

Commonwealth of Pennsylvania
Department of Environmental Protection
Waste Management Program

May 9, 2019, Public Hearing
Comment & Response Document

Greater Lebanon Refuse Authority Landfill
Permit No. 101544
Heilmandale Expansion

Ebenezer Elementary School

Introduction

Greater Lebanon Refuse Authority submitted a major permit modification application on July 23, 2018. Greater Lebanon Refuse Authority is proposing both a lateral and a vertical expansion to the closed section of the Greater Lebanon Refuse Authority Municipal Waste Landfill (GLRA Landfill) adjacent to Heilmandale Road, formerly permitted under permit number 100825. This expansion would add six (6) waste disposal cells, totaling approximately 47 acres, onto the closed landfill. Three of the waste disposal cells will be built entirely upon existing waste of the closed landfill, and three of the cells will be built partially upon existing waste of the closed landfill. The expansion would add approximately 140 feet of elevation to the closed landfill site, as well as provide approximately 5,903,000 cubic yards of additional waste disposal capacity to the GLRA Landfill.

The permit for GLRA Landfill expires February 1, 2025, unless an application for a permit renewal is submitted to the Department to extend the permit term. GLRA Landfill has approximately 5.6 years of disposal capacity remaining (as of June 2019), at which time it must close, unless this expansion application is approved by the Department. The application that was submitted is for a landfill design of about 15 years of disposal capacity based upon anticipated daily operating volumes.

The application was deemed administratively complete by the Southcentral Regional Office on November 5, 2018. The Department negotiated an application review time with Greater Lebanon Refuse Authority of 563 business days (826 calendar days), beginning on September 26, 2018, and ending December 30, 2020.

A Local Municipal Involvement Process meeting was held on September 26, 2018. A public meeting was held on January 15, 2019. A second public meeting, along with a subsequent public hearing, was held on May 9, 2019. It was the comments received at this public hearing that this document serves as a Department response to. This document also addresses all public comments received by the Department before or after the public hearing.

Index of Comments & Responses

<u>Commenter</u>	<u>Comment & Response #</u>	<u>Page #</u>	<u>Transcript Page Numbers</u>
Jo Ellen Litz	1	3	7 - 9
Wayne Kauffman	2	3	9 – 12, 29 - 33
Russell Heller	3	6	12 – 19, 25 - 29
Lloyd Jarboe	4	7	19 – 25
Brenda Miller	5	8	33 - 35
Ted and Elise Kirkwood	6	9	E-mail submitted to the Department on April 29, 2019
Petition signed by citizens	7	10	

1. Jo Ellen Litz is a Lebanon County Commissioner. Ms. Litz was pleased to see the attendance at the Public Meeting/Hearing, and she encouraged public interaction with the GLRA Landfill whenever necessary. Ms. Litz praised and complimented GLRA Landfill, as well as the landfill manager, Larry Taylor, for the services that they provide to the County. Ms. Litz reminded the attendees that the GLRA Landfill does not take waste from outside of the County, and that the landfill serves only the interests of the County. Ms. Litz acknowledged the possibility of nuisances from the landfill but reiterated the need for the community to interact with the GLRA Landfill, including concerns and complaints, as much as possible.

DEP Response: Thank you for your comments. The Department has no response.

2. Wayne Kauffman is a resident who lives near the GLRA Landfill. Mr. Kauffman stated that GLRA Landfill had promised the community during the last permit modification that they would keep Russell and Heilmandale Roads clean on a daily basis, but that over time these roads came to be cleaned only on a weekly basis. Mr. Kauffman stated that GLRA Landfill had purchased a number of nearby properties since the last permit modification, including a farm. Mr. Kauffman said that GLRA Landfill uses the farm as an excuse for odors when odors are reported by the community. Mr. Kauffman questions what GLRA Landfill's goals are for buying all of these properties.

DEP Response: Thank you for your comments. The Department has no involvement in property purchases of the GLRA Landfill..

Mr. Kauffman states that the Department was supposed to notify residents when the permit modification daily tonnage increase occurred, and that the residents had the right to accept or deny this increase, but that this notification never happened.

DEP Response: The March 15, 2006, permit provided for an incremental increase in average daily volume from 520 TPD up to 750 TPD based on the need due to increased waste volume being generated in Lebanon County. All municipal waste generated in Lebanon County is to be disposed in the GLRA Landfill according to the Lebanon County Municipal Waste Plan. The approval for GLRA Landfill to accept up to 750 TPD **was approved** as part of the March 15, 2006, permit modification, and therefore only Department approval was needed to increase the waste volume to 750 TPD based on need with the waste volume being generated in Lebanon County.

