

NORTHEAST REGIONAL OFFICE

April 17, 2017

Mr. Donald Hallock, District Landfill Manager  
IESI PA Bethlehem Landfill Corporation  
2335 Applebutter Road  
Bethlehem, PA 18015-6004

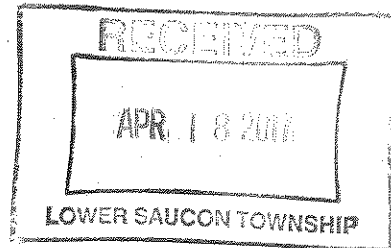
Re: Environmental Assessment  
IESI PA Bethlehem Landfill  
Major Permit Modification – Southeastern Realignment  
Application No. 100020-A151  
APS# 870519 AUTH# 1072854  
Lower Saucon Township, Northampton County

Dear Mr. Hallock:

The Department of Environmental Protection (DEP) has completed its review of the Environmental Assessment (EA) for the IESI PA Bethlehem Landfill (IESI) Southeastern Realignment Expansion Application. The review was performed in accordance with the Municipal Waste Regulations, 25 Pa. Code §271.126 and §271.127, as well as DEP's Environmental Assessment Policy. DEP evaluated the information contained in the application to determine whether IESI demonstrated that the benefits of the proposed project to the public clearly outweigh the known and potential environmental harms that will remain after the proposed mitigation.

DEP has determined that IESI has shown that the identified benefits of the project clearly outweigh the remaining known and potential harms of the project. DEP's Harms vs. Benefits analysis is enclosed with this letter. DEP will begin the technical review of the information contained in the permit application.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.



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- Council
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  - Asst. Mgr.
  - Zoning
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  - P/C
  - P & R
  - EAC
  - Engineer
  - Solicitor
  - Planner
  - Landfill
  - EMC
  - Other *web*

If you want to challenge this action, your appeal must reach the Board within 30 days. You do not need a lawyer to file an appeal with the Board.

Important legal rights are at stake, however, so you should show this document to a lawyer at once. If you cannot afford a lawyer, you may qualify for free pro-bono representation. Call the secretary of the Board (717-787-3483) for more information.

Sincerely,



Roger Bellas  
Environmental Program Manager  
Waste Management Program

Enclosure

cc: Martin and Martin, Incorporated (w/ enclosure)  
Lehigh Valley Planning Commission (w/ enclosure)  
Northampton County Council (w/ enclosure)  
Lower Saucon Township (w/ enclosure)  
Senator Lisa M. Boscola (w/ enclosure)  
Representative Robert L. Freeman (w/ enclosure)  
Representative Justin J. Simmons (w/ enclosure)

# **Environmental Assessment Analysis (Harms/Benefits)**

**IESI PA Bethlehem Landfill #100020  
Southeastern Realignment  
Environmental Assessment  
Lower Saucon Township, Northampton County**

Prepared by:  
Pa. Department of Environmental Protection  
Northeast Regional Office  
Waste Management – Facilities Section

April 2017



**pennsylvania**

DEPARTMENT OF ENVIRONMENTAL PROTECTION

## **PROJECT DESCRIPTION**

The IESI PA Bethlehem Landfill (IESI) is comprised of an existing 201-acre landfill located off Applebutter Road in Lower Saucon Township, Northampton County. The area in the immediate vicinity of the landfill is generally rural with a more densely populated area to the northwest and an industrial area to the southwest. The Lehigh River is located approximately ¼ mile to the north. On January 21, 2015, the Department of Environmental Protection (DEP) received a major modification application for IESI's Southeastern Realignment project. The proposed project is to be located within the current permit boundary and involves expanding over existing fill areas and a small portion of new disposal area in the southeast corner of the site. Overtopping of existing waste will occur in approximately 29 acres of previously completed portions of Phase III and IV of the site which make up the western half of the landfill. These cells have liner systems that are compliant with current requirements and thus do not require any new liner. Overtopping of existing waste will also occur in approximately 22.5 acres of the old landfill Phase I and II areas which make up the eastern half of the landfill. This area is not compliant with current regulations and therefore requires a new "piggyback" liner system, that will act as a cap for the old waste and a liner for the new waste. Horizontal gas collection and header pipes will be installed under the "piggyback" liner system to capture any landfill gas being generated from the old waste. Finally, the project includes placement of waste an approximately 6-acre area to the south and east of the existing Phase I area. This area has not previously had waste placed there and will require new liner construction. The total project covers approximately 57.5 acres. The project does not propose to increase the daily maximum and quarterly average waste acceptance rates for the landfill. IESI has indicated that the expanded landfill will allow the landfill to continue operating for at least an additional 5 years.

