



April 6, 2026

Mr. Michael Piepoli, Site Manager  
Commonwealth Environmental Systems, L.P.  
249 Dunham Drive  
Dunmore, PA 18512  
via email: [ces@ceslfc.com](mailto:ces@ceslfc.com)

Re: Environmental Assessment  
Commonwealth Environmental Systems Landfill  
Major Permit Modification Application – Southwest Expansion  
Application No. 101615-A242  
APS No. 1136269 AUTH No. 1525113  
Foster, Frailey, and Reilly Townships, Schuylkill County

Dear Mr. Piepoli:

The Department of Environmental Protection (DEP) has completed its review of the Environmental Assessment (EA) for the Commonwealth Environmental Systems, L.P. (CES) major permit modification application for the Southwest Expansion. 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 CES 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 CES 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.

Sincerely,

*Roger Bellas*

Roger Bellas  
Program Manager  
Waste Management Program

Enclosure

cc: Dominick DeNaples Jr. w/ enclosure (via email: [dominickd@kslco.com](mailto:dominickd@kslco.com))  
LaBella Associates w/ enclosure (via email: [crobinson@labellapc.com](mailto:crobinson@labellapc.com))  
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Pennsylvania  
Department of  
Environmental Protection

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

**Commonwealth Environmental Systems Landfill  
Permit No. 101615  
Southwest Expansion  
Environmental Assessment  
Frailey, Foster, and Reilly Townships, Schuylkill County**

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

April 2026

## ENVIRONMENTAL ASSESSMENT PROCESS

On August 22, 2024, the Department of Environmental Protection (DEP) received a major modification application for Commonwealth Environmental Systems, L.P.'s (CES) Southwest Expansion project, an expansion of CES' existing landfill located in Foster, Reilly, and Frailey Townships, Schuylkill County. DEP's municipal waste regulations require that DEP evaluate CES' landfill expansion permit application consistent with a two-phase process (25 Pa Code § 273.101). The environmental assessment is evaluated in Phase I prior to technical review in Phase II of the permit review. 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, environmental, 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, environmental, 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.

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.

CES submitted an environmental assessment in its application that provided its 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.

The harms detailed below are those identified by CES, DEP, or other parties who provided comment on the application. The mitigation measures and benefits have been edited from the application and reflect CES' own wording or viewpoint. There is no tacit or implied acceptance of statements made by CES within its 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" and "DEP Evaluation of Benefit" sections are DEP's independent evaluation of CES' proposed mitigation and proposed benefits.

### **PROJECT DESCRIPTION**

The CES Landfill is an existing 484.9-acre landfill located at 99 Commonwealth Road, Hegins, PA. The surrounding area is generally rural with some additional commercial/industrial businesses directly to the south along Route 25 and highway (Interstate 81) to the west. On August 22, 2024, the Department of Environmental Protection (DEP) received the application for CES' Southwest expansion project. The expansion consists of an approximately 16-acre northern disposal expansion area and an approximately 98-acre southwest disposal expansion area. An increase of 38.5 acres to the existing permit area is proposed in order to incorporate the lateral expansion footprint on the north side of the property, the stormwater management network, and the new access road and mechanically stabilized earth (MSE) berm on the north side of the property. The expansion will also "piggy-back" onto the existing landfill and would increase the peak elevation of the landfill by 170 feet. The expansion would increase the facility's disposal capacity by approximately 54,542,544 cubic yards and increase the life of the landfill by approximately 28 years. The project does not propose to increase the current permitted rate of disposal (average and maximum daily volumes of waste).

As part of the review of CES' landfill application, DEP's review is coordinated with various local, state, and federal entities where necessary. Local land use approval and other state and/or federal agency concurrence may be necessary prior to permitting of the expansion project. In addition, permits required by CES from other DEP programs may be coordinated as necessary for the project.

