

Commonwealth of Pennsylvania  
Department of Environmental Protection  
Waste Management Program

July 28, 2015 Public Hearing  
Comment/Response Document

Lancaster County Solid Waste Management  
Authority  
Frey Farm Landfill  
Permit No. 101389  
Vertical Expansion

Manor Township Building

## Background

Frey Farm Landfill is an existing landfill owned and operated by Lancaster County Solid Waste Management Authority (LCSWMA), located in Manor Township. LCSWMA submitted an application for a major permit modification on February 4, 2015. LCSWMA is proposing a vertical expansion to Frey Farm Landfill over approximately 66.8 acres of existing landfill and an additional approximately 32.0 acres of new permit area, of which approximately 9.0 acres are for disposal. The vertical expansion will increase the elevation of the landfill by approximately 50 feet. In addition, Frey Farm is requesting an increase in the average daily volume of waste received for disposal from 1,500 tons/day to 2,500 tons/day, and an increase in the maximum daily volume from 2,000 tons/day to 3,000 tons/day. The application was deemed administratively complete by the Southcentral Regional Office on April 30, 2015.

The Department conducted a Local Municipal Involvement Process Meeting on April 21, 2015. The purpose of the meeting was to discuss the application with local officials and to negotiate a timeline for review of the application. The permittee, host municipality, and DEP negotiated a total of 720 calendar days for DEP to review the application and to render a decision. A public meeting was held June 18, 2015.

The application is currently in the environmental assessment/harms/benefits analysis phase of the review.

## Introduction

This comment/response document responds to comments made during the public hearing held on July 28, 2015 regarding the application for expansion and increase in daily volumes of waste accepted at the landfill for disposal.

To find your individual comment and the Department's response, please see below. In Section 1, the page(s) containing your individual comment(s) from the public hearing transcripts are noted after your name in "Page # in Public Hearing Transcripts". Your comment(s) and the Department's response to your comment(s) can be found in "Comment # in this Document" after your name.

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Section 2 of this document contains DEP responses to correspondence received after the public meeting/hearing.

# Section 1

1. Mr. Baldrige is the president of the Lancaster Chamber of Commerce and Industry. He supports the expansion and indicates that the Frey Farm Landfill is important to the infrastructure of Lancaster County. The civic and business community relies on LCSWMA for disposal services. LCSWMA works to minimize the amount of waste that is landfilled through recycling and combustion. LCSWMA provides professional and financial support to the community to offset adverse impacts. Their operations are operationally and fiscally responsible.

**DEP Response:**

Thank you for your comments. DEP does not have any further response.

2. Lisa Riggs is president of the Economic Development Company of Lancaster County. They support the expansion of the landfill. They are a partner with LCSWMA and believe they are essential to the infrastructure for the business community, as well as a reliable resource for hundreds of businesses for safe disposal of many types of waste streams. LCSWMA has a good track record in fiscal management and long-term planning.

**DEP Response:**

Thank you for your comments. DEP does not have any further response.

3. Mark Platts is president of the Susquehanna Gateway Heritage Area. They are one of the 12 state designated Pennsylvania Heritage Areas. The organization is based across the river in Wrightsville, York County, along Long Level Road. The mission is to enhance the regions quality of life and economic vitality by promoting the preservation, conservation, and interpretation of the cultural and natural heritage of the Susquehanna River. The organization has received funding from LCSWMA to support work along the river, which includes building trails, new visitor facilities, installing way-finding interpretive signage, staff support, and facilitate programs and projects along the river. The organization has already received \$335,000 from LCSWMA and receives ten cents per ton of waste received at Bainbridge and Frey Farm Landfill until at least the year 2019. LCSWMA has funded other projects as well, and shows that they are a good neighbor. They minimize environmental and social impacts of the waste society creates.

**DEP Response:**

Thank you for your comments. DEP does not have any further response.

4. Kathy Hohenadel is the executive Director of the Susquehanna Valley Chamber of Commerce. The organization focuses on preserving and strengthening the business and tourism environment for the Susquehanna Valley. They note that LCSWMA's disposal rates are inexpensive compared to other regions. This allows local waste haulers to pass the savings on to area residents, which frees up money to support the local economy. LCSWMA has provided funding to the Susquehanna Valley Chamber of Commerce, to help support their mission. The Susquehanna Valley Chamber of Commerce supports the expansion.

**DEP Response:**

Thank you for your comments. DEP does not have any further response.

5. Ken Lefever is the president of Environmental Recovery Corporation (ERC). ERC relies on LCSWMA to dispose of waste that it produces that cannot be burned or recycled. ERC is growing, and it is important to have a disposal facility for its waste. Because of the location of Frey Farm Landfill, it keeps transportation costs down, and is easy to access. Not approving the expansion and increase in daily volumes would negatively impact ERC and future growth in Lancaster County.

**DEP Response:**

Thank you for your comments. DEP does not have any further response.

6. Ed Ward is the Municipal Contract Manager for Penn Waste, a local waste collection company. Penn Waste services approximately 175,000 homes per week and 4-5,000 commercial accounts. LCSWMA has an excellent compliance record. They operate their business with excellence. They make smart business decisions and keep costs down. LCSWMA is critical to the hauling companies. Penn Waste supports the expansion so that the future waste disposal needs are met.

**DEP Response:**

Thank you for your comments. DEP does not have any further response.

