

OhioEPA
Division of Air Pollution Control (DAPC)

Response to Comments

**Project: Apex Sanitary Landfill, Chapter 31 modification of Division of Air Pollution Control Permits to Install: 06-06987, 06-07467 and 06-07264.
Ohio EPA ID #: Facility ID: 0641000223, Permit Number: P0103987**

Agency Contacts for this Project

Division Contact: Steve Lowry, Division of Air Pollution Control, (740) 380 5231, steve.lowry@epa.state.oh.us

Public Involvement Coordinator: Jed Thorp, (614) 644 2160, jed.thorp@epa.state.oh.us

Ohio EPA held a public hearing on December 7, 2009 regarding Draft Air Permit for Apex Landfill. This document summarizes the questions received at the public hearing and during the associated comment period, which ended on December 14, 2009.

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.

Fugitive Dust Concerns

Comment 1: One person asked why better dust suppression cannot be required.

Response 1: The permit includes control measures to minimize the amount of particulate and visible emissions that can be emitted from the unpaved haul roads. If the control measures employed by the facility are deemed insufficient, Ohio EPA may require that additional control measures be implemented which could include the use of chemical suppressants/additives to help control dust.

Comment 2: One person asked why Ohio EPA cannot require that the facility unpaved roads be blacktopped.

Response 2: The permit includes control measures to minimize the amount of particulate and visible emissions that can be emitted from the unpaved haul roads. If the control measures employed by the facility are deemed insufficient, Ohio EPA may require that additional control measured be implemented which could include the paving of on-site roadways.

Comment 3: One person asked why Ohio EPA cannot require the facility trucks to go through a wheel wash unit prior to entering state roads.

Response 3: The permit includes control measures to minimize the deposition of mud or dust on public roads. If the control measures employed by the facility for the minimization of the deposition of mud or dust on public roads are deemed insufficient, Ohio EPA may require the facility to submit a plan for a wheel and undercarriage washing station for all vehicles leaving the facility.

Comment 4: A commenter wrote to express his concerns regarding the fugitive dust originating from the landfill's haul roads and dust originating during the dumping of dry containerized waste.

Response 4: As indicated in the draft air permit, the facility is obligated to employ control measures to ensure that the dust emanating from the facility roadways and other material handling operations are adequately controlled. In accordance with the draft air permit and the associated permit application, the facility will use water to control the dust emissions in a manner that will allow the applicable emission limitation and control measure requirements to be met.

Site Visits to Apex Landfill

Comment 5: One person asked how many times has Ohio EPA has visited Apex Landfill since July 9, 2009.

Response 5: Ohio EPA Southeast District Office Staff have made 14 site visits to the Apex landfill since July 9, 2009.

Comments from Apex Landfill

Comment 6: Page 10, Paragraph 12 requires a Title V permit application or modification application to be submitted within 12 months after commencing operation of the emissions unit. A Title V permit application was submitted in November 2006. Does Ohio EPA expect that review of the 2006 application will be completed prior to the 12 month deadline (expected to be January 2011).

Response 6: As part of the Title V permit renewal process, Apex will need to revise or renew their Title V permit application to address any facility or emissions unit changes that have occurred after November of 2006. The DAPC considers the review of the Apex Title V permit application to be a priority project. However, at this time we cannot anticipate when the final review of the application will be completed.

Comments from Apex Landfill regarding emissions unit F001

Comment 7: Page 16, Paragraph b)(1)b. This paragraph states that “all” unpaved roadways. We suggest it be revised to state “roadways defined in b)(2)(a).”

Response 7: Ohio EPA has revised page 16, Paragraph 2(b) to state “The permittee shall employ best available control measures on all unpaved roadways associated with this emissions unit, for the purpose of ensuring compliance with the above-mentioned applicable requirements.”

Comments from Apex Landfill regarding emissions unit F002

Comment 8. Pages 20 and 21, Paragraph b)(1)a. The emission limitations may need to be revised based on the comments provided below.

Response 8. Revisions to the applicable paragraphs have been made. See comments 9 and 10 below.

