



## Division of Solid and Infectious Waste Management

### Summary of Public Comments and Responses

**Project: Apex Environmental, LLC  
Apex Sanitary Landfill  
Permit-to-Install Application No. 06-08438**

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The Ohio Environmental Protection Agency (Ohio EPA) held a public hearing on July 9, 2009, regarding the May 28, 2009, issuance of a Draft Permit-to-Install to modify Apex Environmental, LLC's (Apex) Apex Sanitary Landfill. The facility is a licensed and active municipal solid waste landfill located within Jefferson and Harrison Counties, Ohio. This document summarizes Ohio EPA's responses to the testimony given relative to the proposed expansion which were received at the public hearing and/or during the associated public comment period which ended on July 23, 2009.

Ohio EPA has reviewed and considered all testimony received during the public comment period. Many comments were received regarding odors from the landfill. Therefore, we have addressed odor comments first and then all other comments. The referenced testimony has been condensed and paraphrased for clarity and brevity.

By law, Ohio EPA has authority to consider specific issues related to the protection of the environment and public health. Some, public concerns may fall outside the scope of that authority. For example, concerns regarding compatible land use with neighboring properties are often best addressed through local zoning at the township or county levels. Typically zoning issues may include concerns relative to compatible truck or rail traffic, noise, odors, light pollution, and property values.

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## Odor Related Comments from the Jefferson County Health District

On July 23, 2009, the Jefferson County General Health District (Health District) submitted a letter providing comments on the Permit-to-Install Application's Odor Management Plan. Subsequently, Ohio EPA requested that Apex review and respond to the technical issues presented in the Health District's letter. Follow-up discussions have occurred among the Health District, Apex, and Ohio EPA. On September 8, 2009, Apex submitted their response to the Health District's letter to Ohio EPA. After considering this information, Ohio EPA requested and received several changes to Apex's proposed Odor Management Plan on September 29, 2009.

As shown below, the Health District provided four main comments (Comments 1 through 4). Ohio EPA has provided a response to those comments.

**Comment 1: 'Apex Sanitary Landfill's Permit-to-Install must incorporate best available methods to control any potential odors.'**

Response 1: Ohio EPA's assessment is that Apex has incorporated best available methods to control odors. With numerous odor complaints during the first three years of operation, Apex has developed and used multiple odor control systems to address off-site odors. Apex personnel have received training to provide oversight of the odor control systems.

An odor management plan has been incorporated into this permit. There are seven major odor control systems listed in the Odor Management Plan. The latest system was developed in 2009 and involves a temporary gas collection and control system that is connected to the leachate collection system's cleanout pipes. A flare is used to destroy the landfill gas.

Ohio's municipal solid waste rules require all landfills to operate in such a manner that odors are strictly controlled so as not to cause a nuisance or a health hazard. There are no requirements in rule for specific odor control systems. Apex has included odor control systems that represent the best available methods at their landfill. There is also the stated intention to "continue to research and implement improved methods to manage odors at the facility."

**Comment 2: 'Apex needs to implement a best management practices odor complaint logging system.'**

Response 2: Apex has developed and currently maintains a complaint database for the complaints it receives. The database records all historic data from its odor complaint forms, odor control logs, and on-site weather station. The odor control log documents the location and settings of all deployed

odor control equipment and the location of waste disposal operations. The odor complaint form records the name of the complainant with address or location, type of odor and strength, and time and duration of odor. Meteorological data includes, at a minimum: temperature, barometric pressure, precipitation, and wind speed and direction. All complaint and monitoring data will be maintained on-site for review by the Health District and Ohio EPA. Copies or reports will be provided to those agencies upon request.

Ohio EPA's assessment is that Apex has implemented a best management practices odor logging system. This system has been developed in cooperation with the Health District to promote communication and documentation when complaints are received.

It is important to clarify that as the licensing authority and a health district on the director's approved list, the Health District is required to inspect the landfill with sufficient frequency to ensure substantial compliance and to maintain files of information regarding the facility. Public files are kept by the Health District with all supporting documentation generated and/or collected during their inspections and complaint investigations.