Pursuant to 25 Pa. Code § 271.202, receipt of a permit application for a modification that results in increased disposal capacity does not occur until a Local Municipality Involvement Process meeting is held. At this meeting DEP, the applicant, and municipal officials meet to discuss the application, DEP's review process, the public involvement steps, and any concerns and questions of the municipal officials. This Local Municipality Involvement Process meeting was held on October 24, 2024, at the Newtown Fire Hall. DEP found the application to be administratively complete and officially accepted the application for review on November 5, 2024.

As the first step in the review process, DEP reviewed the Form D – Environmental Assessment, and portions of the application that were relevant to the evaluation of harms or benefits. On April 14, 2025, DEP issued a first Environmental Assessment review letter. CES' response to this review letter was received by DEP on June 13, 2025. On September 10, 2025, DEP issued a second Environmental Assessment review letter. CES's response to this review letter was received by DEP on November 5, 2025.

### **PUBLIC INPUT**

DEP determined that CES Landfill is located within an Environmental Justice (EJ) community as defined by DEP's Environmental Justice Policy and PennEnviroScreen Mapping Tool. DEP has taken appropriate measures to ensure the public and EJ community is informed regarding the proposed expansion. In accordance with DEP's EJ Public Participation Policy, DEP conducted outreach to educate the public, including the EJ community, about the pending application and how they could participate. DEP created a fact sheet and plain language summary to explain the proposed project and made the application and all related materials accessible to the public on the DEP website. The application was also noticed in the PA Bulletin on November 23, 2024. DEP received several letters in support of the project.

### **HARMS AND MITIGATION**

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

- 1. Traffic Related Safety Issues: (SE)** Safety related impacts associated with waste hauling or construction vehicles utilizing the landfill is a potential harm.

CES' Proposed Mitigation: CES will continue to implement their Transportation Compliance and Vehicle Safety Action Transportation Compliance Plan as part of the proposed Expansion. Transportation Compliance Plan compliance checks include inspection of all hauling vehicles for tarps, leaking loads, signage, fire extinguishers, daily logs, weight, and the presence of radioactive materials, and contingency plans for residual waste haulers. Furthermore, CES has a Radioactive Action Program and all

transport vehicles delivering municipal waste must pass through Gamma Radiation Detection Monitoring Devices.

DEP Determination of Remaining Impacts: Based on DEP's inspections and review of records, CES' mitigation of safety related impacts associated with traffic is generally effective. The proposed operation should not exacerbate the potential harms, but it will extend the duration of those potential harms by providing new disposal capacity which will extend landfill related traffic. Some potential harm will remain for the purpose of this environmental assessment.

- 2. Traffic Related Litter and Odor: (E)** Litter blowing from haul trucks and odors from waste trucks is a potential harm.

CES' Proposed Mitigation: CES will continue to require haulers to tarp their trucks, as required by the municipal landfill regulations, to mitigate potential litter blowing and odor concerns. In addition to the above measures, it is important to note that a high percentage of the waste received at the landfill will be inorganic. As such, this material is less prone to generating odors and is also less likely to generate litter.

DEP Determination of Remaining Impacts: Based on DEP's inspections and review of records, CES' mitigation of traffic related litter and odors is generally effective. The proposed expansion 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 related traffic. Some potential harm will remain for the purpose of this environmental assessment.

- 3. Road Deterioration: (SE)** Increased deterioration of road surfaces due to landfill traffic is a potential harm. Since the truck traffic associated with the expansion comprises such a negligible percentage of the total traffic on the access roads, the continued operation of the landfill as a result of the expansion will only result in minimal deterioration of local roads as compared to the road wear that would occur without the expansion.

CES' Proposed Mitigation: Mitigation of the minor deterioration of state and local roads around the expansion will be accomplished by means of state road use and fuel taxes paid by commercial haulers to the Commonwealth, coupled with the corresponding action of PennDOT to maintain state roads, according to its normal duties and obligations. Road use and fuels taxes generated from the operation of trash trucks will assist PennDOT in maintaining approach routes used by landfill related traffic.