Comment 9. Page 27, Paragraph f)(1)a. The fugitive particulate emissions limit is 66.0 tons per year (tons/year). The application calculated a limit of 29.8 tons/year. The compliance method states that all waste is assumed to be C&DD. This is a conservative assumption since most of the waste is MSW. However, the difference would not

be expected to result in such a large difference. The equation on page 28 used to calculate fugitive PE is very different than the equations used in previous permits for Apex and other similar facilities. The equation may be incorrect. For example, the equation has a constant 52 tons per year even if all of the other inputs were zero.

- Response 9.** The equation used to calculate fugitive PE accounts for wind erosion, handling and placement of daily cover and the handling of solid waste. This equation has been applied to other similar facilities. In light of the comment, the equation was reevaluated. The evaluation revealed a slight error and the conservative fugitive particulate emission limitation has been changed to 71.1 tons per
- Comment 10.** Page 28, Paragraph f)(1)(b). The landfill capacity is reported as 11,467,573 Mg but the actual capacity is 11,443,528 Mg as shown on Exhibit B-1 of the application. The same correction is required in Section c, d, and e.
- Response 10.** The landfill capacity has been changed from 11,467,573 to 11,443,528 Mg.
- Comment 11.** Page 29, Paragraph f)(1)f. There is a typographic error referring to USEPA.
- Response 11.** The typographic error was corrected.
- Comment 12.** Page 30, Paragraph f)(2)b. A value of 0.125 lbs of CO/MM BTU is used in the equation to calculate CO emissions. In the application a value of 0.37 lbs of CO/MM BTU was used (from AP-42, Table 13.5-1). The value of 0.37 results in the calculated 55.98 lbs/hr.
- Response 12.** The value of 0.125 lb of carbon monoxide per MM Btu has been replaced with 0.37 lb of carbon monoxide per MM BTU.
- Comment 13.** Page 31, Paragraph f)(2)(c). A value of 0.040 lbs of NO_x/MM Btu is used in the equation to calculate NO_x emissions. Based on a manufacture's performance guarantee, we request the values be changed to 0.068 lbs of NO_x/MM BTU.
- Response 13.** The value of 0.040 lb of nitrogen oxide per MM Btu has been changed to 0.068 lb of nitrogen oxides per MM Btu.

Comment 14. Page 31, Paragraph f)(2)d. A gas generation volume of 5443 scfm is used in the equation for SO₂ emissions. The value in the application is 5,543 scfm. Also a value of 49.6 ppmv/1,000,000 MMscf/scf is used throughout this section. The value should be 46.9 ppmv/1,000,000 MMscf/scf based on AP-42. If the two values are corrected it results in an emission of 2.63 lbs/hr and 11.53 tons per year. Also, the equation may be more clear if a multiplication symbol was inserted after the universal gas constant.

Response 14. The value of 5443 standard cubic feet per minute (scfm) was changed to 5543 scfm. The value of 49.6 ppmv/1,000,000 MM scf was changed to 46.9 ppmv/1,000,000 MMscf/scf.

Comment 15. Page 32, Paragraph f)(2)e. A gas generation volume of 5,443 scfm is used in the equation for NMOC emissions. The value in the application is 5,543 scfm. This results in an emission of 0.90 lbs/hr or 3.93 tons per year.

Response 15. The value of 5,443 scfm was changed to 5,543 scfm. The emission limits were changed from 0.88 lb/yr to 0.90 lb/yr and 3.86 tons/yr to 3.93 tons/yr.

Comment 16. Page 33, Paragraph f)(2)f. A gas generation volume of 5,443 scfm is used in the equation for VOC emissions. The value in the application is 5,543 scfm. This results in an emission of 0.35 lbs/hr or 1.53 tons per year.

Response 16. The value of 5,443 scfm was changed to 5,543 scfm. The emission limits were changed from 0.34 lb/yr to 0.35 lb/yr and 1.51 tons/yr to 1.53 tons/yr.

