



DEPARTMENT ORDER

Dupont Nutrition USA, Inc.
Knox County
Rockland, Maine
A-366-70-J-A

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Amendment #2

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	Dupont Nutrition USA, Inc. (Dupont)
LICENSE TYPE	Part 70 Significant Modification
NAICS CODES	311999, 325412
NATURE OF BUSINESS	Refined Hydrocolloid Products
FACILITY LOCATION	Crocketts Point, Rockland

DuPont is a manufacturer of carrageenan, clarified locust bean gum, and other hydrocolloids used mostly as food additives. DuPont also manufactures agarose for use in molecular biology.

New Source Review (NSR) license A-366-77-8-A (issued 8/31/2021) addressed the installation of a Hydrated Lime Bulk Bag System. Dupont has requested that the provisions of the NSR license be incorporated into their Part 70 license.

Additionally, this license updates visible emission limits for the facility's existing baghouses due to recent revisions to *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101.

B. Emission Equipment

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

Process Equipment

Equipment ID	Pollution Control Equipment
#1, Lime Unloading	Baghouse
#3, Weed Cleaning System	Baghouse
#4, Perlite Unloading	Baghouse
#7, Vacuum System for Belt Dryer Area	Baghouse
#8, Grinder Feed System	Baghouse
#9, A44 Grinder System	Baghouse
#10, ACM 60 Grinder System	Baghouse
#11, Tote Dumper System	Baghouse
#12, Blending Product Conveyor System	Baghouse
#13, Blending Area & Vacuum System	Baghouse
#14, Bulk Bag Filling System	Baghouse
#16, Specialty Blender System	Baghouse
#29, Blending & Packaging System	Baghouses
#18, Agarose Grinding Process	Baghouse
#30, Central Vacuum System	Baghouses
Hydrated Lime Bulk Bag System	Cartridge Filter

C. 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.

Dupont has requested incorporation into the Part 70 Air License the relevant terms and conditions of NSR license A-366-77-8-A issued 8/31/2021 pursuant to *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115. Therefore, this license application was considered a Part 70 Significant License Modification and processed under *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140.

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.

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. Hydrated Lime Bulk Bag System

Dupont proposed to install a Hydrated Lime Bulk Bag System. The proposed system uses 2,000-pound supersacks to add lime to the Algefiber system. It replaced a manual process which used 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 exhausts 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 is equipped with a leak detector which alarms to indicate possible damage to the cartridge filters.

The Department determined 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

C. Visible Emissions

Visible Emissions Regulation, 06-096 C.M.R. ch. 101 was updated in 2019. The visible emission limit shown below is applicable both to the Hydrated Lime Bulk Bag System cartridge filter and all other existing baghouses at the facility.

Visible emissions from the Hydrated Lime Bulk Bag System cartridge filter and all facility baghouses shall each 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)]

D. Facility Annual Emissions

This license amendment 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 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.

The Department hereby grants the Part 70 License Amendment A-366-70-J-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-366-70-G-R/A, in amendment A-366-70-H-A, and the following conditions.

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**.

Severability. 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 Specific Condition (17) of Air Emission License A-366-70-H-A:

(17) PM Emissions from Process Equipment

A. Dupont shall maintain and operate controls for particulate matter on the following equipment:

Equipment ID	Pollution Control Equipment
#1, Lime Unloading	Baghouse
#3, Weed Cleaning System	Baghouse
#4, Perlite Unloading	Baghouse
#5, Cook Vent Filtration System	Cyclone
#7, Vacuum System for Belt Dryer Area	Baghouse
#8, Grinder Feed System	Baghouse
#9, A44 Grinder System	Baghouse
#10, ACM 60 Grinder System	Baghouse
#11, Tote Dumper System	Baghouse
#12, Blending Product Conveyor System	Baghouse
#13, Blending Area & Vacuum System	Baghouse
#14, Bulk Bag Filling System	Baghouse
#16, Specialty Blender System	Baghouse
#29, Blending & Packaging System	Baghouses
#18, Agarose Grinding Process	Baghouse
#30, Central Vacuum System	Baghouses

[06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

B. 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 (A-366-77-8-A, 8/31/2021)]

C. DuPont shall operate a leak detector on the Hydrated Lime Bulk Bag System cartridge filter. [06-096 C.M.R. ch. 115, BACT (A-366-77-8-A, 8/31/2021)]

D. Parameter Monitoring

Dupont shall operate bag leak detectors on all of the baghouses. The bag leak detectors shall be operated continuously in accordance with the manufacturer's recommendations and records maintained indicating the date and time of any alarms

and resulting corrective actions or response. These events are not considered deviations provided DuPont responds to an alarm by either determining that the baghouse did not malfunction (i.e., false alarm) and no corrective action is necessary or by immediately shutting down the process. These monitors are included in DuPont's CAM plan. [40 C.F.R. Part 64]

- E. Visible emissions from the Hydrated Lime Bulk Bag System cartridge filter and the facility's baghouses shall each 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)]
- F. Visible emissions from any general process source, including cyclones, shall not exceed 20% opacity on a six-minute block average basis. Compliance with this visible emission limit shall be demonstrated in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 upon request by the Department. [06-096 C.M.R. ch. 101, § 3(B)(4)]

G. Periodic Monitoring

Dupont shall conduct and maintain records of the following periodic monitors for Process PM emissions [06-096 C.M.R. ch. 140, BPT and 06-096 C.M.R. ch. 115, BACT (A-366-77-8-A, 8/31/2021)]:

- 1. Monthly inspections of each baghouse, cyclone, the Hydrated Lime Bulk Bag System cartridge filter, and any associated leak detectors;
- 2. Any baghouse, cyclone, 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 each baghouse, cyclone, cartridge filter, and leak detectors.

DONE AND DATED IN AUGUSTA, MAINE THIS 26th DAY OF OCTOBER, 2021.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  for
MELANIE LOYZIM, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-366-70-G-R/A.

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
OCT 26, 2021
State of Maine
Board of Environmental Protection