DEP Determination of Remaining Impacts: Landfill traffic will result in some additional wear and tear on the roads that would not occur if the expansion was not approved; however, landfill traffic is a low percentage of the total traffic on the access roads. Furthermore, DEP has not observed nor received comments indicating that the current operation appears to be resulting in excessive road deterioration and no increase in tonnage is proposed as part of the expansion application.

- 4. Leachate Releases and Oil Spills from Trucks: (E)** Leachate releases and oil spills from landfill vehicle traffic is a potential harm.

CES' Proposed Mitigation: Engineering controls (lined truck beds) will be used to minimize leaks if necessary. CES's compliance officers and the Weighmaster check vehicles that enter the landfill to ensure that they are not leaking. If a leak is noticed, proper cleanup measures will be taken.

DEP Determination of Remaining Impacts: Based on DEP's inspections and review of records, CES' mitigation of leachate releases and oil spills from trucks is generally effective. The proposed expansion should not exacerbate the existing potential harm, but it will extend the duration of the potential harm by providing new disposal capacity to extend waste disposal related traffic.

- 5. Noise from Landfill Traffic: (E)** Noise from waste hauling trucks can be a potential harm to residents and businesses located along primary truck routes.

CES' Proposed Mitigation: Trucking is generally limited to normal (daylight) working hours to minimize community disturbance. The proposed expansion does not include a change to the permitted operating hours of the landfill.

DEP Determination of Remaining Impacts: DEP has not received any comments that noise is an issue for residents and businesses. Also, the host municipalities did not raise any concerns regarding noise or the operating hours of the landfill during the LMIP meeting or comment period. 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.

- 6. Traffic Related Dirt and Mud: (E)** Landfill vehicles tracking dirt and mud off-site is a potential harm.

CES' Proposed Mitigation: CES currently operates an existing tire wash facility near the scale house in the existing support facility area to prevent mud, debris, and dirt from impacting PA State Route 25 and any associated stormwater runoff channels. The Compliance Manager for CES monitors roads on and off the site daily for dust and/or mud conditions. Upon determination of a potential issue, the Compliance Manager implements corrective action. When landfill expansion development impacts the existing tire wash facility, a proposed tire wash facility will be constructed and operated in the relocated support facility area. The tire wash facility and visual inspections will continue to prevent off-site mud or dirt tracking issues.

DEP Determination of Remaining Impacts: Based on DEP's inspections and review of records, CES' mitigation of vehicles tracking dirt and mud off-site is generally effective. CES has proposed adequate mitigation measures to prevent dirt and mud from being tracked 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.

- 7. Surface Water Quality: (E)** The potential for surface water contamination from landfill operations is a potential harm.

CES' Proposed Mitigation: Leachate contamination is mitigated by the installation of an impermeable liner system (double-lined system) and cap in the disposal areas of the proposed expansion. Furthermore, the implementation of a groundwater and surface water monitoring program will ensure prompt detection of any changes in water quality proximal to the waste disposal area.

DEP Determination of Remaining Impacts: The liner system and cap are designed to capture leachate and prevent it from reaching surface water. There is no evidence that CES's current municipal waste landfill operation is impacting surface water. Controls and 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. Because these systems could fail to work as intended due to improper operation or maintenance or because natural events exceed the minimum/maximum design, some potential harm remains for the purpose of this environmental assessment.

- 8. Sediment/Storm Water Runoff: (E)** Increased surface water runoff, erosion and sedimentation is a potential harm.

CES' Proposed Mitigation: Potential harms posed by surface water runoff and sediment migration due to the proposed expansion will be fully mitigated according to the Chapter 102 regulations (Erosion and Sedimentation Controls). Mitigation plans and engineering controls are fully described in Form I and include measures to manage surface water, minimize erosion and control sedimentation.

DEP Determination of Remaining Impacts: CES' Soil Erosion and Sedimentation Controls are sufficient to mitigate storm water runoff during the construction and after the construction that will occur as a result of the expansion. 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.

- 9. Head of Hollow Impacts: (E)** A number of unnamed tributaries and one intermittent stream will be affected by the proposed expansion.

