

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

DEPARTMENT ORDER

Dragon Products Company, Inc. Knox County Thomaston, Maine A-326-77-14-A Departmental Findings of Fact and Order New Source Review NSR #13

FINDINGS OF FACT

After review of the air emission 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 (the Department) finds the following facts:

I. <u>REGISTRATION</u>

A. Introduction

FACILITY	Dragon Products Company, Inc.
LICENSE TYPE	06-096 C.M.R. ch. 115, Minor Modification
NAICS CODES	327731
NATURE OF BUSINESS	Cement Manufacturing
FACILITY LOCATION	U.S. Route 1, Thomaston, Maine

B. <u>NSR License Description</u>

Dragon Products Company, Inc. (Dragon) has requested a New Source Review (NSR) license amendment to authorize the use of additional fuel types in the Slag Dryer.

The NSR license A-326-77-9-A (issued 5/10/2016) addressed the installation of a Slag Dryer system to remove excess moisture from granulated blast furnace slag. The Slag Dryer system included a dryer burner that was licensed to fire natural gas. The license established a process limit of 75,000 tons per year. This annual limit was increased to 150,000 tons per year in NSR license A-326-77-13-A (issued 10/22/2020).

Due to market changes, availability of compressed natural gas is now limited. Dragon has requested the addition of no. 2 fuel oil, no. 4 fuel oil, specification waste oil, and propane as licensed fuels for use in the Slag Dyer Burner.

C. Emission Equipment

The following equipment is addressed in this NSR license:

Fuel Burning Equipment

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	Maximum			
Equipmont	Capacity (MMPtu/br)	Maximum Firing Pata	Fuel Tune 9/ sulfur	Steels #
Equipment		Firing Kate	ruei Type, 76 suitur	Stack #
F651: Slag Dryer Burner		548 gal/hr	Distillate fuel, 0.0015%	
	75.6	540 gal/hr	#4 Fuel Oil, 0.5%	
		540 gal/hr	Spec. Waste Oil, 0.7%	#1
		831 gal/hr	Propane, 0.04%	
		74,418 scf/hr	Natural Gas, negligible	

Process Equipment

Equipment	Production Rate	Pollution Control Equipment	Stack #
F650: Slag Dryer F652: Discharge Conveyor	100 tons/hour slag	Dust Collector	#1

D. <u>Definitions</u>

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.

<u>Number 4 Fuel Oil</u> means fuel oil that complies with the specifications for grade number 4 fuel oil as defined by ASTM D396-21.

<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.

E. 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.

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The application for the licensing of additional fuel types for the Slag Dryer Burner does not violate any applicable federal or state requirements and does not reduce monitoring, reporting, testing, or recordkeeping requirements.

The modification of a major source is considered a major or minor modification based on whether or not expected emissions increases exceed the "Significant Emission Increase" levels as given in *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100. For a major stationary source, the expected emissions increase from each new, modified, or affected unit may be calculated as equal to the difference between the post-modification projected actual emissions and the baseline actual emissions for each NSR regulated pollutant.

1. Baseline Actual Emissions

Baseline actual emissions (BAE) are equal to the average annual emissions from any consecutive 24-month period within the ten years prior to submittal of a complete license application. Dragon has proposed using 1/2019 - 12/2020 as the 24-month baseline period from which to determine baseline actual emissions for all pollutants for emission units affected as part of this project.

BAE for existing modified and affected equipment are based on actual annual emissions reported to the Department through *Emissions Statements*, 06-096 C.M.R. ch. 137 with the following exceptions:

- a. Emissions of PM are not collected in the annual emissions report. PM emissions from all equipment were determined in a similar matter as the filterable portions of the PM₁₀ emissions.
- b. Emissions of PM_{10} and $PM_{2.5}$ in the annual emissions report are for the filterable portion only. Emissions of PM_{10} and $PM_{2.5}$ were adjusted to include emissions of condensable particulate matter (CPM).

The results of this baseline analysis are presented in the table below.

Equipment	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC
	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)
Slag Dryer & Slag Dryer Burner	0.77	0.52	0.42	0.01	1.11	0.94	0.06

Baseline Actual Emissions (1/2019 – 12/2020 Average)

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2. Projected Actual Emissions

Projected actual emissions (PAE) are the maximum actual annual emissions anticipated to occur in any one of the five years (12-month periods) following the date existing units resume regular operation after the project or any one 12-month period in the ten years following if the project involves increasing the unit's design capacity or its potential to emit of a regulated pollutant. Dragon has elected to conservatively use the Slag Dryers full potential to emit (PTE) as PEA.