Comment 17. Page 33, Paragraph f)(2)g. A gas generation volume of 5,443 scfm is used in the equation for HCL emissions. The value in the application is 5,543 scfm. This results in an emission of 1.34 lbs/hr or 5.88 tons per year. Also the equation may be more clear if a multiplication symbol was inserted after the universal gas constant.

Response 17. The value of 5,443 scfm was changed to 5,543 scfm. The emission limits were changed from 0.34 lb/yr to 1.34 lb/yr and 1.51 tons/yr to 5.88 tons/yr.

Comment 18. Page 34, Paragraph f(2)g. The second paragraph should refer to HCL instead of sulfur.

Response 18. The reference to HCL was changed to sulfur.

Comments from Apex Landfill regarding emissions unit F004

Comment 19. Page 39, Paragraph b)(2)b. This paragraph states that “all” unpaved roadways. We suggest it be revised to state “roadways defined in b)(2)(a).”

Response 19. Ohio EPA has revised page 39, Paragraph 2(b) to state “The permittee shall employ best available control measures on all unpaved roadways associated with this emissions unit, for the purpose of ensuring compliance with the above-mentioned applicable requirements.”

Comment 20. Page 39, Paragraph b)(2)g. This section states the Ohio EPA may require the installation of a wheel wash if control measures are not sufficient to prevent the deposit of mud and dust on public roads. The vehicles using this roadway haul between the rail unloading area and the working face and will not enter public roads. We request that this paragraph be deleted because it is not relevant to this source.

Response 20. This paragraph has been deleted.

Air Quality Standards

Comment 21: A commenter asked about revisions made to Ohio’s ambient air quality standards. Reportedly, air monitoring sites may be set up, among other things, for complaint areas. What constitutes a complaint area?

Response 21: Ohio EPA, Division of Air Pollution Control has established special study ambient monitoring systems. These systems have been established to acquire specific monitoring data that may not have been collected by existing ambient monitoring systems. The existing ambient monitoring systems have been established to access compliance with the National Ambient Air Quality Standards. While there is no definition of what constitutes a “complaint area”, these special study monitoring systems have been sited when Ohio EPA (or other State or federal agencies such as the Ohio Department of Health or the Agency for Toxic

Substances and Disease Registry, respectively) have enough evidence to believe that a health risk may exist for the citizens living in or near an area of concern.

Rail unloading operation

Comment 22: Commenter believes that the rail car unloading operations (Emissions Unit F005) at the Apex Landfill should occur in a totally enclosed building as has been required for other railcar unloading operations in Ohio.

Response 22: The commenter has correctly indicated that other railcar unloading operations in the State have been required to use an enclosed building to control the emissions generated from the railcar unloading activities. All of the previously issued permits referenced by the commenter established the use of the enclosed building pursuant to Ohio EPA's best available technology requirements under OAC rule 3745-31-05(A)(3) or as a voluntary restriction under OAC rule 3745-31-02(A)(2). However, since the time the permits referenced by the commenter were issued, the Ohio legislature has revised the laws and regulations governing the applicability of Ohio EPA's best available technology requirements. Based upon the information in the facility's permit application and the review and evaluation conducted by Ohio EPA, the potential particulate emissions from the rail car unloading operation will be less than 10 tons per year, which precludes Ohio EPA from establishing best available technology requirements for this operation.

The commenter has also asked Ohio EPA to consider requiring a totally enclosed building pursuant to the reasonably available control measure requirements under OAC rule 3745-17-08(B) given that this rule is applicable to fugitive dust operations in Jefferson County. Ohio EPA agrees that the rule is applicable, that the technology of constructing an enclosed building is feasible, and that the enclosed building can result in a lower calculated particulate emission rate for the operation. However, the definition of reasonably available control measures also requires Ohio EPA to consider the cost-effectiveness of a proposed control measure relative to other measures that have also been proposed. In addressing this comment, Ohio EPA asked the permittee for additional cost information for their originally proposed control approach (spraying/misting system), for a modified version of the proposed approach (spraying/misting

system with a suppressant additive), and for an enclosed building. The additional information provided does demonstrate that the spraying/misting system, as proposed, is the most cost-effective approach which is reasonably available given the control technologies evaluated.

End of Response to Comments