7. Leo Lutz is the Mayor of the Borough of Columbia. As a public official, he states that he has to balance the needs of the community with the potential impacts. LCSWMA assisted with the planning of the relocation of SR 441, which will bypass Columbia so that the trash trucks will no longer travel through town. LCSWMA also assisted with the Columbia Crossing Building. LCSWMA has a great management team. Columbia Borough supports the expansion of the landfill.

**DEP Response:**

Thank you for your comments. DEP does not have any further response.

8. Nancy Smith and her husband have lived directly across from the landfill, since 1966. They believe that the landfill is doing a very good job in all aspects of its operation. The landfill is a good neighbor and takes care of them and other neighbors. The landfill plows their driveways in the wintertime, has assisted in installing an air conditioner, and has provided drinking water. Yard waste can be brought to the landfill free. They have also made a baseball and soccer field for children. They support the expansion of the landfill.

**DEP Response:**

Thank you for your comments. DEP does not have any further response.

9. Jay Frey lives on Brenneman Road adjacent to the landfill. He is also on the Citizens Advisory Board. He has driven around the landfill and believes that the landfill looks very nice and is operated very well with top notch people. It is hard to tell that it is a landfill. LCSWMA does a

lot for the community. Mr. Warner of LCSWMA has the compassion and intelligence to guide the landfill into the future.

**DEP Response:**

Thank you for your comments. DEP does not have any further response.

10. Arthur Mann's family has been in Manor Township for over 260 years and he is Chairman of the Board of Foundry Operation at Donsco, located in Wrightsville and Mount Joy. Donsco depends on the landfill to dispose of spent foundry sand that can't be used or recycled. The landfill expansion is important because of the growth of Lancaster County. He supports approval of the expansion.

**DEP Response:**

Thank you for your comments. DEP does not have any further response.

11. Barry Smith is the chairman of the Lancaster Sewer Authority (LSA). LSA has treated Frey Farm Landfill leachate for more than a decade. Conversely, Frey Farm Landfill has disposed of bio-solids from LSA. Frey Farm is very well run and environmentally responsible. LSA supports the expansion of the landfill

**DEP Response:**

Thank you for your comments. DEP does not have any further response.

12. Leslie Osborne has indicated that the Frey Farm Landfill was designed as a disposal facility for all waste generated in Lancaster County that cannot be processed at the WTE facility, and to receive all ash from that facility. In 2014, 26.92 % of the waste entering the Frey Farm Landfill was generated outside of Lancaster County.

**DEP Response:**

The Pennsylvania Municipal Waste Regulations "*PA Code Title 25 Section 272 Municipal Waste Planning, Recycling and Waste Reduction*" provides for rights and responsibilities for municipal waste planning, recycling and waste reduction. The use of the Frey Farm Landfill for disposal of waste from outside the county is decision of the Lancaster County government and not the Pennsylvania Department of Environmental Protection. Furthermore waste coming into Pennsylvania from out of state and disposed in a landfill or combusted in a resource recovery facility in Pennsylvania is protected by the commerce clause of the US Constitution. Only Federal law may regulate interstate commerce. DEP does not have any authority to regulate if out of state waste is transported to either of LCSWMA's resource recovery facilities and the resultant ash is then disposed at the LCSWMA Frey Farm Landfill. In addition the host municipality, Manor Township, has entered into a host agreement that has provisions concerning the continued operation of the Frey Farm Landfill. DEP's role is to review the application submitted in accordance with applicable regulations, and to monitor the facility for environmental compliance.

13. Leslie Osborne has stated that the increase in ADV and MDV was not mentioned or discussed during negotiations with LCSWMA and PALE.

**DEP Response:**

DEP does not participate in discussions or negotiations between LCSWMA and county government, host municipalities and separate organizations. As part of the application review, DEP encourages public participation. DEP conducts a local municipal involvement meeting, a public meeting, public hearing, accepts comments, and makes the application available for public review.

14. Leslie Osborne stated that the truck traffic, which will double, will impact public health, safety, and the quality of life for people living along the approach route to the landfill.

**DEP Response:**

DEP is aware of additional impacts due to the proposed increase in average and maximum daily volume. DEP is currently evaluating traffic impacts and mitigations as part of the environmental assessment review process.

15. Leslie Osborne submitted a notebook with information that dispute claims that the increase in tonnage is necessary. The harms clearly outweigh the benefits, and the increase in ADV and MDV should be denied.

**DEP Response:**

DEP appreciates the information that has been submitted as part of the public participation process. DEP is currently reviewing this information as part of the environmental assessment review process.

16. Kurt Young was a former employee of LCSWMA and indicated that LCSWMA environmental record was excellent in the years that he worked there. He has a concern regarding where all the additional trash trucks will be coming from. LCSWMA trucks do not have a problem, but many out of state trucks had problems. He lives along SR 441, along the haul route, and is concerned about the condition of non-LCSWMA operated trash hauling trucks utilizing Frey Farm Landfill.

**DEP Response:**

Generally out of state trucks do not enter the Frey Farm Landfill. There are trucks coming in from out of state that haul refuse to the LCSWMA Bainbridge Resource Recovery Facility and LCSWMA Susquehanna Resource Management Complex. DEP and the Pennsylvania Department of Transportation (PennDOT) as well as the Pennsylvania State Police conduct monitoring of waste hauling vehicles for compliance with all applicable regulations. Please note that DEP will be reviewing trash truck traffic compliance. The Frey Farm Vertical Expansion application also includes a plan for traffic compliance for trucks that are transporting waste to the Frey Farm Landfill.