The Local Municipality Involvement Process meeting was held on March 11, 2015 at the Se-Wy-Co Fire Company. The application was found to be complete and officially accepted March 31, 2015. On October 16, 2015 DEP issued the first Environmental Assessment Process (EAP) review letter. IESI responded to the review letter on December 31, 2015. On September 27, 2016 DEP issued the second EAP review letter. IESI responded to the review letter on December 20, 2016.

## **PUBLIC INPUT**

A public meeting was held on June 22, 2015 and a public hearing was held on April 13, 2016. There has been public interest in the application and DEP has received written comments in addition to those received during the meeting and hearing.

## **ENVIRONMENTAL ASSESSMENT PROCESS**

25 Pa. Code § 271.126 and § 271.127 (relating to environmental assessment) require that an applicant conduct and demonstrate that the benefits related to the project clearly outweigh the known and potential environmental harms that remain after mitigation. Applications subject to the environmental assessment regulations must: (1) include a detailed analysis of the potential impact of the proposed facility on the environment, public health and public safety; (2)

describe the known and potential harms of the proposed project; (3) include a written mitigation plan that explains how each known and potential harm will be mitigated and the extent to which any known or potential harms remain after mitigation; and (4) demonstrate that the benefits of the project to the public clearly outweigh the known and potential environmental harms that will remain after the proposed mitigation. Benefits and known and potential harms can be identified by the applicant, DEP or other agencies or any municipality or person.

Benefits of the project consist of social and economic benefits that remain after taking into consideration the known and potential social and economic harms of the project and may also consist of the environmental benefits of the project. To determine whether an impact is a harm or a benefit, DEP compares the applicant's proposal to the conditions that would exist if the project did not move forward. In reviewing an environmental assessment, DEP evaluates social and economic benefits after offsetting them with social and economic harms. Environmental harms are evaluated after offsetting them with acceptable mitigation plans. The environmental harms are then balanced against the social and economic and environmental benefits to determine if the benefits clearly outweigh the harms.

IESI submitted an environmental assessment in its application that provided their analysis of the potential impact of the proposed facility on the environment, public health, and safety. DEP, after consultation with appropriate government agencies and potentially affected parties, evaluated the environmental assessment to determine whether the proposed project has the potential to cause environmental harm. Where appropriate, past performance is used to predict future conditions related to a harm or benefit. In this document, DEP provides its analysis of the known and potential environmental harm that will remain after implementation of the proposed mitigations and whether the benefits of the proposed project clearly outweigh the remaining harms.

Benefits and harms are identified as "known" benefits or harms or "potential" benefits or harms. A known harm or benefit is one that DEP believes will occur in the future. A potential benefit or harm is one that might occur given the right circumstances. A known benefit or harm carries greater weight than if that same benefit or harm were a potential benefit or harm for a particular project.

For each benefit and harm the duration, frequency, intensity, reach (i.e., who will be affected) and sensitivity of receptor are evaluated. For this discussion, duration refers to how long a harm or benefit may continue. Frequency refers to how often it may occur. Intensity refers to how much the harm or benefit may be if or when it occurs. It should be noted that the words "duration," "frequency," "intensity," "reach," and "receptor sensitivity" will not be used to describe every harm and benefit in the analysis. However, these factors are considered for each harm or benefit and are discussed when appropriate.

Each harm is discussed individually below to determine if it has been fully mitigated. If a harm is fully mitigated, that harm is not included in the balancing portion of this document. If there is harm remaining after mitigation, that remaining harm is included in the balancing. The balancing looks at the individual and collective impacts of all the harms and the benefits to

ensure that the total effect of the project is such that the related benefits clearly outweigh the harms.

The harms detailed below are those identified by IESI, DEP, or third parties who provided comment on the application. The mitigation measures and benefits have been edited from the application and reflect IESI's own wording or viewpoint. There is no tacit or implied acceptance of statements made by IESI within their application, or repeated in the mitigation or the benefits sections of this document, by virtue of those statements being included in, or excluded from, this document. The "DEP Determination of Remaining Impacts", "DEP Evaluation of Benefit" and "Conclusions" sections are DEP's independent evaluation of IESI's proposed mitigation and proposed benefits.

