (33) Finish Mill System

- A. Dragon shall control particulate matter emissions from the Finish Mill System through the use of dust collectors (fabric filters). [06-096 C.M.R. ch. 140, BPT]
- B. The Finish Mill System, conveying system transfer points, bagging systems, and bulk loading and unloading systems shall meet the applicable requirements of 40 C.F.R. Part 63, Subpart LLL, including the following:
  - 1. Visible emissions from each affected Finish Mill, conveying system transfer point, bagging system, and bulk loading and unloading system shall not exceed 10% opacity on a 6-minute block average basis. [40 C.F.R. § 63.1345]
  - 2. Dragon shall conduct an initial performance test for opacity in accordance with 40 C.F.R. § 63.1349(b)(2) and 40 C.F.R. Part 60, Appendix A, Method 9 within 180 days after startup. The duration of the performance test must be three hours (30, 6-minute averages), except that the duration of the performance test may be reduced to one hour if both of the following conditions are met:
    - a. There are no individual readings greater than 10% opacity;
    - b. There are no more than three readings of 10% opacity for the first 1-hour period.

[40 C.F.R. §§ 63.1348(a)(2) and 63.1349(b)(2)]

- 3. Dragon shall demonstrate continuous compliance with the opacity standard in accordance with 40 C.F.R. § 63.1350(f). [40 C.F.R. § 63.1348(b)(3)]
  - a. Conduct a monthly 10-minute visible emission test of each affected source in accordance with 40 C.F.R. Part 60, Appendix A, Method 22.
     [40 C.F.R. § 63.1350(f)(1)(i)]
    - (1) If no visible emissions are observed in six consecutive monthly tests for any affected source, the frequency of performance testing may be reduced from monthly to semi-annually for that source. If visible emissions are observed during a semi-annual test, monthly testing must be resumed.

      [40 C.F.R. § 63.1350(f)(1)(ii)]
    - (2) If no visible emissions are observed during the semi-annual test for any affected source, the frequency of performance testing may be reduced from semi-annually to annually for that source. If visible emissions are observed during an annual test, monthly testing must be resumed.

      [40 C.F.R. § 63.1350(f)(1)(iii)]
    - (3) If visible emissions are observed during any Method 22 performance test, 30 minutes of opacity observations, recorded at 15 second intervals, must

be conducted in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 within one hour of observing visible emissions.

[40 C.F.R. § 63.1350(f)(1)(iv)]

- (4) Method 22 visible emissions monitoring is not required of any totally enclosed conveying system transfer point. [40 C.F.R. § 63.1350(f)(1)(v)]
- b. Conduct daily 6-minute visible emissions observations in accordance with 40 C.F.R. Part 60, Appendix A, Method 22 of the dust collectors associated with the mill sweep and air separator of the affected finish mills. [40 C.F.R. § 63.1350(f)(2)(i)]
  - (1) If visible emissions are observed, a follow up Method 22 performance test of each stack from which visible emissions were observed must be conducted with 24 hours. [40 C.F.R. § 63.1350(f)(2)(ii)]
  - (2) If visible emissions are observed during the follow up Method 22 performance test, a 30 minute opacity test must be conducted in accordance with 40 C.F.R. Part 60, Appendix A, Method 9. [40 C.F.R. § 63.1350(f)(2)(iii)]
- c. If visible emissions are observed during any Method 22 visible emissions test, corrective actions must be initiated within one hour. [40 C.F.R. § 63.1350(f)(3)]
- d. The above requirements to conduct Method 22 visible emissions testing do not apply to any finish mill equipped with a Continuous Opacity Monitoring System (COMS) or Bag Leak Determination System (BLDS). [40 C.F.R. § 63.1350(f)(4)]
  - (1) If a COMS is installed in lieu of conducting daily visible emissions testing of a finish mill, the COMS must be installed at the outlet of the PM control device, and installed, maintained, calibrated, and operated as required by the general provisions in 40 C.F.R. Part 63, Subpart A, and in accordance with 40 C.F.R. Part 60, Appendix B. [40 C.F.R. § 63.1350(f)(4)(i)]
  - (2) If a BLDS in installed in lieu of conducting daily visible emissions testing of a finish mill, it must meet the requirements of 40 C.F.R. § 63.1350(m). [40 C.F.R. § 63.1350(f)(4)(ii)]

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Amendment #3

15

4. Dragon shall comply with the recordkeeping requirements as specified in 40 C.F.R. § 63.1355 and license A-326-70-E-R/A (issued March 3, 2016). [40 C.F.R. § 63.1355]

DONE AND DATED IN AUGUSTA, MAINE THIS 28 day of August, 2018

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: PAUL MERCER, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-326-70-E-R/A.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: <u>September 18, 2017</u>
Date of application acceptance: <u>September 19, 2017</u>

Date filed with the Board of Environmental Protection:

This Order prepared by Benjamin Goundie, Bureau of Air Quality.

Filed

AUG 2 8 2018

State of Maine Board of Environmental Protection