17. Philip Wenger is the owner of Isaac's, operating eight restaurants in Lancaster County. He owns property both in York and in Lancaster Counties. He spends much time on the river and

participates in organizations that support the river. He feels that the expansion attends to the future needs of Lancaster County, does it in a cost-effective manner, and minimizes the impact on the environment. He believes that there are visual and other impacts of the landfill, but are primarily mitigated. He believes that LCSWMA is a good partner in the community and supports the expansion.

**DEP Response:**

Thank you for your comments. DEP does not have any further response.

18. Mary Glazier is a resident of Manor Township, less than two miles from the landfill. She indicates that the landfill space should be conserved and only be used by Lancaster County. Many of the benefits provided by LCSWMA were mandated by the 1986 Zoning Hearing Board decision to allow the creation of Frey Farm Landfill in 1986. Other benefits were provided because of an agreement with PALE and to settle other lawsuits.

**DEP Response:**

Please see response #12 regarding the issue of use of the Frey Farm Landfill space to be used only by Lancaster County. DEP will only be evaluating benefits that would be considered related to the vertical expansion of the Frey Farm Landfill.

19. Mary Glazier is concerned about the impact on truck traffic. The truck traffic has been dramatic and traumatic. 15 years ago, leachate from a trash truck spilled in front of her. She had to drive through the leachate which made her car smell so bad that she had to cancel a vacation because spending hours in the car with the smell would have been intolerable. How safe are the trucks using Frey Farm Landfill? Truck inspections at the landfill showed many violations. She was not able to find out the particulars on the violations. This is very important in light of the large number of additional trucks using the haul routes if the increase in daily volumes are approved.

**DEP Response:**

See response number #16. The PennDOT, State Police and DEP conduct truck inspections. DEP is reviewing relevant information regarding truck safety and the LCSWMA traffic compliance plan.

20. Mary Glazier stated that the local newspaper published an article that ranked Lancaster 4th in the state in truck accidents, with 982 accidents between 2011 and 2015. Many trucks have tipped over on SR 441, including trash trucks. The road is very deficient and worse with additional truck traffic. The increased truck traffic will impose a heavy burden on people living close to the landfill from traffic hazards, pollution, noise and wear and tear on the bridges and roadways. She wants DEP to take this into account when reviewing the harms/benefits analysis.

**DEP Response:**

DEP is aware of the concerns of safety concerns and other environmental concerns with truck traffic on SR 441. DEP and PennDOT are reviewing these safety and environmental issues as part of the Environmental assessment process.



21. Penn Glazier indicates that somehow the Authority lost its way and now is operating like a for profit corporation, having forgotten that its original purpose was to serve the people of Lancaster County. The Authority purchased the Harrisburg Incinerator and is now the waste collector for Dauphin County. The Authority now receives waste from 23 other PA counties as well as 12 other states. In February of 2015, the Authority said that the expansion would allow them to serve the needs of Lancaster until the year 2029 and the increase in daily volumes was to accommodate future population growth and waste generation in Lancaster County. No mention was made of taking out of county and state waste. This contradicted the 2014 Municipal Solid Waste Management Plan update where the Authority asserted that the expansion would extend landfill operations until 2042. It was stated that the increase in daily volumes were needed in the event of a disruption at the incinerator. It is clear that the Authority is looking for out of county and state waste. The people living near the landfill will bear a significant burden from the expansion.

**DEP Response:**

Please see Response #12 as well. The LCSWMA, is a Lancaster County government entity that makes planning decisions regarding Lancaster County's waste disposal in conjunction with Lancaster County government. DEP's role is to enforce environmental compliance with the Rules and Regulations of the Department. Waste that is generated out of county or out of state and transported to the SRMC or the Bainbridge Resource Recovery Facility and the resultant ash that is then transported to the Frey Farm Landfill, is a commerce and business issue outside of DEP's authority. DEP and the PennDOT are authorized by regulation to review safety and environmental impacts of trucks hauling waste to the Frey Farm Landfill, and the permitting and environmental compliance monitoring of the Frey Farm Landfill.

22. John Cox is the president of Turkey Hill Dairy. They are a customer of the Authority. They believe that the landfill operates in a way to minimize environmental impacts and supports the community and heritage. There was a time when trash from the landfill was a serious problem, but not anymore. Their economical disposal services are important to Turkey Hill. Turkey Hill is partnered with LCSWMA. The landfill gas plant generates electricity to the grid. Turkey Hill supplies water to LCSWMA to cool their engines and turn it to steam. Turkey Hill then uses the steam to replace approximately 200,000 gallons of diesel fuel that is used in their boilers. They would prefer that the landfill were not there, but they are good neighbors. Turkey Hill supports the expansion.

**DEP Response:**

As part of the environmental assessment for the application, the Department must evaluate all of the real and potential harms that may be associated with the expansion and increase in daily volumes and balance the harms against the social and environmental benefits that are directly related to the proposal. As one of the benefits supporting the application, LCSWMA also provides that the steam piped to Turkey Hill and the use of the steam to replace approximately 120,000 gallons of diesel fuel per year that would be used in their boilers is considered an environmental benefit. Note that LCSWMA indicates the diesel fuel savings of 120,000 gallons per year, which differs from your testimony. The Department will consider this proposed benefit in our analysis.