### **HARMS AND MITIGATION**

(E) = Environmental, (SE) = Social & Economic

- 1. Truck Safety and Traffic Impacts (SE):** The potential impacts associated with additional trucks on the roadways due to the operation of the landfill will continue for the life of the project. The project will also result in potential truck safety and traffic impacts associated with trucks hauling cover soil and construction materials to the site for the project.

Proposed Mitigation: IESI evaluated current and projected traffic volumes and potential impacts. Based on this evaluation, IESI has concluded that the project will have little to no impact on the traffic route. IESI also evaluated the accident history and roadway curves/signage adequacy along the haul route. This information was forwarded to the PA Department of Transportation (PennDOT) and PennDOT concurred with the evaluation. IESI currently implements a variety of measures to minimize and mitigate known and potential harms related to truck safety, vehicle related nuisances and traffic impacts. These mitigation measures are outlined in the Transportation Compliance Plan (TCP) and/or Nuisance Minimization and Control Plan (NMCP) and will continue to be implemented throughout the life of the project.

DEP Determination of Remaining Impacts: IESI did not provide an evaluation of the current effectiveness of the TCP and NMCP in relation to truck safety and traffic impacts. IESI also did not describe how they ensure the trucks hauling cover soil and construction materials do not arrive overweight. Proper implementation of the TCP and NMCP and inclusion of the construction trucks in these plans could mitigate these potential harms. Based on DEP's inspections and review of records, IESI's mitigation of truck safety and traffic impacts is generally effective. The proposed operation should not exacerbate the existing or potential harms, but it will extend the duration of those harms by providing new disposal capacity to extend waste disposal operations in the area. Additionally, because the trucks hauling cover soil and construction materials were not included in the TCP and NMCP it is unclear if the proposed mitigation applies to those trucks. Some harm will remain for the purpose of this environmental assessment.

## 2. Air Quality Impacts (E):

- a. **Odors:** Odors from waste disposal and landfill gas production are a potential harm. Public comment indicates that odors are an issue/concern for those living in the area of the landfill.

Proposed Mitigation: IESI undertakes numerous measures to minimize and control potential nuisances associated with the operation of a solid waste disposal facility. IESI will continue to follow their mitigation measures outlined in the NMCP to address the potential for odors including employing the following: weekly inspections of cover, review of each incoming load, active gas collection and flare system, working face management (limit to 100' by 100'), odor neutralizers and leachate seep control. IESI updated the NMCP to reflect additional measures and the implementation of intermediate cover. Additionally, the use of temporary capping has recently been approved and is being installed to further minimize the release of landfill gas.

DEP Determination of Remaining Impacts: Adjustments and operational controls implemented at the site since 2015 have minimized odors at the landfill. As indicated by DEP's records, there were 207 odor complaints in 2014, 198 in 2015, 17 in 2016 and 1 in 2017 (as of March 3, 2017). DEP's experience based on inspections and oversight is that, following the enhancements of the landfill gas collection system implemented since 2015, IESI generally operates in compliance and has effective mitigation measures in place to control odors. While IESI has proposed adequate mitigation, it is unlikely to provide complete mitigation (elimination) of odors; therefore, some potential harm will remain for the purpose of this environmental assessment.

- b. **Dust:** Dust from truck traffic and construction activities at the landfill is a potential harm.

Proposed Mitigation: IESI undertakes measures to minimize and control potential nuisances associated with the operation of a solid waste disposal facility. These mitigation measures include: inspection of site for dust generation; maintenance of site access roads and use of a sweeper vehicle/water truck as needed; vegetation of disturbed areas; and review of incoming waste streams and inspection of each incoming load.

DEP Determination of Remaining Impacts: DEP's experience based on inspections and oversight is that IESI generally operates in compliance and has effective mitigation measures in place to control dust. While IESI has proposed adequate mitigation, it is unlikely to provide complete mitigation (elimination) of dust; therefore, some potential harm will remain for the purpose of this environmental assessment.

