STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

Dragon Products Company, LLC
Knox County
Thomaston, Maine
A-326-77-4-A

Departmental
Findings of Fact and Order
New Source Review
Amendment #1

After review of the air emissions license amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	Dragon Products Company, LLC (Dragon)
PART 70 LICENSE NUMBER	A-326-70-A-I
LICENSE TYPE	06-096 CMR 115 Minor Modification
NAICS CODES	32731
NATURE OF BUSINESS	Cement Manufacturing
FACILITY LOCATION	Thomaston, Maine
PART 70 LICENSE ISSUANCE DATE	December 31, 2003
NSR AMENDMENT ISSUANCE DATE	January 27, 2010

B. Amendment Description

Dragon submitted a minor modification to license the new clinker storage building dust collection system.

C. Emission Equipment

The following equipment is addressed in this air emission license:

Emission Unit	Pollution Control Equipment
Clinker Storage	Baghouse/fabric filter

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD, SUITE 6
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04679-2094
(207) 764-0477 FAX: (207) 760-3143

web site: www.maine.gov/dep

D. Application Classification

The application for the dust collection system on the clinker storage building does not violate any applicable federal or state requirements and does not reduce monitoring, reporting, testing or record keeping. There will be no emissions increases.

The modification has been processed under *Minor and Major Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 24, 2005) and will be incorporated into the pending Part 70 air emission license renewal.

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 CMR 100 (last amended December 24, 2005). 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 CMR 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Clinker Storage Building Dust Collector System

Dragon has installed a new pulse-jet dust collection system for the clinker storage building pursuant to the Administrative Consent Agreement issued to the facility on October 10, 2008. This Supplemental Environmental Project (SEP) controls fugitive dust from the clinker storage building, especially when the main doors are opened to allow access for equipment.

The dust collection system controls particulate matter by creating a negative pressure on the clinker storage building and then captures, collects, and reintroduces any fugitive dust back into the building. Negative pressure is created by pulling the building air into the dust collector using a 28,000 ACFM (actual cubic feet/minute) fan. The dust collection system is located on the North side of the clinker storage building adjacent to the main doors.

The air stream is pulled into the housing through an inlet duct on the hopper. The hopper is baffled, slowing the air stream to allow for the heavier particles to fall into the bottom of the hopper. The air stream then passes through the collection chamber where the remaining particulate matter is collected on the outside of pleated cartridge style filter media, with a total filter area of 8194 square feet (air-to-cloth ratio of 3.42 CFM per square feet). The filtered air then passes out through the top to the atmosphere.

To maintain differential pressure and optimal efficiency, the cartridges undergo a cleaning cycle periodically during operation with the pulse-jet system. A high pressure jet of compressed air causes the filter to flex and shed dust buildup. Dust is collected inside the hopper and is gravity fed back into the clinker storage building. The dust can then be reintroduced into the cement manufacturing system by being transported to the clinker feed system.

Dragon has set the filter media cartridges cleaning cycles to be based on cartridge differential pressure. Gauges inside the dust collector measure the airflow resistance across the cartridges and a cleaning cycle is initiated when the resistance drops below the designed set point. In the event of a pressure gauge malfunction or if the gauges are taken off-line for maintenance, the cleaning cycles can be initiated by a pre-programmable timer.

BACT for the control of particulate matter from the clinker storage building shall be the operation of the dust collection system. Visible emissions from the cartridge filter unit shall not exceed 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1 hour period. The facility shall take corrective action if visible emissions from the cartridge filter unit exceed 5% opacity.

Periodic Monitoring

Periodic monitoring for the dust collection system for the clinker storage building shall include a weekly visible inspection. To document system compliance, Dragon shall keep an operation and maintenance log recording the weekly inspections, the date and location of all failures, as well as all routine maintenance. The operation and maintenance log shall also include any change from the manufacturer recommended differential pressure startup/initial operation settings and reasons for the change.

III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a minor modification shall be determined on a case-by case basis. Based on the information available in the file, the similarity to existing sources, and the emission reductions expected from the dust collection system, Dragon is not required to submit an ambient air quality analysis for this amendment.

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 A-326-77-4-A pursuant to the preconstruction licensing requirements of 06-096 CMR 115 and subject to the standard and special conditions below.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License 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) Clinker Storage Building Dust Collector System

A. Dragon shall operate the clinker storage building dust collector system to minimize particulate matter emissions from the clinker storage building and meet a visible emission limit from the fabric cartridge unit not to exceed 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average on a 1 hour period. The facility shall take corrective action if visible emissions from the fabric cartridge unit exceed 5% opacity. [06-096 CMR 101 and 115]

B. Dragon shall establish a weekly visible inspection routine on the dust collector system. To document compliance on the system, Dragon shall keep an operation and maintenance log recording the weekly inspections, the date and location of all failures, as well as all routine maintenance. The operation and maintenance log shall also include any change from the manufacturer recommended differential pressure startup/initial operation settings and reasons for the change. [06-096 CMR 115, BACT]

DONE AND DATED IN AUGUSTA, MAINE THIS 27th DAY OF January , 2010.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: James P. Brooks for
DAVID P. LITTELL, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: October 26, 2009
Date of application acceptance: October 28, 2009

Date filed with the Board of Environmental Protection:

This Order prepared by Kathleen E. Tarbuck, Bureau of Air Quality.