23. Michael Ray Helfrich is the Lower Susquehanna River Keeper, a representative of the Members of Stewards of the Lower Susquehanna, a non-profit conservation organization whose mission is to protect and improve the ecological and aesthetic quality of the lower Susquehanna River watershed and Chesapeake Bay. He questions whether this is the best place for a landfill. Many people testified supporting the landfill expansion whose businesses flourished because of the landfill or received financial benefits from the landfill. He is concerned about the ecological and aesthetic degradation that may occur if the expansion is approved. The current permit does not allow the landfill to grow larger. If the expansion is denied, the aesthetic blight can be partially mitigated. It was suggested that Frey Farm could build a berm that could be planted with tall-growing trees such as Tulip, Poplar, and Cherry Trees. An Arborist has been hired to perform a tree buffer study and implement the program if practical. He does not believe though, that it would mitigate the impacts.

**DEP Response:**

Landfills carefully consider all of their options when considering expanding their landfills. Most, if not all landfills, choose to expand at their existing landfill site because the entire infrastructure exists already and they own or lease the land currently, rather than finding new land elsewhere. DEP does not have the authority to require a landfill to look for alternative locations. We must however, consider land use and zoning issues as part of our review. A zoning or land use issue must be identified by the host municipality or county. By letter dated August 3, 2015, we asked Manor Township to determine if any land use or zoning issues are identified. To date, we have not received a response. The Department can take application or permit actions only if a conflict is identified by the host municipality (e.g. permit suspension/denial).

DEP must evaluate all known and potential impacts that could occur if the application is approved, which also includes an evaluation of the aesthetic and viewshed impacts of the landfill expansion. This also includes an evaluation of the long term effectiveness of the proposed vegetative screening. We have and will continue to visit many points around the landfill to see for ourselves the aesthetic impact of the proposed vertical expansion.

24. Michael Ray Helfrich indicates that government has spent \$75 million to improve the existing cultural, historic, and recreational tourism economy in this area. Millions have been spent preserving High Point and the Susquehanna Gateway Heritage areas riverfront improvements. Susquehanna Gateway Heritage received \$350,000 from the Authority, but also received over 1.2 million of our money. The money that the Authority gave cannot offset the negative impacts, especially the vertical expansion that will be seen forever. An aesthetics study was done by the Authority to show how many people could see the landfill, but what about the tourists and the tourist economy? What about the business income that may be lost.

**DEP Response:**

See response to No. 23 and No. 40.

25. Michael Ray Helfrich indicates that the 50 foot vertical expansion will degrade the aesthetics of the Lower Susquehanna River, but also poses unknown risks by placing an additional 7.7 million

cubic yards of waste next to the river, half being incinerator ash. A vertical expansion of this type has not been attempted before with incinerator ash. Incinerator ash is unstable, and PennDOT even determined that it could not be used for road base, but only for road embankment. How will the expansion and contraction of the material effect walls and liners of the vertical expansion? He does not believe that the liners can stretch. Further studies should be conducted regarding the physical and chemical properties of the incinerator ash.

**DEP Response:**

The Department recognizes that the proposed increase in vertical height of the landfill will impart an aesthetic harm to the surrounding landscape. This aesthetic harm will be evaluated in the Department's Harms/Benefit Analysis.

Unless additional information or future events with landfilled municipal incinerator ash prove otherwise, the Department is not aware of any concerns regarding ash instability, or expansion and contraction of incinerator ash. In his public comment, Mr. Helfrich may have been referencing unsuitable construction applications of processed incinerator ash that may have had unfavorable outcomes. Moreover, the Department has not observed any of these conditions within the current Frey Farm landfill. Nonetheless, the Department recognizes the need for ongoing monitoring and surveillance of landfill operations, including landfill grades and cap integrity.

26. Michael Ray Helfrich is concerned regarding the buildup of explosive hydrogen from the oxidation of high levels of aluminum in incinerator ash. How can the landfill be stable when this oxidation will occur forever?

**DEP Response:**

The Department recognizes the potential for hydrogen gas production from municipal incinerator ash. If such hydrogen gas production occurs, the landfill's gas management system will sufficiently remove the gas. Moreover, the Department has not yet observed hydrogen gas within the current Frey Farm Landfill operations. Nonetheless, the Department recognizes the need for ongoing monitoring and surveillance of landfill operations, including proper operation of the gas management system.

27. Michael Ray Helfrich requests that the DEP evaluate the harms/benefits properly. Are there other alternatives? Where is the alternatives analysis? Isn't there a better place for a landfill then somewhere where tens of millions have been spent to preserve and promote recreational and tourism that is based upon the visual appeal of the area?

**DEP Response:**

There is not a requirement for a needs analysis or alternatives analysis in our Municipal Waste Regulations. In other words, a landfill does not have to demonstrate actual need when it is provided for in a county plan, based upon court cases, nor does the facility have to show that their location is better suited than other possible locations for a landfill. DEP's responsibility is to review the application in hand and to make sure that it meets all the requirements of the Municipal Waste Regulations before a permit can be issued. Impacts to the local area are considered as part of our review.

28. Mary Beth Deemer is a partner in the Pittsburgh Law Firm of Jones Day. She introduced four different speakers regarding technical and environmental issues with the expansion. She briefly described what each presenter's topic was. She did not have any other questions or comments regarding the expansion.

**DEP Response:**

Thank you for your comments. DEP does not have any further response.

29. Walter Leis is a Licensed Geologist in the state of Pa. His concern is how gravity will affect the design of the landfill. He believes that it is not a good idea to build a mountain of trash onto another mountain of trash. It is also near an active fault zone. The soil in the area is known to creep. It is not all over, but it is there.

**DEP Response:**

During the technical review, the Department will evaluate the permit application based upon sound engineering and scientific judgment regarding geology and seismic activity. If DEP determines a need for additional information, supporting documentation and/or additional environmental investigation to support the permit application technical review, DEP will request LCSWMA to provide the data.

