

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

REGION 4 HEADQUARTERS
1150 NORTH WESTCOTT ROAD
SCHENECTADY, NEW YORK 12306
(518) 357-2069
(518) 357-2460 (FAX)



Michael D. Zagata
Commissioner

May 9, 1996

William Morris
Director of Compliance
Norlite Corporation
628 So. Saratoga Street
Cohoes, New York 12047

RE: DEC #4-0103-16/16-0
373 HW/APC Permit Modification
Lightweight Aggregate/HW Fuel
Cohoes-C, Albany Co.

Dear Mr. Morris,

In response to Norlite's 4/3/96 request to modify the Fugitive Dust Plan, the Department hereby approves this change. This approval covers only the change to convey the collected dust from the clinker cooler multiclones to the baghouse dust silo pneumatically. Please substitute the attached revised page to the Fugitive Dust Plan Addendum (Revision 2, April, 1996, Page 8-2) for the superseded page. As part of the operation of this system the Department does have a concern that care is taken to assure the system is not over pressurized causing dust to leak from seals around the top of the silo. If you have any questions please feel free to contact either Bob Warland or myself.

Sincerely,

William J. Clarke
Regional Permit Administrator
Region 4

CC: P. Mack
R. Warland
C. Van Guilder
I. Natarajan

onto a truck on the same day. Following the installation of the stacking conveyor, trucks transporting lightweight aggregate fines will be loaded directly from the conveyor to eliminate intermediate transfer and handling.

Norlite does not and will not store bag house dust outdoors. Only blockmix, which contains baghouse dust, will be stored outside. Block mix is produced in the finish mill and is stored nearby in a short-term production pile. Norlites' long-term block mix inventory is stored in a more remote area of the plant which is far removed from Norlite's neighbors. Current practices to minimize dust formation include frequent watering of the short-term production pile by an automatic sprinkler. The working faces of the long-term block mix storage piles face leeward, i.e., towards the southeast. Therefore, loose material is shielded from the prevailing wind. Undisturbed faces of these piles form a crust which virtually eliminates dust pickup by the wind.

Storage pile contouring will be adopted as a future measure to control emission of fugitive dusts from the long-term block mix storage piles. Storage piles will be kept as low to the ground as possible and will be oriented to present minimum working surface area to the prevailing wind. Additionally, the leading edges of piles will be smoothed to minimize air turbulence and dust pick up by the wind.

- Clinker Dust to Clinker Belt: The dust collected in the Barron system (Fig. 8-8) that is currently transferred to the clinker pile via the clinker conveyor belt will be transferred to an enclosed hopper. The dust will be pneumatically conveyed from the hopper to the baghouse dust silos in a dry form.
- Windblown Dust Migrating Across Eastern Boundary: Two rows of Douglas Fir or Spruce trees will be planted along the eastern boundary of the plant in area shown in Figure 8-2 (Item 8). The trees will be placed far enough apart to allow for future growth and will be staggered to provide a continuous wind break along the boundary. When planted, the trees will be 10 to 12 feet in height with an approximate branch span 6 feet. The trees will be planted on a raised berm to increase their effective initial height.

Douglas Fir or Spruce trees were selected because of they grow well in a variety of soil conditions, they have very dense foliage and they maintain their density as they grow. The Douglas Fir and Spruce trees were two of the three types of evergreen trees recommended by the Albany County Cooperative Extension Horticulture Agent.

- Finish Mill Short Term Storage Piles: The short term storage piles at the finish mill (Fig. 8-2; Item 7) are currently wetted with Toro or Rainbird type sprinklers as shown in Figures 8-6 and 8-7. These sprinkler systems will continue to be used in all non-freezing weather conditions. The sprinkler on the block mix conveyor belt will be installed at the new radial stacking conveyor head pulley (Fig. 8-2, Item 2) to ensure that the block mix pile will continue to be sprayed with water.
- Roadways: The procedure detailed in Section 7.0 of this report was implemented on May 1, 1995. The purpose of this procedure is to make sure that the facility roadways are adequately watered to suppress dust. This procedure includes provisions to ensure that equipment and manpower are always available to water the roads when the temperature is above freezing and there is heavy vehicle traffic present in the plant. A site plan drawing, Figure 8-11 has been included to depict areas that the water truck will cover.

SCI-TECH, INC.