- c. **Air contaminants and odors generated during exposure of old waste:** IESI's proposal to remove approximately 26 acres of cap from previously closed areas of the landfill thereby exposing old waste to the atmosphere will result in the potential for off-site air contaminants and odors.

Proposed mitigation: Aside from installation of horizontal landfill gas collectors or headers in the old landfill areas, the old waste will not be exposed. IESI provided a Cap Removal Plan detailing the procedures for this part of the project. The area of cap removal will be limited to that which can be managed within a day or two. If odors are detected, the waste surface will be sprayed with an odor reactant chemical and/or covered with a spray-on alternate daily cover material such as Posi-Shell to control gas emissions. The materials and equipment required for either of these techniques will be positioned near the active work area so that they can be deployed promptly.

DEP Determination of Remaining Impacts: IESI has proposed adequate mitigation. However, because it is difficult for any landfill operation to completely mitigate (eliminate) odors and air contaminants, some potential harm will remain for the purpose of this environmental assessment.

3. **Mud (E):** Tracking of mud off-site by vehicles from the landfill operation is a potential harm.

Proposed Mitigation: IESI undertakes measures to minimize and control potential nuisances associated with the operation of a solid waste disposal facility. These mitigation measures include use of a sweeper vehicle, water truck and truck wash.

DEP Determination of Remaining Impacts: IESI has proposed adequate mitigation measures to prevent mud from being tracked off-site. DEP's experience based on inspections and oversight is that IESI generally operates in compliance and has effective mitigation measures in place to control the tracking of mud off-site. However, because the mitigation could fail to work as intended due to improper operation or maintenance or because of natural events some potential harm will remain for the purpose of this environmental assessment.

4. **Noise (E):** Off-site noise is a potential harm. Public comment indicates that noise is an issue/concern for those living in the area of the landfill.

Proposed Mitigation: IESI undertakes measures to minimize and control potential nuisances associated with the operation of a solid waste disposal facility. These mitigation measures include: use of mufflers on site equipment; onsite speed limit of 10mph; use of backup motion sensor system on site equipment; and adherence to hours of operation.

DEP Determination of Remaining Impacts: The proposed project should not exacerbate the existing potential for off-site noise, but it will extend the operating life of the landfill and therefore will extend the duration of the potential harm. While IESI has



proposed adequate mitigation, it is unlikely to provide complete mitigation (elimination) of noise; therefore, some potential harm will remain for the purpose of this environmental assessment.

- 5. Vectors (E):** The attraction of vectors and birds is a potential harm of a landfill operation.

Proposed Mitigation: IESI undertakes measures to minimize and control potential nuisances associated with the operation of a solid waste disposal facility. These mitigation measures include use of cover soils and licensed vector control services.

DEP Determination of Remaining Impacts: IESI has proposed adequate mitigation measures to prevent nuisances from vectors. However, because the mitigation could fail to work as intended due to improper implementation or maintenance some potential harm will remain for the purpose of this environmental assessment.

- 6. Litter (E):** On and off-site litter from the acceptance and disposal of waste is a potential harm.

Proposed Mitigation: IESI undertakes numerous measures to minimize and control potential nuisances associated with the operation of a solid waste disposal facility. These mitigation measures include: use of tarps or covers on vehicles; management of working face via small size and water spray; prompt placement of daily cover; litter fencing; and patrolling the site for litter.

DEP Determination of Remaining Impacts: IESI has proposed adequate mitigation measures to prevent litter from being unsightly or leaving the site. DEP's experience based on inspections and oversight is that IESI generally operates in compliance and has effective mitigation measures in place to control litter. However, because the mitigation depends on proper implementation of various measures some potential harm will remain for the purpose of this environmental assessment.

- 7. Runoff (E):** Runoff and leachate seeps from the landfill is a potential harm. Public comment indicates on occasion mud and other erosion debris wash from the landfill property onto Applebutter Road during storm events.

Proposed Mitigation: IESI currently undertakes numerous measures to minimize and control potential nuisances associated with the operation of a solid waste disposal facility. These mitigation measures include: conducting inspections and implementing the Soil Erosion and Sediment Control Plan. IESI has implemented additional measures, including more frequent inspections of the storm water conveyance inlets, channels, and pipes; as well as installing a new inlet structure to help contain downdrain flows from the Phase IV working areas. The proposed project will utilize gabion downdrains, channels, inlet and piping to manage stormwater and prevent mud and other erosion debris from washing onto Applebutter Road.