CES' Proposed Mitigation: The affected portion of Gebhard Run will be rerouted around or beneath the proposed relocated support facility area; however, the unnamed tributaries will be directly or indirectly eliminated due to construction of the proposed expansion. To combat these impacts, water quality mitigation projects will be performed and fully funded by CES on impacted waterways. Mitigation efforts and projects were included

and submitted within a Chapter 105 Joint Permit Application. Additionally, the landfill will be constructed over the period of almost thirty years, so many of these impacts will be spread out over the span of multiple decades. A small acid mine drainage impacted surface spring is currently located in the southern footprint of the proposed expansion. An underdrain network will be installed beneath the proposed expansion liner system to allow the spring to continue discharging offsite on the south perimeter of the CES property. The spring discharge will be treated with a limestone or carbonate treatment system before it discharges to the streams south of the property.

DEP Determination of Remaining Impacts: Submittal of a Chapter 105 Joint Permit Application for the proposed impacts to tributaries and streams provides adequate mitigation. Some harm remains due to impacts to the waterways; however, the value added as a result of the Chapter 105 permit outweighs this harm.

- 10. Wetlands: (E)** The proposed expansion will result in the loss of 0.54 acres of wetlands designated as “other” by DEP.

CES’ Proposed Mitigation: The loss of 0.54 acres of “other” wetlands will be mitigated by increasing the size and improving the quality of the existing wetland mitigation area north of the existing landfill footprint.

DEP Determination of Remaining Impacts: CES’ Chapter 105 Joint Permit Application for proposed impacts to wetlands provides adequate mitigation. Some harm remains due to loss of original wetlands; however, the value added as a result of the Chapter 105 permit outweighs this harm.

- 11. Threatened and Endangered Species: (E)** The project is located within an area which supports endangered, threatened, rare plant or animal species. Specifically, the Northern Long-Eared Bat (*Myotis septentrionalis*) and the Indiana Bat (*Myotis solidas*) are of special concern.

CES’ Proposed Mitigation: Exceptional care will be taken to only clear trees on the property during the period of November 15th to March 31st, a time when bats are assumed to be hibernating and not using the trees. Additionally, the expansion project will not impact critical and unique wildlife habitats such as deer wintering areas, caves, denning sites, or rock outcrops.

DEP Determination of Remaining Impacts: Following the Bat Conservation Plan included with the application and only clearing trees during hibernation season is expected to provide adequate mitigation.

- 12. Visibility and Aesthetics: (SE)** Visibility of the landfill is a harm of the project because the proposed expansion will increase the peak elevation of the landfill by 170 feet.

CES’ Proposed Mitigation: To minimize potential visual and aesthetic impacts, CES will maintain compact daily disposal areas (working face, etc.) and employ a filling sequence that completes outer slope areas first, creating a berm and buffer that minimizes the

visual impact of operations, obscuring the more extensive interior areas of the landfill; apply intermediate cover as soon as is practical to areas that reach final grade and promptly revegetate these areas to achieve ground cover; apply final cover as soon as is practical to areas that reach final grade, and revegetate these areas to achieve ground cover composed of vegetative species that are indigenous to Schuylkill County, providing a permanent aesthetically pleasant appearance; and incorporate the use of an MSE berm to reduce the size of the expansion area and associated tree loss/soil disturbance. Furthermore, this design feature provides a visual and noise buffer for the operating portion of the landfill that will be beyond the current landfill footprint.

DEP Determination of Remaining Impacts: Based on the Line of Sight study included with the application, only a small fraction of the proposed expansion may be visible from approximately 1.20 percent (0.33 square miles) of the 3-mile radial area. Based on the aerial photographs, in reality only a small fraction of the 0.33 square miles will actually have visibility of the proposed expansion. Additionally, only 1 percent of this area includes residential neighborhoods, the remaining space is wooded areas. The landfill is visible from vehicle occupants traveling on I-81 and Route 25; however, the visual impacts of this are brief as traffic passes by. CES has proposed adequate mitigation to address visual impacts associated with the project; however, because there will still be some limited visual impacts, some harm will remain for the purpose of this environmental assessment.

