Division of Air Pollution Control (DAPC)

Response to Comments

Project: Mercer Energy; Draft Air permit- to-install (PTI)
Ohio EPA ID #: PTI# 03-17269

Agency Contacts for this Project

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Ohio EPA held a public hearing on August 23, 2007, regarding draft air pollution permit #03-17269 for Mercer Energy. This document summarizes the comments and questions received at the public hearing and during the associated comment period, which ended on August 30, 2007.

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.

Emergency preparedness

Comment 1: **Multiple commenters are concerned about the preparedness of the city in case of an emergency situation.**

Response 1: In the event of an emergency involving the release of air contaminants, Ohio EPA's Division of Emergency and Remedial Response (DERR) will respond and take appropriate action to ensure public health and safety. Local emergency planning committees are designated for each county in Ohio and write chemical emergency response and preparedness plans. For additional information, please contact the Mercer County Information Coordinator at (419) 586-6468.

Consideration of the plant location

Comment 2: **Was there any consideration given to our current state before this, before they even thought about building this plant?**

Response 2: The permit for the ethanol production facility was developed in accordance with air pollution rules and regulations which protect public health, including the health of sensitive populations such as asthmatics, children and the elderly. The Ohio EPA cannot consider area zoning, popularity of the site or location, anticipated increase in road usage, property value concerns, personal or professional background of applicant, ground water and well water quality, flooding/ditch maintenance, labor issues, or noise concerns.

Nuisance concerns

Comment 3: **A commenter asks what is the process to file a nuisance complaint, whether it will be one individual, whether it will take a petition or how it will be handled?**

Response 3: All complaints in regards to odors or fugitive dust from an industrial facility located in Seneca County should be reported to the Northwest District Office of the Ohio EPA at (419) 352-8468. A petition is not necessary for the Agency to investigate and address any nuisance concerns.

Comment 4: **A commenter asks how fines will be assessed, whether it be in a speedy manner to get the problems solved or whether it be in a lengthy manner?**

Response 4: The determination of a fine for a violation is addressed individually in accordance with current enforcement procedures. If the company violates requirements contained in the issued final air PTI, Ohio EPA will take appropriate steps to resolve the matter expediently.

Application of BAT

Comment 5: **A commenter states that the permit fails to require best available technology, or BAT, on numerous sources at the facility.**

Response 5: The Ohio EPA is obligated to follow Ohio law. ORC 3704.03(T)(4) specifies that BAT does not apply to an air contaminant source that has the potential to emit (taking into account air pollution controls installed on the source) of less than 10 tons per year of an air contaminant or precursor of an air contaminant for which a NAAQS has been adopted under the federal Clean Air Act. The ORC has been codified into Ohio EPA rules at 3745-31-05(A)(3)(b), Effective December 1, 2006. The source can accept voluntary synthetic minor type restrictions in the permit (either by use of operating restrictions or optional add-on controls) per OAC rule 3745-31-05(C) to restrict the emissions to below the 10-ton/yr BAT threshold. Until these changes to the SIP are approved or disapproved by U.S.EPA, they are enforceable by the State of Ohio.

The emissions units contained in the permit have emission limitations established, pursuant to OAC rule 3745-31-05(C), at a rate that is less than ten tons per year by use of either add-on controls or operating restrictions.

Comment 6: **A commenter states that a new floor for BAT has been set by Ohio EPA requiring the boiler exhaust to be vented to the thermal oxidizers, or RTOs, in the recently proposed air permit for The Andersons ethanol plant in Crestline. Because this permit does not require such venting, its controls are less and it fails to meet Ohio BAT.**

Response 6: The Andersons ethanol plant in Crestline, Ohio, and Mercer Energy have installed different types of boilers. The Andersons facility employs a heat recovery boiler, whereas Mercer Energy utilizes a standard steam generating boiler.

Comment 7: **A commenter states that the wet scrubber does not use chilled water which would increase its efficiency and should be required as BAT and should require sodium bisulfate injection as required at the E85 permits in Newark and Lancaster.**

Response 7: Each BAT determination is made on a case-by-case basis. Chilled water and sodium bisulfate injections were not considered BAT in this instance. If emissions testing or other additional information warrants a reevaluation of BAT, Ohio EPA will address the situation properly.

Comment 8: **A commenter states that BAT is misapplied in this permit by use of combined emissions limit for multiple sources that emit to the thermal oxidizers. Commenter further states that because several pollutants are very close to the 100-tons- per-year threshold, each source emitting to the thermal oxidizers should have separate emission limitations with separate compliance testing and monitoring to ensure that each source is meeting the BAT requirement. And stated that these errors are further compounded by the permit's failure to specify a control efficiency expressed as a percentage of pollutants controlled for the thermal oxidizers to ensure they meet BAT levels of controls.**

Response 8: The establishment of combined emission limitations has been determined to be part of the BAT determination in this case. Combined limitations result in enforceable restrictions which require demonstration of compliance through testing as well as on going monitoring, record keeping and reporting. The permit will be revised to include control efficiencies.