DEP Determination of Remaining Impacts: IESI has proposed adequate mitigation measures to address mud and other erosion debris washing onto Applebutter Road. Specifically, the DEP has reviewed IESI's Storm Water Management and Post Construction Storm Water Management plans and determined that they are sufficient to mitigate storm water runoff during the construction and after the construction that will occur as a result of the Southeastern Realignment project. However, because the mitigation could fail to work as intended due to improper operation or maintenance or because of natural events some potential harm will remain for the purpose of this environmental assessment.

8. **Leachate (E):** Generation of leachate and the potential for groundwater contamination from the landfill is a potential harm. Public comment indicates additional leachate generation in unlined areas of the landfill during exposure of old waste and for additional leachate flow in the detection zone of the Phase III area is also a concern.

Proposed Mitigation: IESI undertakes numerous measures to minimize and control leachate. These mitigation measures include: use of a liner system, leachate management system, groundwater monitoring system and groundwater abatement system. Aside from the installation of the horizontal landfill gas collectors or headers in the Old Landfill Areas, the intermediate cover beneath the Old Cap will remain in place; thus, old waste will not be exposed. IESI does not expect additional leachate generation during exposure of old waste as the approved procedures for removing the old cap limit the potential for exposure during rain events. In the event rainfall enters the work area during installation of the "piggyback" liner system, the Southeastern Realignment design maintains and preserves the existing leachate collection system in the older landfill areas. The groundwater abatement system south of the southeastern realignment area (as well as the Phase III and IV areas) will also continue to capture groundwater flowing from beneath the site, including any additional leachate which may result from said construction activity. For the same reasons discussed above, IESI does not expect additional flow in the detection zone of the Phase III area; however, IESI is taking additional measures relative to the elevated flow in the leachate detection zone. These measures include periodic cleaning of the anchor trench drains and recalibrating the flow measurement devices. Furthermore, as part of the Southeastern Realignment liner construction, possible stormwater intrusion into the eastern side of the Phase III leachate detection zone will be eliminated by the welding of the new liner systems to the Phase III systems.

DEP Determination of Remaining Impacts: IESI is managing current flows in accordance with DEP Regulations and has proposed adequate mitigation measures to minimize and control leachate. A network of groundwater monitoring wells is utilized to evaluate whether the current landfill operations are impacting groundwater. Based on this groundwater monitoring, there is no evidence that IESI's current municipal waste landfill operation is impacting groundwater. Controls and groundwater monitoring systems are design features required by regulation. Their functions are to minimize, to the best extent practicable, some of the potential harms associated with the operation of the landfill. There will always be a potential harm associated with their

failure to work as intended, their failure to work because of improper operation or maintenance, or their failure to work because natural events exceed the minimum/maximum standards used for design purposes.

9. **Fire Risk (E):** The risk of fires and subsurface reactions is a potential harm of a landfill operation.

Proposed mitigation: Emergency equipment is available at the site as set forth in detail in the Preparedness, Prevention and Contingency (PPC) Plan. The list includes fire extinguishers and a water truck, although the primary fire control equipment at a landfill is the earth moving equipment. The method for fighting fires at a landfill is to expose and spread out the burning materials, and then smother the conflagration with soils and other inert materials to cut off the source of oxygen. The available equipment and the knowledge and experience in responding to such situations, is vested in the landfill operator and the trained staff.

DEP Determination of Remaining Impacts: While IESI does not have a history of fires and subsurface reactions, they can and do occur at landfills. IESI proposed adequate actions IESI would employ should a subsurface fire or reaction occur at the landfill. IESI did not detail any efforts that are taken to monitor for and minimize the risk of fires and subsurface reactions. Some potential harm will remain for the purpose of this environmental assessment.

10. **Health Impacts (E):** Lower Saucon Township requested the PA Department of Health conduct a health study to evaluate the current potential for health impacts from the IESI operation.

Proposed mitigation: IESI's mitigation for specific harms that could contribute to health concerns are already discussed individually.

