

Response to Comments

Response to comments for: Permit-To-Install and Operate

Facility ID:	0322020256
Facility Name:	Erie Materials
Facility Description:	Crushed and Broken Limestone
Facility Address:	9220 Portland Road Sandusky, OH 44870 Erie County
Permit #:	P0105371, OAC Chapter 3745-31 Modification
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the Sandusky Register on 03/09/2010. The comment period ended on 04/19/2010.	
Hearing date (if held)	04/14/2010
Hearing Public Notice Date (if different from draft public notice)	

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

1. Topic: **Health Concerns**

- a. Comment: **Several articles were submitted as evidence regarding the levels and health risks of air toxic contaminants and Hazardous Air Pollutants (HAP's) emitted from asphalt plant operations. The articles included research done by Blue Ridge Environmental Defense League (BREDL) and a significant amount of information pertaining to Polycyclic Aromatic Hydrocarbons (PAH's).**

Response: The levels of individual air toxic contaminants and individual/combined HAP emissions emitted from the asphalt plant were determined using a U.S. EPA document titled "AP-42, Compilation of Air Pollution Emission Factors". The amount of air toxics and HAPs emitted do not exceed any threshold levels that would require specific action to address such emission levels. Despite the absence of any requirement to address air toxics and HAPs, Ohio EPA did perform an analysis for two compounds which would have the highest emission rate for air toxics from the asphalt plant. The results of the analysis indicated that the emission levels were significantly below acceptable concentrations.

- b. Comment: **"All we know is that it is not just an odor problem. It gives you headaches and makes you sick because it is very bad. And you see a lot of that on a regular basis when stuff like that happens, so it needs to be addressed before any permit,...is issued" – regarding photographs taken by the individual indicating a plume from the baghouse stack.**

Response: On February 26, 2003, the Agency for Toxic Substances and Disease Registry (ATSDR) was petitioned by citizens to evaluate the health impacts from air pollution from asphalt and limestone quarry activities in Erie County. The study incorporated the operations from Hanson Midwest Aggregates, Erie

Materials, Inc. and Gerken Materials, Inc. At the request of ATSDR, the Ohio EPA conducted air sampling for particulate matter and volatile organic compound emissions in the immediate area. The results of this testing indicated that all particulate matter concentrations were below National Ambient Air Quality Standards (NAAQS) and no time-averaged volatile organic compound concentrations reported were present at levels of health concern.

- c. Comment: **Newspaper article from *The Morning Journal*, titled “Some believe air test results near quarry were flawed”, dated December 30, 2005 was submitted as a comment concerning the ATSDR study performed.**

Response: Ohio EPA is of the understanding that despite the submittal of objections to challenge the results of the ATSDR study, the conclusions of the study are still considered valid.

- d. Comment: **Anticipated mercury emissions from the asphalt operations.**

Response: The anticipated mercury emissions from the asphalt process were determined using a U.S. EPA document titled “AP-42, Compilation of Air Pollution Emission Factors”. The amount of mercury emitted does not exceed any threshold levels that would require specific action to address such emission levels. The permit does address mercury directly by limiting the amount that can be contained within any “on-spec” used oil used. Additionally the final issued permit has been revised to include stack testing if mercury is detected in any “on-spec” oil analysis performed.

2. Topic: **Permit specific comments**

- a. Comment: **Articles were submitted as evidence with references that this permit action will allow for increased production from the asphalt plant.**

Response: The permit action does not allow for any increased production from the facility. The asphalt plant capacity will remain at a maximum of 400 tons per hour.

- b. Comment: **Are the new emission limits consistent with sulfur dioxide emission increases found during 2008 stack testing done while using slag as an aggregate material at similar facilities?**

Response: The sulfur dioxide emission limit and emission factor associated with slag usage in this permit are consistent with the results of numerous slag tests performed in 2008 at various existing asphalt plants. The permit also contains a term that allows revisions to the emission factor for sulfur dioxide while burning slag if future test data indicates it is necessary.