The term "odor complaint event" has been added to the Odor Management Plan. When the Health District informs Apex that they are investigating an odor complaint event, Apex's odor control personnel will document their site operations by using the established complaint evaluation procedures in the Odor Management Plan. An odor complaint event may originate from multiple odor complaints that share a common time and location.

**Comment 3: 'The Odor Management Plan's measures must be made enforceable.'**

Response 3: The Odor Management Plan in the permit is enforceable.

The operators of Apex Sanitary Landfill use a variety of odor control systems based on the experience of specialty equipment providers and their own experience. Apex is required to operate in a manner such that odors are strictly controlled so as not to cause a public nuisance. They must evaluate and adjust their odor control systems to respond to an odor complaint event and document their actions.

**Comment 4: 'Apex should be more aggressive in its use of horizontal gas collectors and less dependent upon vertical extraction wells.'**

Response 4: Vertical gas extraction wells are established technology and are typically used within a landfill's gas collection system. Horizontal gas collectors may be used as necessary to augment vertical wells.

Apex has developed and implemented a plan for a temporary gas collection and control system connected to the leachate collection system's clean-out pipes. A flare is used to destroy the landfill gas. This temporary system is intended to help control odors by decreasing the amount of landfill gas that escapes from the liner system and cover soils. By extracting gas from the leachate collection system's granular layer, this system acts as a horizontal gas collection system along the bottom and the below grade sides of the landfill.

The temporary gas collection and control system was not included in the permit application. This system was designed and installed in 2009. Ohio EPA approved its use through an alteration to the existing permit. Because this system has been working to destroy landfill gas, Ohio EPA requested that this temporary system be added to the Odor Management Plan as another major odor control system.

This work was done in advance of the installation of the landfill's permanent Gas Collection and Control System (GCCS).

Ohio EPA's assessment is that the landfill's gas collection system should primarily use vertical wells but may use horizontal collection methods as warranted.

### **Odor Related Public Comments**

**Comment 5:** A commenter noted that in addition to Ohio EPA, the Health District also regulates the landfill. In particular, he requested clarification on who was involved in reviewing the "plan" and what were their comments.

Response 5: Ohio EPA is responsible for review and action on the permit to install application. Our review comments are available as a public record. The Health District hired a consultant and a lawyer to review Apex's proposed Odor Management Plan. The Health District's comments were addressed at the beginning of this Summary of Public Comments and Responses. As a result of the comments, Ohio EPA requested some revisions to the Odor Management Plan in the permit application.

**Comment 6: A commenter questioned the effectiveness of the current measures deployed to control odors. He said, 'except for the installation of the landfill's permanent gas flare, nothing new is planned. In particular, won't the odors proportionally increase with the proposed increased tonnage?'**

Response 6: In response to numerous off-site odor complaints, Apex has deployed multiple odor control measures to minimize odor generation. Apex has been cited twice for creating a public nuisance, on July 14, 2006 and July 3, 2008. This record appears to indicate that the current measures are effective in controlling odors to prevent a public nuisance.

With the proposed increase in tonnage, the size of the working face should not expand proportionally. The increased tonnage may affect the landfill's hours of operation.

Through the use of the leachate collection system's cleanout side slope risers, Apex has installed a temporary gas collection and flare system which is currently destroying some 600 standard cubic feet of landfill gas per minute (SCFM). Apex's proposed Gas Collection and Control System (GCCS) is scaled to destroy landfill gas as the landfill continues to fill and develop. This will decrease the landfill's passive off-gassing which will have a direct impact on decreasing odor generation.