<u>VOC, HAPs and Air toxic pollutants</u>

Comment 9: **The commenter states that the allowable VOC emissions should be recalculated based on the Midwest Scaling Protocol with the measurement of VOC mass emissions which has been made specific to corn ethanol plants in the August 2004 protocol.**

Response 9: The permit requires initial testing to ensure the air contaminant source is operating within the allowable emission rates contained in the PTI. All test results shall be calculated in accordance with appropriate methods for quantifying VOC mass emissions. If the company violates the requirements contained in the issued final air PTI, Ohio EPA will take appropriate steps to resolve the matter including, but not limited to, enforcement action which could result

in more air pollution controls and/or reduction of emissions at the facility and a future permitting action.

Comment 10: **The commenter states the permit should specify hazardous air pollutants (HAPs) emitted and that each emissions unit at the site should receive, at least, an acetaldehyde emission limit and the specific testing of acetaldehyde, formaldehyde and acrolein should be required.**

Response 10: Limitations for individual air toxic compounds and hazardous air pollutants are only established in very specific instances. The established limitations for volatile organic compounds effectively restricts emissions of air toxic compounds and hazardous air pollutants such that public health and the environment are protected. The permit does require testing to confirm the emissions of HAPs from the facility but the language will be modified to identify the specific HAPs to be tested.

Comment 11: **A commenter states that the permit has inconsistency regarding application of the Air Toxics Policy as some sources are tested just for hexane, some for acetaldehyde and methanol, and some for all three. There appears to be no justification for the disparate consideration of chemicals which render the permit confusing at best.**

Response 11: The Air Toxics Policy was applied to the total combined emission rate for each individual toxic from all emission units involved in the project. The appearance of inconsistencies in applying the Air Toxics Policy have been corrected by revisions of the terms and conditions in the permit involving air toxics.

<u>Accuracy of information submitted by the facility</u>

Comment 12: **A commenter asks, "How can we be assured that the data that Mercer Energy has submitted is accurate?"**

Response 12: The permit requires testing to demonstrate compliance with emission limitations which were established in accordance with information submitted in the permit application

<u>Size of the facility</u>

Comment 13: **A commenter states that the permit fails to establish that the facility will emit less than the 100-tons-per-year threshold that would subject the facility to regulation as a major source.**

Response 13: Ohio EPA evaluates proposed projects based on the information provided in the PTI application. The permit requires testing emission units while operating at maximum capacity. As part of the initial testing and future testing requirements, the maximum capacity of each emissions unit will be analyzed to ensure that the operation has not been altered such that the presented maximum capacities and the associated emission limitations in the application have been exceeded. Ohio EPA will also evaluate the maximum capacity of emission units based on inspections and data obtained in other required reports. If the company violates requirements contained in the issued final air PTI, Ohio EPA will take appropriate steps to resolve the matter including, but not limited to, enforcement action which could result in more air pollution controls and/or reduction of emissions at the facility and a future permitting action.

Comments from Marguerite Moul, concern citizen of Saint Marys, Ohio (08/06/2007)

Comment 14: **How will the odor, if any, affect those who live in and around the lake, particularly since a lot of businesses there rely on tourists for income? The citizen's experience was that a dry ethanol plant she visited smelled like stale beer and has heard that wet plants have a stronger odor. Does this process have a stronger odor?**

Response 14: The permit involves numerous control requirements that will reduce the emission of odor causing substances. Pursuant to OAC rule 3745-15-07(A), it is unlawful for any person to cause, permit or maintain a public nuisance as is defined in the above stated rule as, "...the emission or escape into the open air from any source or sources whatsoever, of smoke, ashes, dust, dirt, grime, acids, fumes, gases, vapors, odors, or any other substances or combinations of substances, in such manner or in such amounts as to endanger the health, safety or welfare of the public, or cause unreasonable injury or damage to property, is hereby found and declared to be a public nuisance."

The Agency will enforce any odor issues that may arise pursuant to the OAC rule 3745-15-07(A). (See Responses 3 and 4)

Comment 15: **How will the proximity of the proposed ethanol plant impact property value? Could it impact property value?**

Response 15: The effect on property value is one of the items the Agency cannot consider in granting or denying of permits to install.

Comment 16: Does the area have the fire-fighting capacity to fight a gasoline fire? How will fuel used to mix with ethanol be stored? How safe is it?

Response 16: The first part of this question is best addressed by the local emergency planning committee, please see Response 1.

The denaturant (natural gasoline), which is the fuel mixed with ethanol, is stored in a fixed roof storage tank with an internal floating roof. The internal floating roof controls the amount of vapor leaving the tank. The tank is also equipped with circulation vents that minimize the possibility of organic vapor accumulation in the tank vapor space in concentrations approaching the flammable range.

This type of tank is widely used in the industry, and with proper operation is considered safe.