30. Walter Leis indicates that groundwater flows are not known well. The Martic Thrust, a large thrust fault which extends into eastern Pennsylvania, is in the area. Many epicenters correspond to the Roseville Martic Thrust and it is underlain with limestone. At depths (1100-1200 feet), there are thrusts called imbricates, similar to pizza boxes stacked on top of each other, being pushed up. Based upon well logs from the past, it is inconclusive how deep weathering occurs. There are zones under the landfill that may be prone to slippage, potentially causing landslides. He recommends that creep studies be conducted. Seismicity has not been addressed in the application. He recommends that a third party geophysicist be consulted. Structural geology, especially with respect to the weathered soil zones, needs to be looked at very carefully.

**DEP Response:**

See response to No. 29.

31. Walter Leis says that groundwater contours just disappear. The 1985 groundwater models show groundwater flowing towards the river. A totally different conclusion was made with this application using the same data. There are also seeps and springs on the hill, but it is not known where they are or their effect. Post-closure is hundreds of years, with gravity acting on the site every day.

**DEP Response:**

DEP will evaluate these items more closely during the permit application technical review and will request LCSWMA to provide additional information.

32. John Cassel is a geospatial Analyst, who evaluated ARM Group's line-of-sight study. He indicates that ARM mischaracterizes the visual impact as slight. He states that the study did not take into consideration the items listed in Section 271.127 of the Municipal Waste Regulations on any of the maps. The study limit was three (3) miles, where the landfill can be seen much farther away. The Pennsylvania Historic and Museum Commission guidelines recommend a 5-mile study area for wind turbine projects. He believes that ARM should not consider tree screenings in the study area except for those trees adjacent to the landfill property, because trees are not permanent structures and the Authority has no control over trees that are not on their property. He believes that all the people that can see the landfill now should be considered impacted, because they will see a landfill which is higher, not just new people who can see the vertical expansion. Using a viewshed tool in a software package called Global Mapper, the 3-mile radius shows that the landfill would be visible to twice the amount of area then in the ARM study. This is due to the tool considering no trees or structures, but only bare earth in the analysis.

**DEP Response:**

The Department recognizes that the proposed increase in vertical height of the landfill will impart an aesthetic harm to the surrounding landscape. The Department will evaluate this aesthetic harm in the Harms/Benefit Analysis, which will be consistent with acceptable methods, rationales, and considerations.

33. John Cassel indicates that the line of sight study prepared by ARM does not adequately or accurately reflect the visual impact of the vertical expansion, because out of date elevation data and technology was used to compile the 3-mile viewshed, and that the distance studied should have been 5-7 miles instead of 3 miles.

**DEP Response:**

The Department deems that three (3) miles is a sufficient distance for a Line of Sight Study to be acceptable in a permit application. Nonetheless, the Department will assess visual aesthetics at further distances as part of the Harms/Benefit Analysis, which will be consistent with acceptable methods, rationales, and considerations.

34. Craig Benson conducted an engineering review of the application. He states that the majority of waste that Frey Farm Landfill takes in is inorganic (e.g., incinerator ash, foundry sand, other types of residual waste). Inorganic waste does not decompose over time like the organic waste that is typically associated with municipal waste. Because of this, the Frey Farm Landfill must be viewed as a containment facility, as opposed to a facility that will eventually reduce and stabilize the waste through continual decomposition. The challenge and concern for the Frey Farm Landfill is that it will be constructed from synthetic materials that will eventually fail, thus compromising its purpose as a containment facility, and ultimately threatening the environment. Mr. Benson also states that the mechanically stabilized earth (MSE) berm that is proposed for the Frey Farm Landfill expansion will also be constructed with synthetic reinforcing materials that will eventually fail. When this happens, the potential will exist for the landfill's waste to slide into the Susquehanna River. Mr. Benson stated that, if approved as part of this permit application, the MSE berm should be monitored and validated for stability on a regular basis.

**DEP Response:**

Although most organic wastes decompose in landfills over time, the Department draws no distinction between the long-term management of organic versus inorganic wastes. The Department does not recognize the implication that waste stabilization (i.e., through decomposition, gas and leachate production, volume reduction, etc.) lessens the need for long-term containment. The Department views all landfilled municipal and residual waste as equal in its standard of care for long-term containment. As such, the Department recognizes the need for long-term oversight of disposal facilities that are constructed with synthetic materials.

The Department will review the proposed design of the MSE berm based upon current industry design standards and recent historical performances. Again, the Department recognizes the need for long-term oversight of disposal facilities that are constructed with synthetic materials.

35. Dwight Yoder is an attorney who is focused on zoning and land use law. He indicates that the application does not contain zoning or land use approvals from the Township, but just a letter to Manor Township and Lancaster County asking if the expansion meets zoning requirements. They received no response. The 1986 zoning ordinance that approved Frey Farm Landfill states that no raw solid waste may be accepted for disposal from sources outside of Lancaster County. Only ash from out of county may be accepted. Some of the expansion area proposed is not zoned for landfill, and is outside of the area that was approved in 1986. The representation to the Board in 1986 was that there would be no further expansions when Frey Farm was filled. Leachate collection and treatment systems were not to be constructed in any other site in Manor Township. The maximum height of the landfill is 40 feet. Setbacks and lack of screening also violate zoning. The application should be suspended or denied until LCSWMA receives zoning approval. Because of the aesthetic impairment on the Susquehanna River corridor, the benefits of the proposal cannot clearly outweigh the harms, and DEP should look at the environmental assessment very carefully.