**Comment 7: A commenter noted that Ohio EPA performs a technical review of the permit application. Existing solid waste regulations provide the basis for their review. Regulations are derived from law. In part, state and federal legislators create the law. Greater influence must be applied, through the regulatory process, to abate the "stench."**

Response 7: The permit application was reviewed relative to current solid waste regulations. The portion of the operational rules that addresses odor is "the owner or operator shall operate the facility in such a manner that noise, dust, and odors are strictly controlled so as not to cause a nuisance or a health hazard" [Ohio Administrative Code (OAC) Rule

3745-27-19(B)(3)]. Permit applications are reviewed relative to the solid waste regulations in effect at the time.

**Comment 8: A commenter encouraged his neighbors to continue calling in odor complaints. His expectation is that no odors should originate from the landfill.**

Response 8: Ohio EPA's expectation is that odor generation will be minimized and controlled to prevent creating public odor nuisances, as required by OAC Rule 3745-27-19(B)(3).

**Comment 9: A commenter questioned Ohio EPA's inability to prevent the landfill's development. He stated that the landfill's odors have destroyed his life. In particular, he raised the following question: 'who do we go to, to make you people stop?'**

Response 9: It was apparent from the commenter's testimony that he believes Ohio's rules do not meet his needs for safety and enjoyment of his property. The landfill is regulated relative to current solid waste laws and rules. Ohio's rules are intended to address the potential negative effects from the disposal of solid waste. Ohio EPA is required to evaluate and act on permit applications in accordance with the current laws and rules. In the past, three solid waste permits were issued for Apex Sanitary Landfill because they met all the requirements in the solid waste laws and rules.

Laws are a result of the legislative process and are determined to be constitutional through a judicial process. State legislators provide for any changes in the laws. Ohio EPA drafts rules to implement the laws passed by the legislature and solicits input from the public when drafting new or revised rules.

**Comment 10: A commenter asked about recent 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 10: Ohio EPA's Division of Air Pollution Control will respond to this comment in association with their public comment period for the pending fugitive dust permit.

**Comment 11: A commenter and others perceive that the landfill is causing health problems.**

Response 11: A common perception is that landfill gas is a health concern if odor is detectible. This perception can create a heightened concern for residents in the vicinity of a landfill, or other odorous sites, because the odor detection thresholds for common sulfur-containing landfill gas constituents are often quite low and can be well below the health exposure thresholds. Please see the further threshold discussion noted directly below.

**Comment 12: A commenter inquired about the make-up of the unidentifiable smell which is the basis of her frequent complaints to the Health District. The smell is something other than a garbage smell.**

Response 12: The non-garbage smell is likely a combination of hydrogen sulfide and methyl mercaptan which are common landfill gases. Hydrogen sulfide has an accepted odor threshold of 1-10 parts per billion by volume (ppbv), and methyl mercaptan has an accepted odor threshold of 0.002-41 ppbv. Odor thresholds are significantly lower than established health thresholds. For hydrogen sulfide, the worker exposure guideline is 10,000 ppbv as a 10-minute maximum threshold. And for methyl mercaptan, the worker exposure threshold is 500 ppbv as a 15-minute threshold. Therefore, landfill gases may be odorous but not represent a health risk.

**Comment 13: Two commenters wrote to express their concerns about odors originating from the passing waste unit trains. They live along the inbound railroad track in Wellsville, Ohio.**

Response 13: Ohio's solid waste regulations are not applicable to the transport of solid waste or construction and demolition debris. As such, these odors are not considered with respect to a permit's review.

**Comment 14: A commenter wrote to pose the following questions relative to her experience with landfill odors: 'Is it not your mission and goal to protect our environmental for us? If not the Ohio EPA, then who?'**

Response 14: It is the stated mission of Ohio EPA to protect the environment and public health by ensuring compliance with environmental laws. As a health district on the director's approved list for administering a solid waste program and a C&DD program, the Jefferson County Health District shares this responsibility.