Dragon has proposed to maintain the existing federally enforceable limit restricting the Slag Dryer to a throughput of 150,000 tons per year of slag processed. The existing fuel limit of 111.2 million scf per year of natural gas will be changed to an annual heat input limit of 113,424 MMBtu/yr from all fuels combined, with up to 110,638 MMBtu/year of that total for specification waste oil. Therefore, PTE is based on the maximum emissions possible within these limits.

Projected actual emissions from the affected equipment are shown below.

Projected Actual Emissions

Equipment	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC
	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)
Slag Dryer & Slag Dryer Burner*	3.45	2.48	2.19	39.00	8.22	4.67	0.62

*Includes fugitive emissions from material handling equipment

3. Emissions Increases

Emissions increases are calculated by subtracting BAE and excludable emissions from the PAE. The emission increase is then compared to the significant emissions increase levels.

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	Baseline Actual Emissions 1/2019 – 12/2020	Projected Actual Emissions	Emissions Increase	Significant Emissions Increase Levels
Pollutant	(ton/year)	(ton/year)	(ton/year)	(ton/year)
PM	0.77	3.45	2.68	25
PM10	0.52	2.48	1.96	15
PM _{2.5}	0.42	2.19	1.77	10
SO_2	0.01	39.00	38.99	40
NO _x	1.11	8.22	7.11	40
CO	0.94	4.67	3.73	100
VOC	0.06	0.62	0.56	40

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4. Classification

Since emissions increases do not exceed significant emissions increase levels, this NSR license is determined to be a minor modification under *Minor and Major Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115. Dragon has submitted an application to incorporate the requirements of this NSR license into the facility's Part 70 air emission license.

II. <u>BEST PRACTICAL TREATMENT (BPT)</u>

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.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in 06-096 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental, and energy impacts.

B. Slag Dryer

Dragon has requested the addition of no. 2 fuel oil, no. 4 fuel oil, specification waste oil, and propane as licensed fuels for use in the Slag Dyer Burner.

BACT for the Slag Dryer and its associated burner firing natural gas was established in NSR #9. Dragon has submitted a BACT analysis addressing the additional fuels to be fired

in the Slag Dryer burner. The following is a summary of the BACT determination for the Slag Dryer.

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1. Particulate Matter (PM, PM₁₀, and PM_{2.5})

Particulate matter (PM, PM₁₀, and PM_{2.5}) emissions from the Slag Dryer system potentially come from both fuel combustion and the slag material being dried. Dragon operates a baghouse with a rated collection efficiency of 99.9% for the control of particulate matter from the Slag Dryer. A review of EPA's RACT/BACT/LEAR Clearinghouse (RBLC) identified this as the typical control technology for this type of device.

The Department finds that BACT for PM, PM_{10} , and $PM_{2.5}$ is the use of a baghouse with a rated collection efficiency of 99.9% and the emission limits listed in the table below.

2. Sulfur Dioxide (SO₂)

Sulfur dioxide from the Slag Dryer is formed from the oxidation of sulfur in the fuel combusted in the dryer. Options to control SO₂ emissions from fuel combustion include fuel substitution (i.e., low-sulfur fuel) and add-on treatment of the combustion exhaust gases. Because this NSR license is for the inclusion of additional fuel types for use in the Slag Dryer, fuel substitution is not being considered as an available control strategy. Dragon has identified wet and dry scrubbers as potential control technologies for SO₂.

In a wet scrubber, the flue gas stream is ducted to a spray tower and injected with an aqueous slurry of a sodium- or calcium-based alkaline reagent. The SO₂ dissolves into the slurry droplets and is neutralized into a solid compound which is collected at the bottom of the scrubber. Wet scrubbers require a continuous supply of water for the slurry and also require management of the sludge waste generated in the scrubber. Dragon has identified a wet scrubber as a technically feasible control option. However, a control cost analysis conducted by Dragon estimates a cost of \$32,587 per ton of SO₂ removed to install and operate a wet scrubber. Therefore, a wet scrubber is not considered economically feasible and has been eliminated from consideration.