**DEP Response:**

As you may be aware, the Department must consider Act 67 and 68 as part of the review of this application. DEP shall consider and may rely on comprehensive plans and zoning ordinances when reviewing applications. A potential conflict arises when we receive notice from county or local municipality that the project may conflict with local comprehensive plans or zoning ordinances, or if a conflict is noted in the applicant's General Information Form. By letter dated August 3, 2015, we asked Manor Township to determine if any land use or zoning issues are identified. To date, we have not received a response. In the case that conflicts are identified, our Central Office Policy Office will review the conflict and determine the land use implications and notify our office. DEP can deny, approve or put special conditions in permits when a conflict exists.

In reviewing the harms/benefits analysis, the first step is to identify harms, such as aesthetics, traffic, etc., and to review mitigation measures that the applicant has provided. If necessary, we would request additional information to clarify or reinforce mitigation measures to offset the harms. After all mitigations are offered and reviewed, the Department determines the extent of the remaining harm, if any harm still remains. With respect to aesthetics, we need to evaluate what

measures are provided to screen the landfill, and to evaluate the impact of the increased height on the viewshed. Bear in mind, that our evaluation is not the impact of the existing landfill, but what impact the additional 50 feet of height has from varying locations. All harms and all benefits must be evaluated holistically to determine the outcome.

36. William Rackley is a resident in Manor Township along SR 441. Train traffic has increased 400% and the vibrations can be felt in his home. Truck traffic is already bad, without adding additional truck traffic from other counties and states. No one patrols the highway and the trucks travel 50-60 mph every day.

**DEP Response:**

Currently, PennDOT is reviewing the traffic study provided to them by LCSWMA. This also includes an evaluation of SR 441. DEP will also evaluate the community impact of increased truck traffic along this road as well. Part of that evaluation is to review the transportation compliance plan in the application and to evaluate the effectiveness of that plan to ensure that trucks are operated safely and in compliance with our regulations.

37. William Rackley indicates that there are no sidewalks where the kids can walk to get to their school bus stops and no shoulders along the road. People try to keep their kids from the front of their properties. He is concerned for the safety of the kids and the number of school bus stops along SR 441. (Page 108)

**DEP Response:**

As a part of our environmental assessment, DEP will be evaluating the additional trash truck traffic's impact on school bus routes and school bus stops along portions of the haul routes. We will also evaluate the transportation compliance plan in this regard. We will be requesting additional information from LCSWMA regarding school bus stop locations and school bus routes. Generally, the School Districts will be contacted for any comments or concerns they may have also.

38. William Rackley asks that it will be hardship on the economy if the landfill runs out of space because of everyone else using the landfill, and if the permit is granted, that it is for Lancaster residents only.

**DEP Response:**

There have been several court cases that affirmed that Pennsylvania cannot prevent waste from being disposed in PA that is generated out of state, as it would interfere with interstate commerce. However, Act 101, the Municipal Waste Planning, Recycling and Waste Reduction Act, provides that counties manage their waste and designate disposal facilities for waste generated within the county. A county may designate a disposal facility not located in their county. Frey Farm Landfill, however, may accept only ash, construction/demolition, and residual wastes from sources generated outside of Lancaster County, as a result of an agreement with the host municipality. The Frey Farm Landfill may not accept putrescible waste directly from sources generated outside of Lancaster County. The Department also does not authorize violation of country plans, when issuing a permit.

It is also the Department's experience that landfills which have the ability to expand their existing landfill will continue to submit applications for expansion to the DEP until it is no longer feasible to expand. Only one municipal waste landfill has closed in the Southcentral Region in the past 25 years.

39. William Rackley asked if anyone tested the wells around there. People around the landfill get their wells tested for free, but it would cost him \$300.00 to test his own well. Health and safety issues are not being addressed.

**DEP Response:**

LCSWMA currently samples onsite groundwater monitoring wells and contiguous property owner drinking water wells on a quarterly basis. Analytical results indicate that groundwater wells beyond these contiguous property locations would not be impacted by the Frey Farm Landfill.

40. Liz Winand owns a business located on the York County shore of the Susquehanna River. They are involved in the recreational use of the river. They teach paddle sports, are involved with programs for York and Lancaster County students, and put thousands of people each year on the river to enjoy the beauty of that body of water. Every week people using the river ask about the landfill, asking what it is and what's going on. With the vertical expansion, the view will have an even larger impact. She serves on the Susquehanna Riverlands Tourism Development Group, whose mission is to generate economic impact in the region through various activities. At least \$25 million or more of economic impact has been pumped into this area. The Captain John Smith Chesapeake National Historic Trail has been expanded to include our section of the Susquehanna River. The visual impact of the landfill will have a negative impact for anyone using the trail. Millions of dollars of real estate investments have been made in the Long Level community on the York County shore of the Susquehanna River. A higher landfill will impact the value of current and future real estate investments.

**DEP Response:**

DEP must evaluate all known and potential impacts that could occur if the application is approved, which also includes an evaluation of the aesthetic and viewshed impacts of the landfill expansion. This also includes an evaluation of the long term effectiveness of the proposed vegetative screening. We have and will continue to visit many points around the landfill to see for ourselves the aesthetic impact of the proposed vertical expansion. The extent of this harm must be ascertained, and combined with other harms that are not fully mitigated. These harms must be balanced against all of the accepted social, economic, and environmental benefits that are associated with this proposal to determine if the benefits to the public clearly outweigh the environmental harm.