**Comment 15: A commenter stated that Ohio EPA has neglected to enforce OAC Chapter 3745-27-19 relative to Apex's operational failures. Reportedly, Ohio EPA has not cited any violations.**

**Along the same lines, a commenter raised a concern relative to past violations at the landfill, and his perception that no enforcement of the applicable regulations is occurring.**

Response 15: Since November 2004, 12 violations have been cited by either the Health District or Ohio EPA. Within two situations, enforcement has been taken to provide resolution. Apex signed a Compliance Agreement on October 17, 2006 relative to the July 14, 2006, public nuisance citation. Director's Final Finding and Orders, dated November 13, 2008, provided a resolution to the acceptance of containerized liquid events of April 18, 2007, and June 11, 2008.

Please reference the permit application's Appendix C1-E (Summary of Notice of Violations) for a complete index as of January 2009. Ohio EPA has reviewed the accuracy of Appendix C1-E.

Apex and all other Ohio landfills are regulated relative to the current solid waste rules and their permit requirements.

**Comment 16: A few commenters noted that the odors are not as bad as some people are claiming and that the odor complainers are actually a small group. A direct correlation between the most outspoken complainers and the pending class action lawsuit is perceived.**

Response 16: Ohio EPA does encourage the reporting of off-site odors. Notifying the landfill about off-site odors is a request to evaluate the facility's operations and better manage the odors that may originate at the landfill. Making a complaint with the Health District is a request for a qualified inspector to evaluate the landfill's compliance with their permit and the operational rules. The inspection will also evaluate whether the off-site odors constitute a public nuisance.

The intensity of odors and the degree to which they affect people is quite variable. The director of Ohio EPA must determine that the landfill is in substantial compliance. The number of violations and enforcement actions are a measure of substantial compliance. The pending class action lawsuit will not have an effect on the determination of substantial compliance at this time.

According to OAC Rule 3745-27-07(A)(3), the director shall not approve any Permit-to-Install Application for a sanitary landfill facility unless he has determined that the applicant has managed or operated the facility in substantial compliance with the applicable provisions of the Ohio Revised Code (ORC), and any rules, permits or other authorizations issued thereunder, and has maintained substantial compliance with all

applicable orders issued by the director, the Environmental Review Appeals Commission (ERAC), or courts in the course of such previous or current management or operations. The director may take into consideration whether substantial compliance has been maintained with any applicable order from a board of health maintaining a program on the approved list and any other courts having jurisdiction.

To date, Apex has been cited twice by the Jefferson County Health District for creating a public nuisance on July 14, 2006 and July 3, 2008. On October 17, 2006, Apex signed a Compliance Agreement relative to the first odor violation. No other odor related enforcement has occurred.

**Comment 17: In the opinion of some individuals, Apex's deployed odor control measures seem to be working.**

Response 17: Apex has developed a multifaceted Odor Management Plan to minimize and manage odors. Within the new permit, Apex will use a combination of odor control systems described in the permit to manage odors. Apex has committed to improving upon these processes as necessary and as new technology is available.

**Comment 18: Several letters noted that some individuals were applying a double standard to Apex's occasional smells compared to the occasional smells originating from local steel mills.**

Response 18: Odors are a byproduct of many industries. There are areas known for odors from their paper mills, coke ovens, bakeries, breweries, steel mills, or landfills. Odor management through odor control systems must be used in all operations at Apex Sanitary Landfill to control odors and prevent a public nuisance.

**Comment 19: Several letters raised a concern about other undesirable odors in the neighborhood being blamed on the landfill (for example, failed or no septic systems, manure, and dead animal carcasses). Does the Health District's inspectors actually backtrack odor complaints to their source as opposed to just assuming it was the landfill?**

Response 19: The Health District's inspectors are required to evaluate compliance at the landfill. In addition to evaluating the source and severity of an odor, inspectors must determine if operational practices are not in compliance with the landfill's permit or the operational rules.

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## General Comments

**Comment 20:** Several commenters raised concerns about their perception that numerous flies were originating from the landfill and that these flies were causing a health impact.

Response 20: Fly nuisances are not typically associated with modern landfills because of a landfill's progressive filling and covering. Fly larvae take four to seven days to pupate in warm weather. Any exposed waste is covered within a day which does not support the development of flies.

At the landfill, no fly nuisances have been noted during past inspections.