**13. Noise from Landfill Operations: (E)** Off-site noise is a known potential harm of a landfill operation.

CES' Proposed Mitigation: The existing horizontal buffers (i.e., highways, forested areas, and mountains) will continue to block noise to offsite communities with horizontal separation of ¼ mile from the closest dwellings. CES prohibits waste haulers from using compression release type breaks (i.e., jake brakes) within the footprint of CES. CES also will maintain and enhance vegetative plantings along public roadways contiguous to the site to minimize visual and noise impacts.

DEP Determination of Remaining Impacts: The expansion does not propose to increase the waste acceptance rate, nor propose an increase in truck traffic to the site; therefore, equipment and truck noise levels will remain comparable to present conditions. While the proposed project should not exacerbate the existing potential for off-site noise, it will extend the operating life of the landfill and therefore will extend the duration of the potential harm. While CES 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.

**14. Odors: (E)** Odors are a potential harm of landfill operations.

CES' Proposed Mitigation: The prevention of odors at the landfill is accomplished by daily inspections, prompt disposal of odorous loads, limiting the size of the working face, placement of daily cover, and regular maintenance of the landfill gas extraction system.

DEP Determination of Remaining Impacts: DEP's experience based on inspections is that CES' mitigation has generally been successful at controlling odors; 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. It is noted though, that because the location of the landfill is in a rural area and CES has adequate mitigation measures, the duration, intensity, and frequency of any remaining potential harm is significantly minimized.

**15. Vectors: (E)** Attraction of vectors is a potential harm of landfill operations.

CES' Proposed Mitigation: Preventing the attraction of vectors at the landfill is accomplished by daily inspections, prompt disposal of odorous loads, limiting the size of the working face, and placement of daily cover.

DEP Determination of Remaining Impacts: DEP's experience based on inspections is that CES' mitigation has generally been successful at controlling the attraction of 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. It is noted though, that because the location of the landfill is in a rural area and CES has adequate mitigation measures, the duration, intensity, and frequency of any remaining potential harm is significantly minimized.

**16. Dust: (E)** Dust from landfill operations is a potential harm.

CES' Proposed Mitigation: Dust is controlled through daily inspections, water trucks, establishing a focused site access roadway usage plan to minimize the number of roads that require water treatment for dust control, implementation of on-site speed limits, and application of water to waste vehicle unloading as required by waste conditions.

DEP Determination of Remaining Impacts: This is a known potential harm of landfill operations. CES' mitigation measures have generally been effective at preventing off-site dust. While CES 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.

**17. Fugitive Landfill Gas Emissions: (E)** The generation of landfill gas (LFG) is a known harm of a landfill operation.

CES' Proposed Mitigation: The LFG generated by the proposed expansion will be captured by a landfill gas collection and control system (GCCS). In order to maximize the capture efficiency of the GCCS, the LFG collection system will be installed as the waste filling progresses. Approximately 90 to 95 percent of the LFG will be captured by the GCCS when capping of the facility is complete. CES will conduct surface monitoring for LFG along the perimeters and on traverses across the surface of the landfill as required by regulation. Any reading exceeding 500 ppm of methane above background will be considered an exceedance and appropriate remedial action will be taken as

specified in the regulations. During the majority of the time that the proposed expansion GCCS is operating, the collected LFG will be beneficially re-used to produce energy. The flares will provide 100% backup capacity to the beneficial users and therefore, emissions due to operation of the flare are anticipated to be very minimal over the life of the proposed Expansion.

DEP Determination of Remaining Impacts: CES has proposed adequate mitigation; however, because a small percentage of the LFG does not get collected, some harm will remain for the purpose of this environmental assessment.

- 18. Nuisances – Litter: (E)** The potential for on and off-site litter from the acceptance and disposal of waste is a known potential harm of a landfill operation.