The greatest impact on real estate values would be those properties closest to the landfill. LCSWMA has in place, through an agreement with Manor Township, a property protection plan for those residents owning properties near the landfill. This does not, however, extend into York County across the Susquehanna River. It would be very difficult to determine whether real estate values in the Long Level community would be impacted by the vertical expansion because the



impact of the existing landfill is not considered, but only the additional 50 feet of height of the landfill, if permitted. In addition, it would be difficult to determine whether the landfill has impacted real estate values in the area over time, or whether property prices realized were simply a function of market conditions.

41. Michael Fry is concerned about the truck traffic. He also states that sometimes you can't see the trucks at the bridge before you get to Warner's Garage. He is concerned about safety and the potential for accidents. He would like to know if the out of state trucks could go somewhere else. He also asks if he could pass around a petition so people could vote on whether they want the expansion or not.

**DEP Response:**

DEP and PennDOT will be reviewing the intersection near Warner's Garage. Generally out of state trucks are not coming directly to the Frey Farm Landfill. Regarding your question on a petition; there is no provision in our regulations to consider a vote on a proposal. However, we do consider concerns that are raised by residents and factor them into our environmental assessment.

42. Brandon Clark is the Chair of Manor Township Supervisors. The Township supports the expansion of the landfill. LCSWMA has been a terrific neighbor to the Township. LCSWMA is operated well and they have the county's best interest in mind environmentally and fiscally. They have gone above and beyond to address the constituents and PALE. The Board of Supervisors will continue to hear concerns, but everything can be overcome.

**DEP Response:**

Thank you for your comments. DEP does not have any further response.

## **Section 2**

### **The following emails and letters were received after the meeting/hearing:**

**Christine Meckley August 4, 2015 email**

She asks what contamination is flowing into the Susquehanna River now from the existing landfill. Farmers have to make changes to the way they operate their farms due to Chesapeake Bay, but consideration is given to the impact that the landfill will have on the bay. She states that the landfill will have an impact on the natural beauty of the river hills.

**DEP Response:**

The landfilling of waste is conducted above impermeable engineered synthetic liner systems and leak detection zones. The groundwater in the vicinity of the Frey Farm Landfill is monitored by a network of groundwater monitoring wells around the perimeter of the landfilled area. Stormwater management and sediment control facilities have already been constructed to allow the surface water runoff from the landfill to be filtered via settlement and removal of sediment prior to the

water entering a surface water body. Groundwater from the Wissahickon Formation (gray to green albite-chlorite schist) has been documented to be soft and high in iron concentrations. Other constituents such as chloride, nitrates, sodium, and total dissolved solids are elevated in the area, but appear to be naturally occurring or the result of upgradient activities (e.g. agricultural, road salting, other). The stream monitoring point upgradient of the Frey Farm Landfill tends to be more highly elevated in constituent concentrations in comparison to the downgradient stream monitoring point. Constituents detected at the Frey Farm groundwater monitoring well locations have a tendency to be at lower concentrations than the stream monitoring points.

**Christine C. Brubacker August 7, 2015 emailed letter**

She attended the public hearing but did not speak and would like this letter to represent her testimony. She thought that, after reading the press release, that the June 18, 2015 public meeting was by invitation only, and not a public meeting. She has never seen an official vote supporting the expansion by the Supervisors at a township meeting. She has been very actively involved with government agencies and environmental organizations over the years. She thought that eventually the US Department of the Interior would name this area a National Landmark. When that failed Pennsylvania named the area a Heritage Site. If DEP approves the application, then DEP is telling the state that the designation does not matter. The landfill has contaminated streams before, and the water cannot be contained in the liners. The ash in the landfill is possibly toxic, radioactive, and unstable. The seismic activity should be evaluated, as she has witnessed rock slides before. She requests that DEP denies the application.

**DEP Response:**

The Department will follow all regulatory guidelines and procedures in its review of the Frey Farm Landfill permit application. The Department will not issue a permit that is contradictory to, or in violation of, any applicable state or local laws or ordinances that are not preempted by the Pennsylvania Solid Waste Management Act.

The Department is not aware of any stream contamination events from the Frey Farm landfill.

The Department does not permit the disposal of toxic waste in municipal and residual waste landfills, such as the Frey Farm Landfill.

The Department is not aware of any added instability from municipal incinerator ash.

The Department will evaluate the permit application based upon sound engineering and scientific judgment, including locational specific considerations regarding geology and seismic activity.

**Christine C. Brubacker August 7, 2015 email (second email)**

This email provides information and questions regarding Turkey Hill Dairy operations, pipelines, and Manor Township meeting format.

**DEP Response:**

Your comments and questions have merit, but DEP cannot comment on your email, as our review is specific to the vertical expansion of the Frey Farm Landfill.

**Robert DeLange August 3, 2015 letter**

He lives along SR 441 near Turkey Hill. He requests that DEP denies the expansion and increase in truck traffic. When he moved here he was told that the landfill was going to be closed and turned into a park in 2019. His quality of life is already diminished because of truck traffic, oil trains, high pressure gas pipe planned in the field across the road, and the Turkey Hill expansion. Also, he has lost half of the night sky. Most of the people who have something to gain from the expansion live somewhere else. He has been run off the road by trucks, which speed up to 70 mph, feared for his safety, have had to pick up trash in his yard from the landfill trash trucks. He has put up with enough and requests that the permit be denied.

**DEP Response:**

The Department will evaluate the increased traffic harm in the Harms/Benefit Analysis, which will be consistent with methods, rationales, and considerations.