Mr. Kauffman asked how GLRA Landfill was going to eliminate odors.

DEP Response: GLRA Landfill proposes to continue current odor mitigation activities, which include the use of an active landfill gas collection system, disposal area size minimization, odorous waste load disposal prioritization, off-site odor patrols twice daily during working operations, odor source investigations, perimeter odor neutralization sprays, and daily compliance with standard regulatory requirements such as daily, intermediate, and final cover applications, waste load compliance with the approved waste acceptance plan, and control of leachate seeps, should they ever arise. GLRA Landfill has made a great deal of effort to find the source of any odors being generated by the landfill and to control the odors. Residents are

encouraged to contact GLRA Landfill if they detect odors they believe are being emanated from the landfill as well as to contact the DEP Waste Management Regional Office.

Mr. Kauffman asked if the liner design that is proposed in this landfill expansion is any different from the design of liners in the past for the purpose of controlling odors.

DEP Response: The proposed liner design for controlling odors in this proposed landfill expansion is different from what is currently in place on the active area of the landfill (Schilling Farm). The current active landfill had a soil and grass cover and did not include a synthetic liner for many years. This was due to the landfill being filled. This soil cover may allow the release of small amounts of landfill gases that can create odors. A synthetic liner and soil cover was placed over a significant portion of the active Schilling Farm landfill this year, and a liner and soil cover will be installed over the remainder of the active landfill once it has reached capacity. The proposed liner design for this expansion, and the remaining portion of the uncapped areas of the current landfill, Schilling Farm, is an impermeable, geosynthetic liner cap made of plastic that will be placed over the waste mass, which will contain landfill gases within the landfill. Furthermore, there will be a gas extraction system which will operate under vacuum beneath the geosynthetic cap which will remove gas from the waste mass. The surface of the landfill is also monitored for surface emissions.

Mr. Kauffman asked if landfill odors cause health effects other than nausea. Mr. Kauffman asked who monitors landfill odors and where these monitoring results can be found.

DEP Response: The question of health effects from landfills has been raised over the years. The Department is not aware of any conclusive evidence of health effects from landfills on residents living in close proximity to landfills. The Department's Air Quality Program monitors surface emissions at landfills and maintains records of these monitoring results. The Department's Air Quality Program can be reached at 717-705-4868.

Mr. Kauffman asked if a Host Municipal Inspector can be hired from an outside municipality in the interest of impartiality.

DEP Response: The host municipality of a municipal waste landfill may hire up to two (2) persons to serve as Host Municipal Inspectors. These Inspectors are not required to be residents of the host municipality.

Mr. Kauffman asked if any laws exist that can prevent this permit application from being denied. Mr. Kauffman asked if any similar permit applications have been denied in the past.

DEP Response: The Department has the authority to deny any permit application for any statutory or regulatory reasons that exist. On May 30, 2002, the Department denied a permit application for a landfill expansion to the Dauphin Meadows Landfill, located in Dauphin County, due to the Department's determination that the Applicant did not clearly demonstrate that the benefits of the proposed landfill expansion clearly exceeded the harms that would result from the proposed expansion.

Mr. Kauffman asked what guarantee was in place to ensure that the proposed landfill expansion will not affect the water supply or air quality.

DEP Response: The Department reviews permit applications for conformance with environmental statutes and regulations, which define conditions, pollutant thresholds, operating requirements, and environmental impacts that are considered acceptable. Department issuance of a permit or permit modification creates an enforceable contract that obligates the permit holder to compliance with statutes and regulations, as well as any additional permit conditions specified in the permit. The Department also conducts inspection, compliance, and enforcement activities of all permitted and regulated facilities in order to ensure compliance with environmental permits, statutes, and regulations.

The groundwater of the landfill is monitored quarterly and the analysis is reviewed by the Department hydrogeologists. PA Code Title 25 Chapter 273 contains regulations that address if a groundwater assessment plan would be needed as well as an abatement plan. Title 25 Chapter 273.245 Water Supply Replacement addresses the need to provide a replacement water supply.

The double liner composite systems that have been installed in PA municipal waste landfills for the past 30 years have proven to be extremely effective in containing leachate and preventing groundwater degradation.

