



DEPARTMENT ORDER

**Dupont Nutrition USA, Inc.  
Knox County  
Rockland, Maine  
A-366-77-8-A**

**Departmental  
Findings of Fact and Order  
New Source Review  
NSR #8**

**FINDINGS OF FACT**

After review of the air emission license 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

FACILITY	Dupont Nutrition USA, Inc. (Dupont)
LICENSE TYPE	06-096 C.M.R. ch. 115, Minor Modification
NAICS CODES	311999, 325412
NATURE OF BUSINESS	Refined Hydrocolloid Products
FACILITY LOCATION	Crocketts Point, Rockland

B. NSR License Description

Dupont Nutrition USA, Inc. (Dupont) has requested a New Source Review (NSR) license to collect and vent emissions from a bulk bag handling system for hydrated lime (Hydrated Lime Bulk Bag System).

C. Emission Equipment

The following equipment is addressed in this NSR license:

**Process Equipment**

<b>Equipment</b>	<b>Pollution Control Equipment</b>
Hydrated Lime Bulk Bag System	Cartridge Filter

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.

The application for Dupont 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) for existing affected emission units 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. The selected 24-month baseline period can differ on a pollutant-by-pollutant basis. However, there are no existing emission units which are considered “affected” by this project.

The only equipment addressed by this license are new emission units. Baseline actual emissions for new equipment are considered to be zero for all pollutants; therefore, the selection of a baseline year is unnecessary.

2. Projected Actual Emissions

New emission units must use potential to emit (PTE) emissions for projected actual emissions (PAE). Those emissions are presented in the following table.

**Projected Actual Emissions**

<b>Equipment</b>	<b>PM (tpy)</b>	<b>PM<sub>10</sub> (tpy)</b>	<b>PM<sub>2.5</sub> (tpy)</b>
Hydrated Lime Bulk Bag System	< 0.1	< 0.1	<0.1

The expected maximum throughput for the Hydrated Lime Bulk Bag System is 50,000 lb/year. The proposed control equipment has a rated control efficiency of 99.9%. Therefore, the PTE for particulate matter from the Hydrated Lime Bulk Bag System is estimated to be significantly less than 0.1 tpy.

### 3. Emissions Increases

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

Pollutant	Baseline Actual Emissions (ton/year)	Projected Actual Emissions (ton/year)	Emissions Increase (ton/year)	Significant Emissions Increase Levels (ton/year)
PM	0	< 0.1	< 0.1	25
PM <sub>10</sub>	0	< 0.1	< 0.1	15
PM <sub>2.5</sub>	0	< 0.1	< 0.1	10

### 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. Dupont has submitted an application to incorporate the requirements of this NSR license into the facility's Part 70 air emission license.

## II. BEST PRACTICAL TREATMENT (BPT)

### 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. Hydrated Lime Bulk Bag System

Dupont proposes to install a Hydrated Lime Bulk Bag System. The proposed system will use 2,000-pound supersacks to add lime to the Algefiber system. It replaces a manual process which uses 50-pound bags. The system has two dust collection points. The first collection point is at the super sack discharge point where lime is fed into the feed screw. The second is on the slurry mix tank where the lime is mixed with water to create lime slurry.

The Hydrated Lime Bulk Bag System will exhaust outside the building. Dupont proposed controlling emissions of particulate matter through use of a cartridge filter that uses pulses of air to clean the filter media, similar to a baghouse. The particulate matter control efficiency of the cartridge filter is rated at 99.9%. The cartridge filter will be equipped with a leak detector which alarms to indicate possible damage to the cartridge filters.

The Department determines that the use of a cartridge filter and the visible emission limit applicable to baghouses in *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101, to be BACT for control of particulate matter from the exhaust of the Hydrated Lime Bulk Bag System. Dupont shall perform monthly inspections of cartridge filter including verifying that the leak detector is in working order.

Visible emissions from the Hydrated Lime Bulk Bag System cartridge filter shall not exceed an opacity of 10% on a six-minute block average basis. Dupont shall take corrective action if visible emissions exceed 5% opacity on a six-minute block average basis.  
[06-096 C.M.R. ch. 101, § 3(B)(3)]

Dupont shall conduct and keep records of the following for the Hydrated Lime Bulk Bag System:

1. Monthly inspections of the cartridge filter and associated leak detector;
2. Any cartridge filter or leak detector malfunction including the date and time of any alarms and resulting corrective actions or response; and
3. Any maintenance activities (planned or unplanned) performed on the cartridge filter or leak detector.

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. 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

This license will not change the facility's licensed annual emissions.

**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 A-366-77-8-A pursuant to the preconstruction licensing requirements of 06-096 C.M.R. ch. 115 and subject to the specific conditions below.

Severability. 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.

**SPECIFIC CONDITIONS**

(1) **Hydrated Lime Bulk Bag System**

- A. Dupont shall operate and maintain a cartridge filter for control of particulate matter for the Hydrated Lime Bulk Bag System. [06-096 C.M.R. ch. 115, BACT]
- B. Visible emissions from the Hydrated Lime Bulk Bag System cartridge filter shall not exceed an opacity of 10% on a six-minute block average basis. Dupont shall take corrective action if visible emissions exceed 5% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(B)(3)]
- C. DuPont shall operate and maintain a leak detector on the cartridge filter in accordance with the manufacturer's recommendations.  
[06-096 C.M.R. ch. 115, BACT]

D. Dupont shall conduct and maintain records of the following:

1. Monthly inspections of the cartridge filter and associated leak detector;
2. Any cartridge filter or leak detector malfunction including the date and time of any alarms and resulting corrective actions or response; and
3. Any maintenance activities (planned or unplanned) performed on the cartridge filter or leak detector.

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

DONE AND DATED IN AUGUSTA, MAINE THIS 31<sup>st</sup> DAY OF AUGUST, 2021.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  for  
MELANIE LOYZIM, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 8/2/2021

Date of application acceptance: 8/10/2021

Date filed with the Board of Environmental Protection:

This Order prepared by Lynn Muzzey, Bureau of Air Quality.

**FILED**  
AUG 31, 2021  
State of Maine  
Board of Environmental Protection