FINAL DETERMINATION

PERMITTEE

Lehigh Hanson (Hanson Pipe & Precast, LLC)
840 West Avenue
Deland, Florida 32720

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Management Program
Northwest District
160 W. Government Street, Room 308
Pensacola, Florida 32502-5740

PROJECT

Air Permit No. 0390039-004-AC
Minor Source Air Construction Permit
Hanson Pipe & Precast, LLC – Gretna Facility

This permit authorizes the use of a portable crusher owned and operated by a third party and the addition of a concrete batching plant at the Hanson Pipe & Precast, LLC Gretna Facility (Hanson). Hanson is proposing to commence production of precast concrete products in addition to pipes. This permit updates the description of existing emissions units to accurately define operations at the facility.

NOTICE AND PUBLICATION

The Department distributed a draft minor source air construction permit package on June 16, 2011. The applicant published the Public Notice in the Gadsden County Times on June 30, 2011. The Department received the proof of publication on July 11, 2011. No requests for administrative hearings or requests for extensions of time to file a petition for administrative hearing were received.

COMMENTS

No comments on the Draft Permit were received from the public or the EPA Region 4 Office.

Applicant

On June 22, 2011, the Department received comments from the applicant. The following summarizes the comments and the Department's response. Requested additions are double-underlined, requested deletions are crossed through and facility comments are in italics. Department changes are in bold type and brackets.

(1) Page 6 of 15 Section 3. A. Concrete Batch Plant #2: **[Revised as requested]**

Hanson is proposing to add a new concrete batching plant to the Gretna facility. The new concrete batching plant will include one split storage silo with two compartments for the storage of cement and cement supplement, a weigh hopper and a concrete mixer. Cement and cement supplement delivered to the Gretna facility via tanker truck will be pneumatically loaded into the split silo. Each silo compartment will be controlled by a separate WAM Corp. FC3J 24-250 pulse jet baghouse with an exhaust flow rate of 1,500 actual cubic feet per minute (acfm) and an air to cloth ratio of 6:1. ~~Sand and aggregate from the feed bins and cement and cement supplement from the storage silo will then be transferred to the weight hopper via conveyor.~~ Sand and aggregate will be transferred from stockpiles via front loader to one of four (4) elevated feed bins via enclosed conveyor. Sand and aggregate from the feed bins will then be transferred to the mixer via skip bucket. Cement and cement supplement from the storage silo will then be transferred to the weigh hopper via gravity feed. The material will then be gravity fed from the weigh hopper and the skip bucket to the mixer where it will be combined with water to make concrete. The weigh hopper and mixer loading operations will be controlled by a single WAM Corp. FC2J07-65 pulse jet baghouse with an exhaust flow rate of ~~390~~ 350 acfm and an air to cloth ratio of 6:1. The concrete batch plant has a maximum production capacity of 394,200 cubic yards of concrete per year (yd3/yr).

EQUIPMENT

1. Concrete Batch Plant: Permittee is authorized to construct a concrete batch plant to provide concrete to produce concrete pipes and precast concrete products. The new concrete batching plant will include one split storage silo with two compartments for the storage of cement and cement supplement, a weigh hopper and a concrete mixer. Each silo compartment will be controlled by a separate WAM Corp. FC3J 24-250 pulse jet baghouse with an exhaust flow rate of 1,500 actual cubic feet per minute (acfm) and an air-to-cloth ratio of 6:1. ~~Sand and aggregate from the feed bins and cement and cement supplement from the storage silo will then be transferred to the weight hopper via conveyor.~~ Sand and aggregate will be transferred from stockpiles via front loader to one of four (4) elevated feed bins via enclosed conveyor. Sand and aggregate from the feed bins will then be transferred to the mixer via skip bucket. Cement and cement supplement from the storage silo will then be transferred to the weigh hopper via gravity feed. The material then will be gravity fed from the weigh hopper and the skip bucket to the mixer where it will be combined with water to make concrete. The weigh hopper and mixer loading operations will be controlled by a single WAM Corp. FC2J07-65 pulse jet baghouse with an exhaust flow rate of ~~390~~ 350 acfm and an air to cloth ratio of 6:1. [Application No. 0390039-004-AC]

(2) *Page 7 of 15 Section 3. A. Concrete Batch Plant #2:* **[Condition not removed. Revised condition by adding "(if dry materials are being loaded")]**

EMISSIONS STANDARDS

~~b. Use of spray bar, chute or partial enclosure to mitigate emissions at the drop point to the truck.~~
This condition should be removed as the dry materials are combined with water within the mixer, no fugitive dust will occur from the mixer drop point.

(3) *Page 7 of 15 Section 3. A. Concrete Batch Plant #2 :* **[Revised as requested]**

TESTING REQUIREMENTS

9. ~~If emissions from the weigh hopper (batcher)~~ The weigh hopper and mixer loading operations are controlled by a dust collector which is separate from the silo dust collectors, visible emissions tests of the weigh hopper and mixer ~~(batcher)~~ dust collector exhaust point shall be conducted while batching at a rate that is representative of the normal batching rate and duration. Each test report shall state the actual batching rate during emissions testing. [Rule 62-296.414(3)(c)&(d), F.A.C.]

(4) *Page 9 of 15 Section 3. B. Portable Concrete Crushing System*

EQUIPMENT **[Added "Screeners, separate from the crusher system, may be used on site concurrently with the crusher system."]**

1. Crusher System: Permittee is authorized to use only one Crusher System at this site at any time, which includes unloading area, hopper, screeners, conveyors, crusher and storage piles. [Application No. 0390039-004-AC]

Please clarify if a crushing contractor brings a screener to the facility can he use it in concurrently with the crusher or would he need to perform each operation separately?