Mr. Kauffman asked if the proposed expansion area was stable enough to support 15 more years of trash disposal. Mr. Kauffman asked if core borings were done in preparation of this permit application and, if so, whether they were done in-house or by an outside consulting firm.

DEP Response: Both a Subbase Bearing Capacity Analysis and a Subgrade Settlement Potential Analysis were performed by SCS Engineers and submitted as a part of this permit application. A Final Slope Stability Analyses at final proposed landfill grades was also submitted in the permit application. These analyses will be evaluated by the Department in the review of this application.

Mr. Kauffman questioned if the current liner of the proposed expansion area will support the overhead expansion of addition waste.

DEP Response: The proposed Heilmandale expansion area currently does not have an engineered liner system. The current waste that is in place has been compacted and laid upon compacted soil. In contrast, the proposed expansion will place a geosynthetic liner system over the compacted waste that is currently in place. This geosynthetic liner system has been designed to support the proposed overhead expansion. Nonetheless, and as previously mentioned, a Subbase Bearing Capacity Analysis and a Subgrade Settlement Potential Analysis of the in-place compacted waste have been performed and submitted as a part of this permit application.

Mr. Kauffman asserted that landfills are exempt from soil conservation laws.

DEP Response: Landfills, as well as all other waste facilities, are subject to the provisions of all applicable soil conservation laws, in particular, the erosion and sediment control laws of 25 Pa Code Chapter 102.

Mr. Kauffman predicted that the Department will eventually issue the permit for the proposed landfill expansion. That said, Mr. Kauffman petitioned that the focus moving forward should be on solving and preventing the expected landfill problems from happening with this landfill expansion. Mr. Kauffman asked if new technologies or landfill designs could mitigate common landfill odors.

DEP Response: As previously mentioned, the proposed landfill expansion will include an impermeable, geosynthetic liner cap design with an active gas extraction system under constant vacuum within the waste mass. It should also be noted that this same cap and gas extraction design is currently being applied to the currently active Schilling Farm landfill.

Mr. Kauffman suggested that GLRA Landfill provide financial assistance to nearby residents to cover motel stays or other temporary relocation expenses due to odor problems.

DEP Response: Thank you for your comment. GLRA Landfill should remove the refuse in a way that nuisance odors are not generated off-site.

Mr. Kauffman questioned what GLRA Landfill will do with the farm that they purchased, as well as a few other properties that they purchased.

DEP Response: Thank you for your comment. This question should be addressed to the GLRA Landfill, as the Department does not have any involvement.

3. Russell Heller is a resident who lives near the GLRA Landfill at 1606 Heilmandale Road. Mr. Heller stated that he has lived at his property his entire life since 1956, and that his family has lived at the property for two generations before him. Mr. Heller stated that the landfill has grown noticeably over the past 15 years. Mr. Heller stated that the landfill has been operated well and has succeeded in controlling nuisances. Mr. Heller stated that the current location of the working Schilling Farm landfill has helped in mitigating odor nuisances due to the direction of the prevailing winds relative to the Heilmandale community. Mr. Heller believes that current Department regulations have also contributed to the success of the current landfill.

DEP Response: Thank you for your comments. The Department has no response.

Mr. Heller expressed great concern about the planned waste excavations of the old landfill in preparation for the proposed expansion. Mr. Heller asserted that the most dangerous landfills are older landfills which accepted waste many years ago. Mr. Heller expressed concern that disturbing the current Heilmandale landfill would release toxins and gases into the environment. Mr. Heller expressed concern about gases migrating underground and entering nearby homes. Mr. Heller was concerned about mercury vapor being released from the old landfill. Mr. Heller stated that odors resulting from disturbance of the old landfill would be noxious and much worse than odors from daily waste disposal operations. Mr. Heller stated that he has experienced

severe odors in the past during minor waste excavation projects at the landfill. Mr. Heller stated that the quality of life in Heilmandale would be greatly impacted by excavating waste from the old landfill.

DEP Response: As part of this permit application review, the Department will require GLRA Landfill to submit a Landfill Excavation Plan which, if approved by the Department, will be an enforceable protocol within the final approved permit. This Landfill Excavation Plan will address matters such as waste excavation procedures (i.e., area size of excavation, duration of excavation, season of the year, etc.), waste placement procedures, soil stockpiling procedures (i.e., pile sizes, pile durations, etc.), and soil testing for volatile chemicals. This document will also address routine air testing for toxic gases and vapors throughout the waste excavation project.