**Comment 21:** A commenter raised a concern that the landfill has negatively impacted her property value. Another commenter noted the pending litigation (class action lawsuit) could possibly provide restitution for her loss.

Response 21: A landfill's potential property value impacts, whether positive or negative, are not regulated by Ohio's solid waste laws and is not considered with respect to a permit's review.

**Comment 22:** A commenter requested the names of the Ohio EPA engineer(s) that reviewed the permit and who would subsequently make recommendations to the Director concerning the issuance of the final Permit-to-Install.

Response 22: Several staff in the Ohio EPA Southeast District Office were involved in the review of the permit application. Craig Walkenspaw performed the permit's general engineering. Brian Queen performed landfill stability and settlement reviews. Hydrogeologist Steve Saines provided an assessment of Apex's limestone quarry exemption request. The subsequent Draft Permit-to-Install recommendations were routed through Southeast District Office's management prior to forwarding to Ohio EPA Central Office's management for processing and further consideration.

**Comment 23:** A commenter requested further consideration before issuing another permit with an exemption for the prohibition of locating a landfill within a stone quarry.

Response 23: OAC Rule 3745-27-07(H)(2)(b) establishes siting criteria relative to ground water aquifer system protection and limestone and sandstone quarries. Specifically, the rule prohibits locating a sanitary landfill

facility in a limestone quarry or sandstone quarry. However, the rule also provides that the term limestone quarry does not include excavation of limestone resulting from the construction of the sanitary landfill facility.

OAC Chapter 3745-27 was revised on August 15, 2003, and July 1, 2004. When the 1998 and 2002 permits were issued, OAC Rule 3745-27-07(H)(2)(b) prohibited locating a sanitary landfill facility in a limestone quarry or sandstone quarry “unless deemed acceptable by the director.”

With issuance of the 1998 and 2002 permits, Ohio EPA determined that siting the landfill within the limestone quarry was “deemed acceptable” because all of the other ground water siting criteria were met, and it was unlikely to adversely affect the public health or safety or the environment.

It could be construed that, because the excavation of the limestone is occurring as a result of construction of the sanitary landfill facility, the current siting prohibition does not apply. But, because Apex sells a portion of the excavated limestone commercially, Ohio EPA’s position is that the siting criterion does apply. Therefore, Apex has requested an exemption under the provisions of ORC Section 3734.02(G).

Ohio EPA has determined that the limestone mining that has taken place at the facility to date, and the limestone mining that is planned, will not compromise the suitability of the site for operating a sanitary landfill facility and maintaining a ground water monitoring network. Additionally, because a minimum 15-foot separation from the bottom of the recompacted soil liner to the uppermost aquifer system will be maintained, and because the landfill’s stability will not be affected by past or future mining, granting an exemption from OAC Rule 3745-27-07(H)(2)(b) is unlikely to adversely affect the public health or safety or the environment.

Therefore, an exemption from OAC Rule 3745-27-07(H)(2)(b) is included within the approval of the expansion’s Permit-to-Install.

**Comment 24: A commenter stated that long term health issues will result from the exposure to the landfill, and he was concerned about the inability to prove direct health impacts and the lack of future accountability.**

Response 24: Ohio’s solid waste rules were developed to prevent any short or long term health issues. Ohio’s solid waste laws and regulations provide a

minimum of 30 years of post-closure care after facility closure. During post-closure care, the owner must continue to properly manage leachate, surface water, and explosive gases, and continue the monitoring of the landfill's ground water, gas migration, leachate quality, and surface water discharges.

**Comment 25: A commenter stated that the landfill's surface water runoff will create some environmental detriment.**

Response 25: The landfill's surface water runoff is regulated through two National Pollutant Discharge Elimination System (NPDES) permits for the two sedimentation ponds. The discharges from these ponds are to be sampled quarterly and their test results reported to Ohio EPA. In actuality, the ponds have not yet discharged, so this sampling has not occurred. Alternately, Apex has done a water quality assessment of the ponds and has found no constituent above drinking water standards.