DEP Determination of Remaining Impacts: Regulations and permits are developed to be protective of public health. Implementation of proposed operational controls, mitigation plans and the NMCP is adequate to protect public health. The PA Department of Health's health consultation recommended that local air emission sources implement robust engineering controls to reduce air emissions; to continue oversight, permit enforcement and timely nuisance odor response; and to continue monitoring of groundwater. The recommendations are currently implemented and will continue. Specifically, IESI has completed the installation of many acres of temporary cap and additional gas collection devices since the sampling was conducted for the health consultation. DEP staff inspect the landfill regularly and review data collected by the landfill including groundwater monitoring data. DEP does not feel it is necessary or appropriate to include health impacts as a separate harm for the purpose of the environmental assessment as specific harms that could contribute to health concerns are addressed individually.

- 11. Visual Impacts (SE):** Visibility of the landfill from homes in the immediate vicinity of the landfill is a harm of the project.

Proposed mitigation: IESI performed an updated and expanded visual impact analysis in connection with the proposed project. The project will be visible from homes in the immediate vicinity of the landfill. As a result, IESI modified the grading and access road to shift the access road traffic further away from the homes; the landfill finalized and executed an agreement to purchase the home immediately adjacent to the landfill at the southeastern corner of the site and has offered to purchase the neighboring property to the East; and IESI will plant vegetative screening along the southeast and eastern sides of the project footprint to provide visual screening from these properties and from Applebutter Road.

DEP Determination of Remaining Impacts: IESI has proposed adequate mitigation to address visual impacts associated with the project; however, there will still be some limited visual impacts to those in the immediate vicinity of the landfill. Therefore, some harm will remain for the purpose of this environmental assessment.

#### **BENEFITS**

(E) = Environmental, (SE) = Social & Economic

- 1. Recycling Drop Off Containers (SE):** Recycling drop off containers are provided at the landfill for use by the local population to promote and encourage recycling.

DEP Evaluation of Benefit: DEP believes that the recycling drop off containers is a Social and Economic benefit because IESI is providing access to free disposal. Because this is a service that the local community would not continue to receive without the Southeastern Realignment project, this is a Social and Economic benefit for the life of the project.

- 2. Free White-Goods Disposal (SE):** IESI provides free year round white-goods disposal to the residents of Lower Saucon Township.

DEP Evaluation of Benefit: DEP believes that the free white-goods disposal is a Social and Economic benefit because IESI is providing access to free disposal. Because this is a service that the local community would not continue to receive without the Southeastern Realignment project, this is a Social and Economic benefit for the life of the project.

- 3. Benefits to Lower Saucon Township (SE):** Lower Saucon Township, the host community for IESI, will continue to receive host benefit fees in the amount of \$4.84/Ton for municipal solid waste and \$7.01/Ton for residual waste. The Township receives approximately \$2.1 million a year of unencumbered funds for its use, and amounts to approximately 30% of the total Township operating revenue.

DEP Evaluation of Benefit: The host fees are based on tonnages and are paid on a quarterly basis and there is no guaranteed minimum amount. These fees are considered to be a Social and Economic benefit for the life of the Southeastern Realignment project.

4. **Local Economic Benefit (SE):** IESI identified that the continued operation of the landfill results in additional purchases and use of local and regional goods, services and supplies. The sales tax associated with these purchases would also be included in this benefit. These include fuel, piping, supplies, quarry products, environmental control products and systems, vehicle services, tires, rental equipment, professional consulting and testing services, gas management services, parts and inventory, facility landscape services and computers and office supplies. These expenditures are projected at a rate of approximately \$1,585,063 per year for the duration of the proposed project. IESI also identified that the project will result in an increase in local spending on capital improvements in terms of equipment purchases and site development costs totaling an estimated \$37.3 million during the proposed additional 5.5 years of additional site life. These expenditures average approximately \$6.7 million per year, of which \$2.5 million are projected to be made within the local area.

DEP Evaluation of Benefit: IESI did not identify the radius of area where the local and regional goods, services and supplies come from or the radius where the local purchases come from. DEP recognizes that there will be a local economic benefit associated with the project; however, because the local area was not defined, the intensity and reach of the benefit cannot be determined.

5. **Direct Employment (SE):** IESI identified that the project will result in direct employment for a number of area residents.

DEP Evaluation of Benefit: DEP recognizes that the project would result in the continued employment of landfill employees and the payment of payroll taxes. However, IESI did not provide specific information to define and quantify this benefit. Therefore, DEP cannot determine the intensity of this benefit.