Mr. Heller stated that the GLRA Landfill has acquired adjacent farmland to the west and south of its property. Mr. Heller stated that building a new landfill in either of these areas would be a better option for the people of Heilmandale because of both wind direction and not needing to excavate old waste.

DEP Response: Thank you for your comments. The Department has no response. Questions about possible future expansions that GLRA Landfill may be considering can be directed to GLRA Landfill.

Mr. Heller stated that his property would be greatly impacted by odors and toxic gases from the proposed landfill expansion. Mr. Heller said that it would be dangerous for him and his family to live there if the proposed expansion gets approved.

DEP Response: GLRA Landfill will be monitoring soils and excavation area. If waste is encountered that would be considered a Hazardous waste, then the excavation will be stopped and the waste will be evaluated.

Mr. Heller stated that he completely opposes the proposed landfill expansion.

DEP Response: Thank you for your comment. The Department has no response.

Mr. Heller stated that his son and daughter-in-law declined his offer to give them his property because of the presence of the landfill.

DEP Response: Thank you for your comment. The Department has no response.

Mr. Heller stated that he feels that the GLRA Landfill does not care about him or the Heilmandale community.

DEP Response: Thank you for your comment. The Department has no response.

4. Lloyd Jarboe is a resident who lives near the GLRA Landfill. Mr. Jarboe stated that he and his wife moved to their current home about 3 ½ years earlier, and that they greatly appreciate the

quiet solitude of the area, as well as the open, rural atmosphere. Mr. Jarboe stated that he understands the purpose of landfills and that he appreciates their existence. Mr. Jarboe expressed concern that, if approved, the landfill expansion will increase noise levels in the area due to excavation and construction of the new landfill disposal areas, primarily from heavy construction equipment. Mr. Jarboe said that this would impact their life. Mr. Jarboe stated that noise levels can also be both magnified and carried to further distances by the wind. Mr. Jarboe also expressed concern for odors and real estate depreciation.

DEP Response: Thank you for your comments. The GLRA Landfill has procedures for mitigating noise and odor nuisances. Moreover, the Department will evaluate these mitigating procedures in its review of this proposed landfill expansion application. Although an understandable concern, the Department has yet to see any evidence or studies that support the assertion that landfills cause nearby real estate depreciation.

Mr. Jarboe asked if the Department was only concerned about residents who border the landfill, or if there are regulations concerning other residents who live further away, as this proposed landfill expansion will affect those people as well.

DEP Response: Thank you for your concern for other residents in the vicinity. Please be assured that the Department administers its regulations with a focus on all citizens, sensitive populations, ecosystems, environmental media, and biota that are potentially affected by a proposed permit action. As for this permit application, GLRA Landfill was specifically required to notify only contiguous property owners to the landfill property of the permit expansion application prior to its submission by Department regulation 25 PA Code § 271.141(b).

5. Brenda Miller asked if GLRA Landfill had explored other alternatives to this proposed landfill expansion. Ms. Miller asked if there are any other waste management options that could be considered in place of this proposed landfill expansion. Ms. Miller asked if use of a waste incinerator had been considered, as was discussed years ago.

DEP Response: Thank you for your comments. These questions should be addressed to the GLRA Landfill as the Department does not have any involvement with future disposal options that GLRA Landfill may be considering. Lebanon County is tasked with planning as to where the waste generated in Lebanon County is disposed.

Ms. Miller expressed concern about the air quality that would result from the proposed landfill expansion. Ms. Miller asked about the harm and benefit to the local community that would result from the proposed landfill expansion.

DEP Response: GLRA Landfill is required to comply with Department regulations and current permits regarding air quality protection. The GLRA Landfill will also be bound to mitigating procedures for odors, dust, and toxic gases that are approved as part of this permit application. The Department will also evaluate the overall harms of the proposed landfill expansion against the overall benefits of it. The scope of this Harms/Benefit Analysis will include, but not be limited to, the local community nearest the landfill. If the Department determines that the

benefits of the expansion do not outweigh the resulting harms, then the permit application will be denied.

Ms. Miller expressed concern about truck traffic crossing Russell Road after getting weighed to access the new disposal areas of the expansion, and any mechanical failures that might close the road to local traffic.