CES' Proposed Mitigation: Cover material will be placed daily on the active work face, the size of the workface will be maintained as small as possible, litter fences will be placed around the perimeter of the active disposal areas downwind of the facility, waste hauling vehicles will be required to remain tarped, and any observed fugitive litter will be collected by facility personnel and returned to the landfill for proper disposal.

DEP Determination of Remaining Impacts: Litter is a known potential harm of landfill operations. CES's mitigation measures have been generally effective at preventing litter from being unsightly or leaving the site. However, because the mitigation depends on proper implementation of various measures some potential harm will remain for the purpose of this environmental assessment.

- 19. Fire Potential: (E)** The risk of fires and subsurface reactions is a known potential harm of a landfill operation.

CES' Proposed Mitigation: CES disposes of a high percentage of inorganic (non-combustible) wastes in the facility which minimizes the risk of fires. Daily and intermediate cover are used on active and completed cells, the landfill has a state-of-the-art LFG collection system; and firefighting equipment from the Tremont fire company is available if necessary. On-site water supplies are available from various sedimentation ponds at the site also. In addition, CES's TCP provides specific fire and safety protection requirements for waste transporters entering the facility. The TCP states that all vehicles transporting waste must be equipped with charged fire extinguishers and other safety equipment.

DEP Determination of Remaining Impacts: CES has proposed adequate mitigation to prevent fires and subsurface reactions and has proposed adequate measures CES would employ should a fire or reaction occur at the landfill. In the past 10 years of operations at the landfill, there have been no landfill fires at the facility; however, because the risk of fires and subsurface reactions cannot be eliminated entirely, some potential harm will remain for the purpose of this environmental assessment.

20. **Groundwater Impacts: (E)** The generation of leachate and the potential for groundwater contamination is a known potential harm of a landfill operation.

CES' Proposed Mitigation: CES will continue to install their liner cap system in a phased approach, which will aid in reducing the potential development of leachate. Continuation of the dual contained lining system, leachate collection and treatment, and phased lined cap system installation mitigate potential harms to the groundwater associated with the proposed expansion and continued operations at CES. Since the early 1990's, a groundwater monitoring system has been in place at CES. Currently, both upgradient and down gradient wells comprise the groundwater monitoring system. The wells are sampled quarterly by CES, with the results by a Professional Geologist forwarded to the PADEP and host municipalities. CES is currently in a groundwater assessment/abatement process related to elevated constituents observed in the groundwater monitoring wells in the previously permitted south-eastern Southern Expansion Area. CES has determined that the source of the degradation is most likely infiltration of leachate-impacted stormwater. CES has implemented operational controls to prevent future occurrences and decreases in concentration in both the leachate detection zone and monitoring well MW-23D throughout 2025 have been observed after these operational controls have been in use. Significant declines in leachate indicator parameters have continued for three consecutive quarters, and in some cases four, suggesting that operational modifications have positively affected both groundwater quality and leachate detection zone quality in the assessment/abatement area. However, downgradient migration of leachate indicator parameters to point of compliance monitoring well CW-03, most strongly evidenced by a nitrate exceedance of the statewide health standard in the 2025 4<sup>th</sup> quarter sampling event, necessitates CES conducting interim remedial actions in the near future. An abatement plan/interim remedial action plan was submitted with CES' 2025 4<sup>th</sup> quarter water quality report.

CES plans to extract groundwater from four wells that are within the nitrate plume in order to treat the impacted groundwater at CES' reverse osmosis treatment system. The four remediation wells and downgradient impacted well CW-3 will be sampled monthly for nitrate and leachate indicator analytes to assess remediation effectiveness. At DEP's discretion, remediation will cease when nitrate concentrations decrease below abatement standards.

DEP Determination of Remaining Impacts: As described above, there are current elevated constituents observed in the groundwater monitoring wells in the Southern Expansion Area, and CES is currently in a groundwater assessment/abatement process as a result. Continued monitoring and implementation of operational controls is adequate to address this degradation and prevent future occurrences. Leachate generation is a known harm of landfill operations. CES 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. 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. Some potential harm remains for purposes of this environmental assessment.