### BALANCING OF HARMS AND BENEFITS

Based on the discussion of harms above, DEP has determined that the following known or potential harms are related to the proposed Southeastern Realignment project:

<b>Known Environmental Harms:</b>	<b>Known Social and Economic Harms:</b>
	Truck Safety/Traffic Impacts
	Visual Impacts
<b>Potential Environmental Harms:</b>	<b>Potential Social and Economic Harms:</b>
Air Quality Impacts	
Mud	
Noise	
Vectors	

Litter	
Runoff	
Leachate	
Fire Risk	

The permanent disposal of waste ultimately results in some irreversible, unmitigated harm. Its mere presence results in harm (real or potential) to the environment. That said, there is nothing particularly unique or significant about the harms associated with this project. Rather, they reflect the existing and potential harms that would reasonably be expected at any well-run, well-designed sanitary landfill. Through the design and operational controls utilized at its existing facility, IESI has been successful in adequately mitigating many of the harms associated with traffic, aesthetics, air quality, water quality, vectors and litter. This indicates that IESI should be successful in mitigating the harms from the Southeastern Realignment project to the same extent.

The remaining harms will be of variable duration, depending on the type of harm. The potential and/or known harms associated with traffic, aesthetic impacts related to active landfill operations, odors related to active landfill operations, vector impacts, and litter impacts will only persist as long as landfill disposal operations, or at least 5 years based on the disposal capacity provided by the project. For example, while the potential for these impacts is limited to active landfill disposal operations, the magnitude or impact of any single occurrence may be limited to a day or two. Conversely, the potential for landfill gas emissions and water quality impacts will persist beyond the cessation of active landfill disposal operations. Consequently, more telling may be the frequency and intensity of the harm. Based on past experience and the proximity to likely receptors, IESI's design and operational controls should result in only infrequent occurrences of harms related to odors, dust, mud, noise, vectors, litter and runoff. These controls should also minimize the severity, or intensity, of any such occurrence. For example, wind-blown litter may be a problem only for a few days per year (frequency). The intensity of the harm is also impacted by the effectiveness of the IESI's controls in reacting and responding to the incident. Litter should be contained within the on-site litter fencing and quickly picked up by facility workers (low intensity).

Based on the discussion of the benefits above, the Department has determined that the following known or potential benefits are related to the proposed Southeastern Realignment project:

<b>Known Environmental Benefits:</b>	<b>Known Social and Economic Benefits:</b>
	Recycling Drop Off Containers
	Free White Goods Disposal
	Host Fees
	Local Economic Benefit
	Direct Employment
<b>Potential Environmental Benefits:</b>	<b>Potential Social and Economic Benefits:</b>

There are significant social/economic benefits to the local community in the form of host fees, with additional benefits arising from local economic impact, direct employment, public recycling drop-off and free white goods disposal. The social/economic benefits will have a duration of at least 5 years. Other benefits alleged by IESI either have not been adequately defined, are not benefits to be attributed to the proposed project, or are more appropriately considered to be mitigation rather than benefits.

DEP considered the harms and benefits individually and collectively when balancing the harms against the benefits. DEP considered the identified environmental harms and their mitigation measures. The host fees are a significant social/economic benefit to the local community. The known social/economic harms (traffic and visual impacts) are expected to be of low intensity and would be mainly associated with the life of the active disposal operation. The potential harms are not likely to occur or, should they occur, would be infrequent and of low intensity, as long as the proposed mitigation measures are implemented properly. Most of the harms associated with the project are already associated with the existing landfill operation. DEP's experience based on inspections and oversight is that IESI generally operates in compliance and has effective mitigation measures in place to control harms such as odors, dust, mud, vectors, litter and leachate.

### **CONCLUSIONS**

DEP has determined that IESI has demonstrated that the benefits to the public from the project clearly outweigh the known and potential harms posed by it. The structural and operational mitigation controls proposed by IESI are adequate to prevent any significant harms to the community. The social and economic benefit to the local community from host fees is significant. Furthermore, DEP recognizes that the continued employment of landfill employees; purchases and use of local and regional goods, services and supplies; and an increase in local spending on capital improvements in terms of equipment purchases and site development costs are benefits of the project but because sufficient information, as requested by DEP, was not provided, DEP was unable to determine the intensity or reach of these benefits in the balancing.