In a dry scrubber, dry alkaline sorbent, typically lime or limestone, is pneumatically injected into the flue gas stream. SO_2 is absorbed by the dry sorbent particles and is captured using a baghouse. PM from the Slag Dryer is currently controlled by an existing baghouse, and the collected material is combined with the dried slag as a salable by-product. In order to prevent the loss of this revenue generating stream, Dragon would need to install a second baghouse and conduct dry scrubbing lime injection in the duct between the two baghouses, after the salable by-product is collected, to make this technology technically feasible. A cost analysis conducted by Dragon estimates a cost of \$41,412 per ton of SO_2 removed to install and operate a dry

scrubber. Therefore, this control technology is not considered economically feasible and has been eliminated from consideration.

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The Department finds that BACT for SO_2 is good combustion practices and the emission limit listed in the table below.

3. Nitrogen Oxides (NO_x)

The formation of NO_x is determined by the interaction of chemical and physical processes occurring within the flame zone of the dryer. Thermal NO_x arises from the thermal dissociation and subsequent reaction of nitrogen (N₂) and oxygen (O₂) in the combustion air. The major factors influencing thermal NO_x formation are temperature, concentrations of combustion gases in the inlet air, and residence time within the combustion zone. Fuel NO_x is formed by the oxidation of fuel-bound nitrogen. NO_x formation can be controlled by adjusting the combustion process and/or installing post-combustion controls. Potentially applicable NO_x control technologies include selective catalytic reduction (SCR), regenerative selective catalytic reduction (RSCR), selective non-catalytic reduction (SNCR), and low- NO_x burners.

SCR and RSCR are post-combustion NO_x add-on control devices that are placed in the flue gas stream following the dryer. Ammonia is injected into the flue gas stream ahead of a catalyst bed and reacts on the catalyst surface with NO_x in the gas stream to form molecular nitrogen (N₂) and water. The exhaust gas from the Slag Dryer system is expected to be less than 400 °F, which is outside the optimal temperature range for this type of system. In addition, a review of the RBLC database did not indicate the use of either conventional or regenerative SCR systems for this application. Therefore, the use of SCR or RSCR is not considered a technically feasible control technology for the Slag Dryer.

SNCR add-on control technology describes a process by which NO_x is reduced to nitrogen and water by injecting an ammonia or urea spray into the post-combustion area of the unit. Once injected, the urea or ammonia decomposes into NH₃ or NH₂ free radicals, reacts with the NO_x molecules, and reduces to nitrogen and water. SNCR is considered a selective chemical process because, under a specific temperature range, the reduction reactions described above are favored over reactions with other flue gas components. Although other operating parameters such as residence time and oxygen availability can significantly affect performance, temperature remains one of the most prominent factors affecting SNCR performance. Based on manufacturer's specifications and literature searches, the minimum temperature for effective operation of a SNCR system is 1,650 °F. Below this temperature, the NH₃/NO_x reaction will not occur. Because the exhaust gas temperature from the Slag Dryer is well below the SNCR operating range, SNCR is not considered a technically feasible control technology.

Low NO_x burners are considered an effective means for the control of NO_x emissions. A cost analysis conducted by Dragon estimates a cost of approximately \$16,207 per ton of NO_x reduction. The actual reduction in NO_x emissions would be approximately 4 tons/yr. Low NO_x burners are not considered economically feasible given the relatively low NO_x emissions from the Slag Dryer.

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The Department finds that BACT for NO_x is good combustion practices and the emission limit listed in the table below.

4. Carbon Monoxide (CO) and Volatile Organic Compounds (VOC)

A review of the RBLC database indicated that BACT for CO and VOC emissions from similar operations is considered to be the implementation of good combustion practices. Based on the relatively low levels of CO and VOC emissions from the Slag Dryer (4.56 and 0.61 ton/yr, respectively), no additional controls were considered.

The Department finds that BACT for CO and VOC is good combustion practices and the emission limits listed in the table below.

5. Emission Limits

Emission limits for the Slag Dryer are based on the following emission factors:

Natural Gas

		0.12 lb/MMBtu based on 06-096 C.M.R. ch. 103(2)(B)(1)(a)
PM/PM10/PM2.5	_	7.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
		0.01 gr/dscf after baghouse control
SO_2	_	0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
NO _x	_	100 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
CO	_	84 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
VOC	_	5.5 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
Visible Emissions	_	06-096 C.M.R. ch. 101
Propane		