Engineering and Environmental Services

Suite 108
20 Beaver Road
Wethersfield, CT 06109
Phone (203) 257-0767
Fax (203) 257-3530

March 27, 1996

William J. Clarke
Regional Permit Administrator
Region 4
New York State Department
of Environmental Conservation
1150 North Wescott Road
Schnectady, NY 12306-2014



Dear Mr. Clarke:

SUBJECT: Fugitive Dust Plan Addendum Change

Norlite Corporation has revised one page of the October 1995 Fugitive Dust Plan Addendum. SCI-TECH, INC. has reviewed this change and believes it to be an improvement in Norlite's dust control strategy.

Handling the clinker cooler dust as a wet slurry maintained the potential for creating dust during transport due to poor mixing of the water and dust. Conveying the dust in a dry form to the bag house dust silos, using a pneumatic vacuum system, significantly reduces the potential for dust emissions during handling. Furthermore, problems with excessive ground water run off and icing conditions during the cold season will be averted.

If you have any questions or comments please do not hesitate to call me directly at (860) 257-0767.

Sincerely,

SCI-TECH, INC.

Edward T. Brookman, P.E.
Principal Consulting Engineer

ETB/sal

CLARKE01.LTR

Norlite Corporation



628 So. Saratoga Street
P.O. Box 694
Cohoes, New York 12047
tel. (518) 235-0401
fax. (518) 235-0233

April 3, 1996

Mr. William J. Clarke
Regional Permit Administrator
New York State Department of
Environmental Conservation
Region 4
1150 North Westcott Road
Schenectady, New York 12306



Re: Request for Approval for Revision to Fugitive Dust Plan.

Dear Mr. Clarke:

Norlite Corporation, in conjunction with our consultant, SCI-TECH, Inc., is proposing to revise the Norlite Fugitive Dust Plan Addendum (FDP). Specifically, the revision consists of a change in operating methodology for the handling of dust collected from the clinker cooler exhaust stream. The fugitive emission control improvement for this area is described in the FDP, Section 8.0, Clinker Dust to Clinker Belt, p. 8-2.

With the concurrence of our consultant (see attached letter from E. Brookman to W. Clarke, dated 3/27/96) Norlite proposes to manage the unloading of dust from the clinker coolers multiclones into enclosed hoppers. The hoppers will then be unloaded pneumatically into the baghouse dust silo through existing pneumatic systems for transporting baghouse dust to the silos. The current FDP calls for unloading the clinker cooler multiclone dust into an enclosed hopper then unloading the hopper directly onto the clinker pile as a wet slurry. The revised method is superior for several reasons including:

1. This method can be used throughout the winter months without problems due to excessive icing from runoff during offloading of slurried material or freezing of material in the hopper prior to offloading. (Using the method currently given in the FDP, approximately 750 - 1000 gallons of water would be used to offload one hopper load. At normal production levels, each hopper will require unloading once every 24 hours, therefore, with both kilns running, a total of two hopper loads per day will be unloaded. This will result in approximately 1500 - 2000 gallons of water being directed onto the clinker pile each day.)
2. Eliminates the potential for increased runoff from the clinker piles (see above) due to offloading of slurried material from hopper in warmer weather.
3. Eliminates the potential for fugitive dust emissions from the hopper during offloading due to poor mixing of dust with water.

Mr. Edward T. Brookman of SCI-TECH, Inc., has reviewed and concurs with the improved effectiveness of the revised plan (see attached E. Brookman letter dated 3/27/96). The modification affects page 8-2 of the FDP which has been revised and is also included with this letter request.



Norlite would like to proceed with implementation of this revision as soon as possible. Since some new equipment has to be purchased and installed, Norlite is requesting an extension of 45 days (until June 15, 1996) to allow sufficient time for equipment procurement and to complete the installation and startup of the new equipment. The cost of implementing this modification is not expected to differ significantly from the method currently described in the FDP, therefore, the Escrow Account will remain sufficiently funded to complete the items described in the FDP Schedule (Table 8-1).

If you have any questions concerning this submittal, please feel free to call me or Mr. Brookman.

Sincerely,

Norlite Corporation

A handwritten signature in black ink that reads "Edward C. Burgher".

Edward C. Burgher
Director of Compliance

cc: R. Warland
E. Brookman
T. Lachell
W. Morris
A. Popp
R. Wallen

file: NCO96036.LTR

Fugitive Dust Plan Addendum - Revision 2 (April 1996)
Page 8-2, Clinker Dust to Clinker Belt

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