**Comment 26: A commenter is concerned about horizontal migration of landfill gas.**

Response 26: The perimeter of a modern landfill is monitored for the potential horizontal migration of landfill gas in accordance with OAC Section 3745-27-12. With the landfill's geomembrane liner component and the future installation of an active gas collection system, the horizontal migration of landfill gas is not likely.

**Comment 27: A commenter questioned the further development of the landfill's eastern slope in contrast to the proposed truncation of the development of the landfill's northern slope.**

Response 27: In consideration of the landfill's proximity to the residents of Red Dog Road, Apex voluntarily redesigned their proposed expansion to minimize the development of its northern slope. As a result, the capacity of their expansion request was decreased by some 500,000 cubic yards. Ohio's solid waste rules do not prohibit the proposed vertical expansion on the landfill's northern or eastern slopes.

**Comment 28: A commenter tasked the Ohio EPA to enforce the regulations to fulfill their obligation to the tax payers.**

Response 28: The landfill's compliance is assessed by the Health District and Ohio EPA through regular inspections. During the review and decision process for issuing permits and annual licenses, Ohio EPA and the Health District must follow the current laws and regulations.

**Comment 29:** A commenter asked about the landfill's acceptance of pulverized construction and demolition debris (C&DD). In particular, is there a limit on the degree that the C&DD may be pulverized? And has any C&DD been turned away because it has been over-pulverized and not recognizable?

Response 29: In accordance with OAC Chapter 3745-27, the landfill is a municipal solid waste facility and may accept C&DD. Material that is pulverized such that it is unidentifiable must be managed as solid waste. As such, there is no limit to the degree that C&DD may be pulverized when taken to a solid waste landfill and classified as solid waste.

**Comment 30:** A commenter asked whether any seismic considerations were incorporated into the permit application.

Response 30: Yes, a seismic stability analysis was performed for the proposed expansion which included multiple potential failure modes for the landfill's incremental and completed development in accordance with OAC Rule 3745-27-06(C)(4)(d). Acceptable factors of safety have been demonstrated for the landfill with standard seismic conditions.

**Comment 31:** A commenter asked why the landfill typically gets notified or warned before any NOVs (Notice of Violations) are issued.

Response 31: As the landfill is inspected, any points of non-compliance are noted and are typically discussed with the landfill's operator for correction. Informing the operator of violations during the inspection is important to achieve compliance with the rules as quickly as possible. Additional violations can be cited during follow-up inspections if the facility continues to not be in compliance. Depending on the severity of the violations, enforcement action may result.

**Comment 32:** A commenter noted that within a recent ground water monitoring report that a revision to the Ground Water Monitoring Plan should be submitted due to a perceived change in the bedrock and mine spoil horizon noted during the landfill's construction. In particular, was the plan submitted and what were the changes?

Response 32: Yes, the October 24, 2007, revisions to the Ground Water Detection Monitoring Plan (GWDMP) addressed the differences observed within the bedrock and mine spoil horizons' significant zones of saturation (SZS). Apex volunteered to construct wells for the bedrock SZS, even where no bedrock SZS water was encountered (dry wells).

**Comment 33: A commenter raised a concern regarding future ground water contamination caused by the landfill.**

Response 33: Upon its completion, the ground water monitoring system will consist of a total of 22 wells that monitor the uppermost aquifer system and two significant zones of saturation beneath the landfill's limits of waste placement. In addition, the landfill's three shallow underdrains are monitored. After the landfill closes, the ground water monitoring will continue for a period of at least 30 years. If ground water contamination is detected, then further assessment will be done prior to initiating any corrective measures. Apex Sanitary Landfill's Ground Water Monitoring Plan meets Ohio's solid waste regulations.

**Comment 34: A commenter asked who would be responsible to test the water quality of her well?**

Response 34: Any elective monitoring of a private water well is at the owner's expense.

**Comment 35: A commenter questioned the quality of the water used in the odor control misting system.**

Response 35: There are no water quality standards established for the odor control misting systems. Therefore, the permit application does not specify the odor control misting systems' water source.

