



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Mr. Jay Patterson
Lone Star Industries, Inc. dba Buzzi Unicem USA
PO Box 486
Greencastle, IN 46135

May 31, 2006

Re: Response to Review Request
No. **133-22780-00002**

Dear Mr. Jay Patterson:

Lone Star Industries, Inc. dba Buzzi Unicem USA, located at 3301 South County Road 150 W, Greencastle, IN 46135, submitted a review request on March 13, 2006. The letter was submitted to determine if Lone Star Industries, Inc. dba Buzzi Unicem USA requires an air pollution permit for certain modifications to their existing Gas Suspension Absorber (GSA).

The source has requested to eliminate a gas return loop that returns a portion of the bypass gas to the gas stream being drawn from the kiln via a quench fan. Specifically, the modification involves the following:

- Elimination of the duct permitting recirculation of air from the cyclone exit back to the gas stream for quenching.
- Replacement of the 200 horsepower dirty gas quench air fan with a 75 horsepower clean quench air fan.
- Diverting a portion of the cyclone exit gas to the preheater.
- Replacement of corroded conditioning tower duct work.
- Replacement of the GSA fan wheel with a higher temperature wheel and water cooled bearings.

The Permittee has stated in this review request that this modification will not increase the formation and subsequent emissions of any regulated pollutants, will not increase generation of waste dust, and will not effect production capacity. IDEM, OAQ has not reviewed any additional information and will not be making any determination in this regard as part of this review.

The modification may be exempt from the permitting requirements of 326 IAC 2, if the potential to emit of the modification is less than the following emission threshold levels as listed in 326 IAC 2-1.1-3(e)(1):

- (A) Five (5) tons per year of either particulate matter (PM) or particulate matter with an aerodynamic diameter less than ten (10) micrometers (PM₁₀).
- (B) Ten (10) tons per year of sulfur dioxide (SO₂).
- (C) Ten (10) tons per year of nitrogen oxides (NO_x).
- (D) Ten (10) tons per year of volatile organic compounds (VOC) for sources or modifications that that are not described by clause (E) below.
- (E) Five (5) tons per year of volatile organic compounds (VOC) for sources or modifications that require the use of air pollution control equipment to comply with the applicable provisions of 326 IAC 8.
- (F) Twenty-five (25) tons per year of carbon monoxide (CO).
- (G) Two-tenths (0.2) ton per year of lead (Pb).
- (H) One (1) ton per year of a single hazardous air pollutant (HAP) or two and one-half tons per year of any combination of hazardous air pollutants (HAPs) listed pursuant to Section 112(b) of the Clean Air Act (CAA).
- (I) Five (5) tons per year of the following regulated air pollutants:

- (i) Hydrogen sulfide (H₂S).
- (ii) Total reduced sulfur (TRS).
- (iii) Reduced sulfur compounds.
- (iv) Fluorides.

If there is a reasonable possibility that these changes to the source would constitute a “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a Clean Unit (or at a source with Plant-wide Applicability Limitation (PAL)), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), then the source will be required to keep records and report in accordance with Source obligation in 326 IAC 2-2-8 and Applicability in 326 IAC 2-3-2.

If a source can comply with exempt levels, the burden of proof lies with the source. If the source requires a definite decision to be made by the IDEM, the source must submit a permit application to IDEM. Based on the information provided in that application, IDEM can then make a final determination on the appropriate permit level for this source.

Information for obtaining environmental permits is available from the IDEM's Permit Wizard located at:
<http://www.in.gov/ai/appfiles/permitwizard/>

Air permit application instructions and forms are available at:
<http://www.in.gov/icpr/webfile/formsdiv/idem.html>

Questions should be directed to Jenny Acker, OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204-2251, or call (800) 451-6027, and ask for Jenny Acker or extension 2-8253, or dial (317) 232-8253.

Sincerely,

Original signed by

Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

Attachments

JLA

cc: File - Putnam County
Putnam County Health Department
Air Compliance – Ray Schick