DEP Response: GLRA Landfill will install truck crossing signs in both directions of Russell Road should the proposed landfill expansion be approved by the Department. In the event of a truck breakdown on Russell Road, towing and removal services will be provided as soon as possible.

6. Ted and Elise Kirkwood of 1688 Heilmandale Road near the GLRA Landfill submitted the following comments to the Department on April 29, 2019, by way of e-mail as well as written comments dated May 7, 2019:

“Our concerns with this expansion project are the disturbance of gases and chemical liquids and other contaminants that we don't know about that were buried in the ground back in the 1980's when guidelines and regulations for dumping contaminants were not as strict as they are today. We feel the disturbance of this ground will lead to airborne pollution as well as ground contamination such as the water. We already see water flowing out of the ground along the road that is an orange color. We believe that not enough concern for the local residents for these conditions which should be their first priority is being heard. We lived here since the 1960's and have always put up with a smell. We have been doing a lot of research on Incinerating and it is a much cleaner alternative then just burying it in the ground. If you think about it, it takes 1,000 years for a plastic bag to decompose. If burnt it's gone in seconds. There is an incinerating plant in Lancaster (1299 Harrisburg Pike, Lancaster, PA ,17603), go see how much cleaner it is. The GLRA doesn't care what local residents have to say they push their way through no matter what. They have taken perfectly good farmland and destroyed it by taking the dirt away. They destroy Geese nests. There is a pond at the corner of Heilmandale Rd and Russel Rd and the mosquitos are horrible from it. I hope this letter helps shine a light on this very bad situation.”

DEP Response: Thank you for your comments. As previously mentioned, the Department will require GLRA Landfill to submit a Landfill Excavation Plan which, if approved by the Department, will be an enforceable protocol within the final approved permit. This Landfill Excavation Plan will address matters such as waste excavation procedures (i.e., area size of excavation, duration of excavation, season of the year, etc.), waste placement procedures, soil stockpiling procedures (i.e., pile sizes, pile durations, etc.), and soil testing for volatile chemicals. This document will also address routine air testing for toxic gases and vapors throughout the waste excavation project.

If approved, the landfill expansion will greatly reduce groundwater impact by placing an impermeable geosynthetic liner over the existing waste mass. In turn, this will eliminate rainwater percolation into the waste mass, which could impact groundwater. The groundwater monitoring wells surrounding the GLRA Landfill are sampled every three months and the data is reviewed by a Department hydrogeologist.

Although incineration is a viable alternative for waste disposal, it still has its environmental risks and harms and, as a result, many stringent environmental regulations and permit requirements that it needs to comply with, particularly in the Department's Air Quality Management Program. Final ash residue from incinerator operations must also meet stringent waste handling and disposal requirements with the Department.

Please know that any complaints that you ever have regarding landfill operations or nuisances may be directed to either the Department or the GLRA Landfill itself.

7. Signed Petition regarding increased odors emanating from the daily operations of the GLRA Landfill and concerns of odors and health concerns from excavation of waste.

DEP Response: As explained in previous comments, the Department will require GLRA Landfill to submit a Landfill Excavation Plan which, if approved by the Department, will be an enforceable protocol within the final approved permit. This Landfill Excavation Plan will address matters such as waste excavation procedures (i.e., area size of excavation, duration of excavation, season of the year, etc.), waste placement procedures, soil stockpiling procedures (i.e., pile sizes, pile durations, etc.), and soil testing for volatile chemicals. This document will also address routine air testing for toxic gases and vapors throughout the waste excavation project

Also as explained previously the question of health effects from landfills has been raised over the years. The Department is not aware of any conclusive evidence of health effects from landfills on residents living in close proximity to landfills. The Department's Air Quality Program monitors surface emissions at landfills and maintains records of these monitoring results. The Department's Air Quality Program can be reached at 717-705-4868.

GLRA Landfill proposes to continue current odor mitigation activities, which include the use of an active landfill gas collection system, disposal area size minimization, odorous waste load disposal prioritization, off-site odor patrols twice daily during working operations, odor source investigations, perimeter odor neutralization sprays, and daily compliance with standard regulatory requirements such as daily, intermediate, and final cover applications, waste load compliance with the approved waste acceptance plan, and control of leachate seeps, should they ever arise. GLRA Landfill has made a great deal of effort to find the source of any odors being generated by the landfill and to control the odors. Residents are encouraged to contact GLRA Landfill if they detect odors that they believe are being emanated from the landfill as well as to contact the DEP Waste Management Regional Office.