DM/DM. /DM.		0.05 lb/MMBtu (before baghouse control) based on
F IVI/F IVI 10/ F IVI2.5	_	06-096 C.M.R. ch. 115, BPT
SO_2	_	0.054 lb/1000 gal based on AP-42 Table 1.5-2 dated 7/08
NO _x	_	13 lb/1000 gal based on AP-42 Table 1.5-2 dated 7/08
CO	_	7.5 lb/1000 gal based on AP-42 Table 1.5-2 dated 7/08
VOC	_	1.0 lb/1000 gal based on AP-42 Table 1.5-2 dated 7/08
Visible		06-096 C M R ch 101
Emissions	_	

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Distillate Fuel

		0.08 lb/MMBtu (before baghouse control) based on		
PIVI/PIVI10/PIVI2.5	_	06-096 C.M.R. ch. 115, BPT		
SO_2	_	based on firing distillate fuel with a maximum sulfur content		
		of 0.0015% by weight		
NO _x	_	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	_	0.2 lb/1000 gal based on AP-42 Table 1.3-3 dated 5/10		
Visible		06 006 C M P ab 101		
Emissions	_	00-090 C.IVI.K. CII. 101		

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#4 Fuel Oil

		0.08 lb/MMBtu (before baghouse control) based on
F IVI/ F IVI10/ F IVI2.5	_	06-096 C.M.R. ch. 115, BPT
SO ₂	_	based on firing #4 fuel oil with a maximum sulfur content of
		0.5% by weight
NO _x	_	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	_	0.2 lb/1000 gal based on AP-42 Table 1.3-3 dated 5/10
Visible		000000 m h 101
Emissions	_	00-090 C.WI.K. CII. 101

Specification Waste Oil

		255 lb/1000 gal (before baghouse control) based on AP-42
PIVI/PIVI10/PIVI2.5	_	Table 1.11-1 dated 10/96
SO_2	_	based on firing specification waste oil with a maximum sulfur
		content of 0.7% by weight
NO _x	_	19 lb/1000 gal based on AP-42 Table 1.11-2 dated 10/96
CO	_	5 lb/1000 gal based on AP-42 Table 1.11-2 dated 10/96
VOC	_	1.0 lb/1000 gal based on AP-42 Table 1.11-3 dated 10/96
Visible		06.006 C M P ch 101
Emissions	_	00-090 C.WI.K. CII. 101

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	PM	PM 10	PM _{2.5}	SO ₂	NOx	CO	VOC
Fuel	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Natural gas	Negligible		0.04	7.41	6.23	0.41	
Propane	(based on the AP-42			0.05	10.80	6.23	0.83
Distillate Fuel	baghouse control		0.12	10.96	2.74	0.11	
#4 Fuel Oil	efficiency of \geq 99.9%)			38.62	10.96	2.74	0.11
Spec. Waste Oil	0.2*	0.2*	0.2*	53.30	10.26	2.70	0.54

The BACT emission limits for the Slag Dryer are the following:

*After baghouse control

6. Visible Emissions

Visible emissions from the Slag Dryer shall not exceed 10% opacity on a six-minute block average basis. Dragon shall take corrective action if visible emissions from the baghouse exceed 5% opacity.

7. Operating Limits

Dragon shall process a maximum of 150,000 tons per year (12-month rolling total) of slag in the Slag Dryer, based on the quantity of product exiting the Slag Dryer. Records shall be maintained documenting compliance with this limit on a monthly and 12-month rolling total basis.

Total fuel use for the Slag Dryer Burner shall not exceed 113,424 MMBtu/yr (12-month rolling total) of total heat input, with up to 110,638 MMBtu/yr from specification waste oil. Dragon shall keep records of the amount of each fuel fired in the Slag Dryer on a monthly and 12-month rolling total basis.

8. Control Equipment

Dragon shall maintain and operate a baghouse to control emissions during operation of the Slag Dryer. Dragon shall maintain records of all routine and non-routine maintenance conducted on the baghouse. Such records shall contain the location, date, nature of maintenance or failure, maintenance action, and action taken to correct each failure.

C. Incorporation Into the Part 70 Air Emission License

Pursuant to *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140 § 1(C)(8), for a modification at the facility that has undergone NSR requirements or been processed through 06-096 C.M.R. ch. 115, the source must apply for an amendment to their Part 70 license within one year of commencing the proposed operations, as provided in 40 C.F.R.

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Part 70.5. An application to incorporate the requirements of this NSR license into the Part 70 air emission license has been submitted to the Department.