- c. Comment: **Would it be feasible to have direct testing and monitoring of mercury and PCB emissions to better ensure compliance with the ppm limitations presented in the permit?**

Response: A number of years ago when fuel burning sources began submitting applications that included used oil, Ohio EPA developed the standard term contained in this permit which is based on regulations that distinguish materials like used motor oil, from oils that might be contaminated or classified as hazardous waste. Used oils accepted for burning should not be contaminated with those listed substances to begin with, however testing of actual oil shipments is required through permit monitoring to provide verification. In general Ohio EPA is of the position that alternate stack/emissions testing would likely not provide better detection than monitoring for each oil shipment, the approach used in many Ohio permits. [Sources burning hazardous waste would likely have emissions testing requirements.]

Due to the unique situation and circumstances associated with the Erie Materials site and project the final issued permit will be revised to include direct stack testing for mercury and PCB emissions. As indicated in response 1.d. above, the final issued permit has been revised to include direct stack testing for mercury if mercury is detected in any “on-spec” oil analysis performed. Additionally the final issued permit will also be revised to include direct testing for PCBs if PCBs are detected in any “on-spec” oil analysis performed.

- d. Comment: **How long has the source been in violation of its emissions limits? Have violations occurred on a regular basis?**

Response: The source was first discovered to be in violation of permitted emission limits in October of 2001. The Ohio EPA has been taking appropriate actions since that time to address the violations at the facility. The actions taken have included adherence to U.S. EPA's "Guidance on the Appropriate Injunctive Relief for Violations of Major New Source Review Requirements (Memorandum)" dated 11-17-98. The latest actions have involved Ohio EPA taking enforcement action that resulted in a consent order, in which the company must perform a compliance demonstration in accordance with the requested limits of the most recent permit to install application.

In order to fulfill the requirements of the consent order, the facility conducted stack testing in August of 2009. The results of this test indicated emission levels greater than the requested allowable limits from the permit application and in violation of the consent order. The company has taken several corrective actions since the most recent stack testing and is required to conduct a compliance demonstration early into the 2010 asphalt season to determine the compliance status. It should be noted that Ohio EPA is of the position that the violations at the facility have not led any imminent threat to health or the environment.

- e. Comment: **Given the facility's emission history and plan to use slag, does probable cause of a 17-02 violation not exist?**

Response: It should first be noted that OAC rule 3745-17-02 was rescinded as of April 8, 2009. The violations at the facility have not involved emissions of particulate matter and as such the Ohio EPA does not see probable cause for violations of rescinded OAC rule 3745-17-02. Additionally Ohio EPA was involved in air sampling for a study conducted by the ASTDR and the results of the study did not present any information that would indicate any probable cause for violations of air quality standards for particulate matter (see response 1.b.).

- f. Comment: **The permit indicates that actual emissions of CO and OC (VOC) never exceeded major source thresholds, even though the Permit Strategy Write-up states that emissions exceeded 250 tpy during October 2001 testing?**

Response: The potential emissions of CO and VOC exceeded major PSD thresholds during the October 2001 testing, but the actual emissions from this source did not exceed these levels. This facility is a seasonal operation and the company did not have a permit in place that limited the annual production and resulting potential emissions. The company has since requested an annual production restriction in order to avoid major source thresholds.

- g. Comment: **How were the BACT- equivalent control rates determined?**

Response: Ohio EPA was involved in the development of a "General Permit" for asphalt plants at the time this permit action was being processed. As part of the development of the general permit a determination was made regarding "Best Available Technology" (BAT) requirements under OAC rule 3745-31-05(A)(3). Upon review of permitted asphalt emission levels across the state, cost effective evaluation for add-on control, etc., BAT was determined to be 0.10 pound of organic compounds and 0.15 pound of carbon monoxide per ton of asphalt produced. The BAT emission rates established for general permit purposes were further evaluated with consideration to the RACT/BACT/LAER Clearinghouse and were determined to be a BACT equivalent requirement.