PERFORMANCE RESTRICTIONS **[Deleted condition and renumbered accordingly]**

~~2. Crusher Engine: The crushers' engines shall not be larger than a 325 Hp maximum diesel engine with a maximum design heat input rate of 2.28 MMBtu/hr. The engines shall be fired with No. 2 fuel oil. [Rule 62-210.300(3)(a)36., F.A.C., Application No. 0390039-004-AC]~~

Would it be possible to remove the crusher engine restriction as the make and model of the crusher is not controlled by the facility and engine emissions are an insignificant source as well as we are limiting the hours of operation and maximum throughput?

(5) *Page 10 of 15 Section 3. B. Portable Concrete Crushing System* **[Deleted condition and renumbered accordingly]**

1. Unconfined Emissions of Particulate Matter: Unconfined emissions shall be controlled by using a water suppression system with spray bars located wherever unconfined emissions occur at the feeder, the entrance and exit of the crusher, the screen, and the conveyor drop points. (Applicable to affected facilities on or after April 22, 2008) [Rule 62-296.320(4)(c), F.A.C.]

(6) *Page 12 of 15 Section 3. B. Portable Concrete Crushing System* **[Revised as shown below requested changes]**

20. Crusher Operation Records: In order to document crusher compliance, Permittee shall record the following while the crushing system is on site:

a. facility name, facility ID No., emission unit ID No., crushing system owner's name, Florida General or non-Title V Air Operation Permit No., crushing system serial number and any other identification information so each crushing system can be clearly distinguished from another crushing system;
~~b. manufacturer's maximum rated capacity in Tons Per Hour for the material with the highest processing rate;~~ *Can this be removed as we have limited the maximum throughput to 195,000 tons per 12 months?.*
c. operating configuration while on-site to include specific pieces of equipment, emission points ~~and/or a process flow diagram;~~ *Can the Process Flow Diagram be removed as we do not have an environmental manager onsite?*
d. date of most recent visible emissions test and a copy of the test report;
e. date brought on site, date removed from site.
f. hours of operation: ~~per day~~, per month and per rolling twelve month total; and, *Can the per day requirement be removed as we are limiting by 975 hours per 12 months not a daily rate?*
g. concrete throughput in tons: ~~per day~~, per month and per rolling twelve month total; *Can the per day requirement be removed as the maximum throughput is limited to 195,000 tons per 12 months not a daily rate?*

This information shall be available no later than the last working day of the month following the end of each calendar month, and shall be made available for inspection upon request by the Department.
[Rule 62-4.070(3) F.A.C.]

Crusher Operation Records: In order to document crusher compliance, Permittee shall require the crushing contractor to record and provide to the permittee the following, while the crushing system is on site:

a. facility name, facility ID No., emissions unit ID No., crushing system owner's name, Florida General or non-Title V Air Operation Permit No., crushing system serial number and any other identification information so each crushing system can be clearly distinguished from another crushing system;
b. operating configuration while on-site to include specific pieces of equipment, emission points;
c. date of most recent visible emissions test and a copy of the test report;
d. date brought on site, date removed from site.
e. hours of operation: per day*, per month and per rolling 12-month total; and,
f. concrete throughput in tons: per day*, per month and per rolling 12-month total;

This information shall be available no later than the last working day of the month following the end of each calendar month and shall be made available for inspection upon request by the Department. *If the crushers' engines have run-time hour meters, it is acceptable to log, on the last day of each month, the run hours reading and not have a daily hour's entry in the log.
[Rule 62-4.070(3) F.A.C.]

(7) *Page 14 of 15 Section 3. C. Forming and Coating Operations* **[Revised as shown below requested changes]**

RECORDS AND REPORTS

3. VOC and HAP emissions shall be tracked on logs commencing from the date of issuance of this permit with monthly materials usage and emission calculations based on the VOC and HAP content (wt %) of the materials used or purchased based on MSDS information. At a minimum, the logs shall include:

- Identification of the raw materials (solvent, coatings) used.
- Quantity and composition of the materials used and if different materials received at plant site identifying total VOC content, total HAP content, and individual HAP content for each material.
- A 12-month rolling average accounting of the raw material used shall be documented through purchase receipts, records and sales receipts, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period. [Rule 62-210.370(2)(c)]
- VOC, total HAP, and individual HAP emissions based on materials used or purchased.

Please add the additional statement based on the Facility-Wide Recordkeeping for VOC and HAP emissions referenced on Page 4 of 15 in Section 2 Administrative Requirements.

VOC and HAP emissions shall be tracked on logs commencing from the date of issuance of this permit with monthly materials usage and emission calculations based on the VOC and HAP content (wt %) of the materials used or purchased based on MSDS information. At a minimum, the logs shall include:

- **Identification of the materials (solvent, coatings) used.**
- **Quantity and composition of the materials used and if different materials received at plant site identifying total VOC content, total HAP content, and individual HAP content for each material.**
- **A 12-month rolling average accounting of the material used shall be documented through purchase receipts, records and sales receipts, the amount of material purchased during the computational period, and the amount of material disposed of in the liquid phase during such period.**
- **Total VOC, total HAP, and individual HAP emissions based on materials used or purchased.**

[Rule 62-210.370(2)(c)]

CONCLUSION

The final action is to issue the permit with any changes, corrections and clarifications as described above.