D. 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:

- Operating the Kiln System for 8,760 hrs/year (maximum for PM, PM₁₀);
- Annual limits for the Kiln System and Clinker Cooler (maximum for SO₂, NO_x, CO, and VOC);
- Processing 150,000 ton/year in the Slag Dryer;
- Firing 113,424 MMBtu/year of fuel in the Slag Dryer Burner consisting of up to 110,638 MMBtu/year of specification waste oil and using worst case emission factors;
- Operating each emergency generator for 100 hrs/year; and
- Operating the Auxiliary Kiln Drive Engine for 8,760 hrs/year.

Note: This information does not represent a comprehensive list of license restrictions or permissions. That information is provided in the Order sections of the facility's Part 70 air emission license, subsequent amendments, and NSR licenses.

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC	NH ₃
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				0.8	0.2	0.1	
Quarry #1 Pump				0.4	0.1		
Auxiliary Kiln Drive Engine	0.5	0.5		19.3	4.2	1.5	
Slag Dryer	3.5	2.5	39.0	8.2	4.7	0.6	
Total TPY	85.3	84.3	345.6	1,561.7	852.4	59.7	32.9

Total Licensed Annual Emissions for the Facility Tons/year

(used to calculate the annual license fee)

III. <u>AMBIENT AIR QUALITY ANALYSIS</u>

Dragon previously submitted an ambient air quality impact analysis outlined in air emission license A-326-71-U-R/A (dated November 19, 2002) demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards (AAQS). An additional ambient air quality impact analysis is not required for this NSR license.

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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 New Source Review License Amendment A-326-77-14-A pursuant to the preconstruction licensing requirements of 06-096 C.M.R. ch. 115 and subject to the specific conditions below.

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

SPECIFIC CONDITIONS

The following shall replace Condition (1) of NSR Air Emission License A-326-77-13-A (10/22/20):

(1) Slag Dryer

- A. Dragon shall process a maximum of 150,000 tons per year (12-month rolling total) of slag in the Slag Dryer, based on the quantity of product exiting the Slag Dryer. Records shall be maintained documenting compliance with this limit on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BACT]
- B. Fuel
 - 1. Dragon is licensed to fire natural gas, propane, distillate fuel, #4 fuel oil, and specification waste oil in the Slag Dryer.
 - 2. Total fuel use for the Slag Dryer Burner shall not exceed 113,424 MMBtu/yr MMBtu/year (12-month rolling total) of heat input.

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- 3. Specification waste oil use for the Slag Dryer Burner shall not exceed 110,638 MMBtu/year (12-month rolling total) of heat input.
- 4. Dragon shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm), #4 fuel oil with a maximum sulfur content that exceeds 0.5%, or specification waste oil with a maximum sulfur content that exceeds 0.7%.
- 5. Compliance shall be demonstrated by fuel records showing the quantity, type, and the percent sulfur of the fuel used (if applicable). Records of annual fuel use shall be kept on a monthly and 12-month rolling total basis. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the tank containing the fuel to be fired.

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

C. Emissions from the Slag Dryer shall not exceed the following when firing each of the following fuels: [06-096 C.M.R. ch. 115, BACT]

	PM	PM 10	PM2.5	SO ₂	NOx	CO	VOC
Fuel	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Natural gas				0.04	7.41	6.23	0.41
Propane				0.05	10.80	6.23	0.83
Distillate Fuel				0.12	10.96	2.74	0.11
#4 Fuel Oil				38.62	10.96	2.74	0.11
Spec. Waste Oil	0.2	0.2	0.2	53.30	10.26	2.70	0.54

D. Visible emissions from the Slag Dryer baghouse shall not exceed 10% opacity on a sixminute block average basis. Dragon shall take corrective action if visible emissions from the baghouse exceed 5% opacity. [06-096 C.M.R. ch. 101, § 3(B)(3)]

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E. Dragon shall maintain and operate a baghouse to control emissions during operation of the Slag Dryer. Dragon shall maintain records of all routine and non-routine maintenance conducted on the baghouse. Such records shall contain the location, date, nature of maintenance or failure, maintenance action taken, and action taken to correct each failure. [06-096 C.M.R. ch. 115, BACT]

DONE AND DATED IN AUGUSTA, MAINE THIS 20^{th} day of $\mathrm{JANUARY},2023$.
DEDADTMENT OF ENVIRONMENTAL DEOTECTION
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BY: for
MELANIE LOYZIM, COMMISSIONER
PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES
Date of initial receipt of application: December 23, 2021
Date of application acceptance: January 12, 2022

Date filed with the Board of Environmental Protection:

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

FILED

JAN 20, 2023

State of Maine Board of Environmental Protection