**J. Dwight Yoder August 7, 2015 letter**

He asks if it is appropriate for LCSWMA to rely on studies and tests performed in the 1980's as part of their original application for the Frey Farm Landfill, especially since a different conclusion was reached using the same data. The landfill has been operating for 30 years and the types of waste received are now different. Testing and analysis should be based upon current conditions and latest technology.

LCSWMA indicates that the landfill will reach capacity in 2019. He believes that the landfill has much more capacity, and would like DEP to verify the remaining capacity. This is important in light of zoning and approvals were based upon the landfill being used only for Lancaster County Waste.

LCSWMA has misrepresented the site life from the expansion to the public, saying that the expansion will afford them 20+ years of additional capacity. DEP should explain exactly how many years of capacity they will receive with the expansion request, and explain the discrepancy. Long-term landfill will undermine and destroy the aesthetics and viewshed of the Susquehanna River as well as having a negative impact on property owners and businesses.

There is a concern that the vertical expansion will last potentially until the year 2050 or beyond. Because of using MSE berms, the landfill may continue to expand and DEP should consider the harms/benefits of a likely future expansion of the landfill.

**DEP Response:**

The Department will evaluate the Frey Farm Landfill permit application based upon current regulatory guidelines, industry standards and practices, best available data and information, sound engineering and scientific judgment, and past compliance history.

The Department concurs with the current estimated capacity date of 2019, based upon current average daily volumes to the landfill.

The proposed expansion will add 10 additional years of capacity to the landfill, based upon the proposed average daily volume of 2,500 tons per day. The actual time that the landfill takes to reach this capacity may be longer than 10 years due to fluctuating daily volumes. Nevertheless, any expansion beyond the scope of what is approved in this permit application would require another permit application for landfill expansion to be submitted to the Department.

The Department's evaluation of the harms and benefits of this permit application is limited to the scope of the proposed expansion of this permit application.

**David B. Smith undated message**

David submitted a message simply saying "no landfill expansion"

**D. Robert Thompson, PE, Borough Manager, Borough of Ephrata July 31, 2015 letter**

The Borough of Ephrata supports the expansion. He indicates that there is a challenge for LCSWMA to balance the needs of the citizens they serve, with the conflicting desires of other citizens and businesses. Government agencies strive to develop solutions that fulfill a larger community need, realizing not everyone will be happy. If the Authority expanded elsewhere, those people would not be happy. LCSWMA has done their best to minimize the social, financial, and environmental impact with this project. Frey Farm Landfill is a cost effective solution for disposal of Ephrata's sewage sludge, and is the only landfill in the county. To go elsewhere would increase sewer fees to their customers.

**DEP Response:**

The Department's Harms/Benefits Analysis was developed for many of the same reasons that you outline in your letter. It was known that landfills do impact the local community in many ways, both negatively and positively. The Department's job is to balance the two by ensuring that the applicant mitigates and minimizes negative impact to both the environment and the local community to the greatest possible extent when an expansion is proposed at an existing location. If all harms cannot be fully mitigated, then the applicant must provide benefits to offset those harms. It is the Department's role to make a judgment on the balancing of the harms and benefits, and issue a permit only if the benefits to the public clearly outweigh the environmental harms.

**Additional documentation:**

**Walter Leis, PG also submitted the following documents:**

1. July 28, 2015 Frey Farm Vertical Expansion (VE) TCI Report
2. July 28, 2015 Frey Farm VE Supplemental 1 (TCI Supplement re: Martic Line and earthquakes)
3. August 3, 2015 Frey Farm VE Supplemental 2 (TCI Supplement re: Creep)

Mr. Leis recommended that the VE not be approved by DEP due to insufficient data regarding the following concerns:

- The long term affects that gravity and tectonics will have on the facility.

- The geology and structural geology needs to be more closely evaluated. The highly weathered “slippery” rock types and micaceous soils, including the possibility of carbonate rocks at depth need to be more adequately characterized. Soil creep has been documented along the hillsides. Well logs indicating deeper weathering than shown on the engineering cross sections is a concern. The potential for landslides due to the added force provided by the VE along the river side as a result of the rocks dipping steeply towards the Susquehanna River and striking parallel to the river side. Creep mapping is recommended, especially on the riverward side of the VE.
- Seismicity has not been adequately addressed. The Martic Line (thrust fault) is mapped within ½ mile of the proposed VE. Over the past 250 years, this line defines the mapped location of epicenters of at least 20 earthquakes in this area. Creep as well as landslides could result due to potential seismic events and should be taken into account in the design. Better analysis of the seismic risk in the area should be conducted.
- Concern that groundwater and runoff is into one of PA’s most important recreational rivers. The current groundwater maps are not properly contoured and do not take into account the seeps/springs in the area, especially along the western flanks of Turkey Hill. Concern that the regional water table may be less than the required 8 ft based on landfill cross sections A-A’ and B-B’. Recommends flow nets or constant/variable drawdown pumping tests to be conducted to more accurately assess the groundwater flow direction.
- Problems with well data such as: no wells on the river side and discrepancy in well log interpretations from different consultants should require the need for additional borings or more thorough analyses of past logs and drilling data.
- The control plan for dust and blowing debris control needs to be better defined.

**DEP Response:**

DEP will evaluate all the submittals during the technical review. DEP will request that LCSWMA have these concerns evaluated by licensed professionals with expertise in these technical areas and provide additional information, supporting documentation and conduct additional environmental investigation(s) if necessary.