Comment 17: What is the difference between the wet process and hydromilling? Is there anywhere that citizens could visit to see a hydromilling plant?

Response 17: Hydromilling is a term used to describe a wet corn mill operation that does not use sulfur to process the corn. A list of ethanol facilities can be found by going to the industry links at following website: http://www.ethanolrfa.org

Comment 18: How much noise will the grinding process create? Will it be 24/7? Will there be other noise associated with the process (truck traffic)?

Response 18: Please see Response 2.

Comment 19: The commenters are concerned about properly balancing risk to human health with cost effective best available technology (BAT).

Response 19: The permit for the ethanol production facility was developed in accordance with air pollution rules and regulations which protect public health which includes the application of BAT with appropriate cost effective determinations.

Comments from Jill Meyers, citizen of Celina Ohio

Comment 20: **What is the wording of OAC rule 3745-21-08 paragraph B?**

Response 20: OAC rule 3745-21-08(B), which is specific to carbon monoxide emissions, has been removed from the regulations and paragraph (B) is now listed as reserved. The former wording of OAC rule 3745-21-08(B) included the requirement that "the permittee shall employ best available control techniques and operating practices."

Comment 21: **What affect does OAC rule 3745-21-08 with or without paragraph B have on the following?**

2.a This permit to install takes into account the use of a flare system, whenever this air contaminant source is in operation, with a minimum control efficiency of 98%, by weight for VOC, as a voluntary restriction as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

2.h The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by complying with the requirements established pursuant to OAC rule 3745-21-07(E) [3745-31-05(A)(3)] in this PTI.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and U.S. EPA approves the revision to OAC rule 3745-21-08, the requirements to satisfy "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio

Response 21: The rule would have no effect on the items specified. Term A.2.a relates to volatile organic emissions, whereas OAC rule 3745-21-08(B) regulated carbon monoxide (CO) emissions. Term A.2.h presents the requirements of OAC rule 3745-21-08(B) which have been removed from the Ohio Administrative Code, but are still part of Ohio's SIP as indicated in the second paragraph of the term.

Comment 22: **Would OAC rule 3745-21-08 with paragraph B allow the permittee to use their process for the purpose of avoiding Best Available Technology?**

Response 22: No, the application of Best Available Technology (BAT) is a separate requirement from OAC rule 3745-21-08(B). In this case, the requirements of OAC rule 3745-21-08(B) are satisfied by the requirements established under BAT.

Comment 23: **Would OAC rule 3745-21-08 with paragraph B not allow the permittee to use their process for the purpose of avoiding Best Available Technology?**

Response 23: See Response 22.

Comment 24: **With regard to emissions unit P801, why does Ohio EPA not require operational restrictions, monitoring, record keeping or reporting requirements to ensure that the emissions unit does not exceed its annual allowable emission rates? Since the information pertaining to this come from the company that is using the process, how do you know with certainty that the emissions will fall within the permitted standards? Might any additional VOC emissions take them over the 100-tons-per-year limit and thus put the Mercer Energy Ethanol Plant in another classification for regulations?**

Response 24: Term A.2.f for this emissions unit is erroneous and will be removed. The applicable allowable emissions from this source are based on an equipment count of all the valves, pumps, relief valves and connectors at the facility. Adequate operational restrictions, monitoring, record keeping and reporting requirements are specified for this emissions unit.

Comment 25: **If Mercer Energy revises or edits their permit applications, will the public be informed of these changes? How will they be informed? Will they be permitted to make comments concerning the changes?**

Response 25: Any significant modifications to the permit would go through the normal permit process including the opportunity for public comment. Citizens are notified via the newspaper of largest circulation in the county when any application for a permit modification is received, when any draft is issued, when any

comment period is open, and when any public hearing is to be held. Citizens are given the opportunity to participate in these processes. Ohio EPA is amenable to meeting with citizens to discuss any permit modification should the occasion arise.

Comment 26: **What is the procedure for filing an air pollution nuisance? Where is it sent? How long does it take to investigate? What are the possible outcomes?**

Response 26: Please see Responses 3 and 4.

Comment 27: **If individuals suffer from any health problems that begin after the Mercer Energy Ethanol Plant comes to fruition, what procedure do they follow to file a complaint? Where is it sent? How long does it take to investigate? What are the possible outcomes?**

Response 27: Ohio EPA has found that the best way to address these concerns is through the development of a community-based organization focused on addressing local environmental and public health issues. Ohio EPA partners with these organizations to bring awareness of any concerns the local community may be experiencing. More information can be found by going to the following weblink: http://www.epa.gov/compliance/citizens/index.html.

<u>Comments from Donald Hilgeman</u>

Comment 28: **Would we consider animal feed producer to be in our national interest?**

Response 28: Environmental permitting does not take into consideration such matters in the decision-making process.

Comment 29: **Who are the major stockholders and what shares?**

Response 29: Environmental permitting process does not take into consideration such matters in the decision-making process.

End of Response to Comments