**Comment 36: 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 36: Ohio EPA's Division of Air Pollution Control will respond to this comment in association with their public comment period for the pending fugitive dust permit.

**Comment 37: A commenter wrote to express his concerns regarding noise originating from the landfill.**

Response 37: Noise originating from a landfill is regulated by OAC Rule 3745-27-19(B)(3) which is the same rule that addresses odor. Noise must be strictly controlled to prevent a public nuisance.

**Comment 38: Numerous written comments noted that Apex has actively supported local schools and civic organizations. Other letters noted that Apex now employs a large number of individuals and that the expansion would help to perpetuate the landfill. Another**

**letter stated that local road improvements have been possible because of taxes paid by Apex.**

Response 38: Ohio EPA acknowledges Apex's financial contributions to the local community. However, a landfill's community involvement, employment potential, or taxes paid are not considered with respect to a permit's review.

**Comment 39: A commenter noted that Apex has been responsive to her concerns raised relative to truck traffic routing.**

Response 39: Ohio's solid waste laws do not address the hauling of solid waste or construction demolition debris. Local road tonnage limitations are addressed by the applicable townships and counties.

**Comment 40: A commenter noted Apex's efforts to restore Goose Creek in Amsterdam.**

Response 40: Because of defined stream and wetland impacts during the landfill's development, Apex had to provide several stream and/or wetland remediation projects. The remediation work along Goose Creek in Amsterdam is just part of the efforts that Apex is undertaking. Three additional projects are in different stages. Apex just completed a wetland dam project on-site. The beginning of Faith Ranch's eight-acre wetland is pending. And Apex's 10-acre upland wetland will be constructed on company property west of Apex Road.

No additional stream or wetland impacts are necessary for the development of the proposed vertical expansion.

**Comment 41: One written comment noted that the landfill's site was largely an un-reclaimed strip mine. In contrast, the developing landfill is actually designed to be protective of the environment.**

Response 41: Prior to the landfill's development, large un-reclaimed spoil piles were scattered throughout the site. Streams were heavily impacted by eroded sediments. With the landfill's development, the spoil is being systematically processed to make the material needed for the liner system's three-foot thick recompacted soil liner (RSL) component. The large limestone cap rock, located within the un-reclaimed spoil, is also being crushed and made into aggregate for road and building construction in Jefferson and Harrison Counties. Besides the utilization of erosion prevention measures, all surface water runoff is routed through two permitted sedimentation ponds. The landfill will have an

engineered liner system and the ground water beneath the site is being monitored.

**Comment 42:** One written comment noted encouraging changes since Environmental Logistics Services, LLC's purchase of the landfill in December 2007. In particular, their deployment of new technology was noted. Another written comment acknowledged the pride that they took to beautify their front entrance and to properly display the American flag.

Response 42: Ohio EPA acknowledges that the current owners and operators of the landfill have made several operational and aesthetic improvements to the landfill. However, Ohio EPA's decision on the permit application is based upon its meeting all applicable technical requirements and with maintaining substantial compliance with all laws and rules.

**Comment 43:** The Mayor of Amsterdam noted that Apex is engaging high school students to teach them about jobs in the "green economy," animal habitat protection, and engineering. Another commenter acknowledged that Apex's proposed landfill gas to electric generation project would be a benefit to the environment.

Response 43: Ohio EPA recognizes Apex's involvement with high school students and their alternative energy project. However, Ohio EPA's decision on the permit application is based upon its meeting all applicable technical requirements and with maintaining substantial compliance with all laws and rules.

**Comment 44:** The Mayor of Amsterdam was concerned about keeping businesses in the local area and keeping families employed.

Response 44: Ohio EPA recognizes that Apex may be a significant employer in the immediate area. However, Ohio EPA's decision on the permit application is based upon its meeting all applicable technical requirements and with maintaining substantial compliance with all laws and rules.

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**End of Responsiveness Summary**