- h. Comment: **How was the sulfur dioxide compliance equation determined?**

Response: The sulfur dioxide (SO₂) compliance equation was developed as an restriction to limit sulfur dioxide emissions. The equation was developed by limiting sources of SO₂ emissions from asphalt plant operations which include the use of sulfur containing fuels and SO₂ from processing slag material.

Emission factors associated with associated fuels and slag throughput were applied. The equation calculates emissions from SO₂ generating activities during a rolling 12-month period.

- i. Comment: **In light of the credible evidence rule and under the Testing Requirements of the permit, “compliance with the annual emission limitation shall be assumed” may not be appropriate. Suggest replacing with “it shall be rebuttable presumption that compliance with the annual emission limitation has been attained”.**

Response: Ohio EPA had direct discussions with U.S. EPA regarding a resolution to the comment presented. As a result of those discussions the language in the permit will be revised to read “...compliance with the annual emission limitation shall also be demonstrated.”

3. Topic: **Current Asphalt Technologies**

- a. Comment: **A significant amount of information was provided as testimony and evidence during the public hearing regarding a new asphalt technology known as “warm mix asphalt”. Much of the information provided included specific operating conditions, benefits of the process, lower healthcare costs, less employee turnover, and specific locations where this technology has been used.**

Response: In this permitting instance air pollution control regulations require the application of “Best Available Control Technology” (BACT). BACT is determined by a five step “top-down” process as specified in U.S. EPA’s New Source Review Workshop Manual (Draft – October 1990). The first step is to identify all control technologies for the affected source. Innovative technologies are not required to be identified in the first step. Warm mix asphalt is considered an innovative technology at this time. The technology is not completely proven and the resulting product has not gained wide spread acceptance in commercial applications. Given the current stage of development regarding warm mix asphalt, the technology cannot be considered in determining the application of BACT for this source.

4. Topic: **Site Location**

- a. Comment: **The total emissions from both asphalt plants (Erie Materials, Inc. and Gerken Materials, Inc.) need to be considered together.**

Response: These two asphalt facilities are separate of one another and as such, the emissions have been evaluated separately. Air pollution rules and regulations are applied from a procedural standpoint to each facility separately as mentioned above. Air pollution rules and regulation are developed and inherently designed with consideration that multiple facilities may be located in close proximity. Additionally, ATSDR performed a study in the area which involved the two asphalt plants and the Hanson Midwest Aggregates quarry. The results of the study indicated that all particulate matter concentrations were below National Ambient Air Quality Standards (NAAQS) and no time-averaged volatile organic compound concentrations reported were present at levels of health concern (see response 1.b.).

5. Topic: **Unrelated Comments**

- a. Comment: **If draft permit becomes final, there must be three wells put in place to monitor underground water. (one at the site of the asphalt plants, one at site near Strecker Road #4, and one at discharge to Caswell ditch to Mills Creek).**

Response: As stated during the public meeting, this air pollution permit action cannot take into consideration groundwater or well water issues, including any flooding or ditch maintenance. Groundwater issues would need to be addressed to the Ohio EPA Division of Drinking and Groundwater. Water discharge issues to a receiving ditch would need to be addressed to the Ohio EPA Division of Surface Water. The appropriate Ohio EPA division can be contacted by calling 1-800-686-6930.

Well water issues would need to be referred to the Erie County Health Department which can be contacted by calling 1-888-399-6065.

- b. **Comment: Advantages of warm mix asphalt technology including lower healthcare costs, workers compensation costs and less employee turnover.**

Response: As stated during the public meeting, the DAPC cannot take into consideration any labor issues. Additionally see response 3.a. for more information regarding the determination for warm mix asphalt technology.

- c. **Comment: There needs to be a protection plan in place for the people on Portland Road. There was a protection plan in place for State Route 4 and there was one in place for Strecker Road. There needs to be a committee set up to monitor these companies [Erie Materials, Gerken Materials and Hanson Aggregates] so that there is communication.**

Response: The protection plan addressed in the comment appears to be an area zoning issue which as indicated during the public meeting, area zoning issues cannot be taken into consideration for the proposed air permit action.