### **BENEFITS**

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

- 1. Schuylkill County Host Fee: (SE)** Schuylkill County receives a host community fee equivalent to \$3.00 per ton of waste disposed of at the CES landfill facility, unless that waste originates in Schuylkill County. According to the 2023 Annual Form R Report, waste originating from outside of Schuylkill County collected at the site accounted for 83% of the total accepted waste. Over the proposed 28-year operating life of the proposed Expansion, and using the percentage stated above, this host fee would amount to at least \$3,620,000 per year, or a total of \$101,000,000.

DEP Evaluation of Benefit: The host fees are based on tonnages and there is no guaranteed amount. This is considered to be a Social and Economic benefit for the life of the expansion.

- 2. Local Township Host Fee: (SE)** Foster Township, Frailey Township, and Reilly Township receive a host community fee of \$1.00 per ton of waste to be paid to these respective townships by CES. According to the 2023 Annual Report, CES paid the following host fees to these townships: Foster Township: \$553,025.40, Frailey Township: \$552,861.75, Reilly Township: \$552,865.41. Comparable contributions towards the three townships will continue for the entirety of the expansion's lifespan on a yearly basis. Over the 28-year life of the Expansion, this would amount to approximately \$15,500,000 for each of the three townships.

DEP Evaluation of Benefit: The host fees are mandated by law and based on tonnages and there is no guaranteed amount. This is considered to be a Social and Economic benefit for the life of the expansion.

- 3. Recycling Fee: (SE)** For each ton of waste disposed by CES, CES will pay \$2.00 to the Commonwealth as required by 25 Pa Code § 273.315 (c) for recycling (Act 101) fees. Based upon the projected waste receipts over the life of the expansion (4,750 tons per day over a 306-day operating year), this economic benefit, assuming that there is no fee escalation over time, will amount to approximately \$2,907,000 per year over the proposed operating life of the expansion. Recycling fee payments would total \$81,396,000 over the 28-year life of the disposal area.

DEP Evaluation of Benefit: These fees are mandated by law. Because the amount of fees paid is dependent on the volume of waste received, the amount is not guaranteed. These fees will be considered to be a Social and Economic benefit, for the Commonwealth, for the duration of the expansion.

4. **Environmental Stewardship Fee: (SE)** For each ton of waste disposed by CES, CES will pay \$0.25 to the Commonwealth as required by 25 Pa Code § 273.316 (c) for environmental stewardship fees. Based upon the projected waste receipts over the life of the expansion (4,750 tons per day over a 306-day operating year), this economic benefit, assuming that there is no fee escalation over time, will amount to approximately \$363,375 per year over the proposed operating life of the expansion. Environmental Stewardship Fee payments would total \$10,174,500 over the 28-year life of the disposal area. This significant economic benefit will be realized only if the proposed expansion moves forward.

DEP Evaluation of Benefit: These fees are mandated by law. Because the amount of fees paid is dependent on the volume of waste received, the amount is not guaranteed. These fees will be considered to be a Social and Economic benefit, for the Commonwealth, for the duration of the expansion.

5. **Operating Costs: (SE)** Over the proposed 28-year operating life of the proposed Expansion facility, CES would incur significant operating costs each year. These costs would be related to equipment purchases, site and equipment maintenance, utility costs, etc. These expenditures by CES would occur within the immediate area surrounding the landfill, and generally in municipalities in the locality of the proposed expansion. Based on recent landfill operations, these annual operating costs would be expected to amount to at least \$1,055,000 per year during operation of the proposed expansion. Notably, this amount does not account for inflation. Overall, operating expenditures would be projected to amount to a total of \$29,540,000 over the 28-year facility life of the Expansion.

DEP Evaluation of Benefit: Operating costs including equipment purchases, site and equipment maintenance, and utility costs is a Social and Economic benefit for the life of the landfill.

6. **Purchase of Goods and Services: (SE)** CES will purchase goods and services associated with site preparation, cell construction, cell capping, landfill gas collection system installation, and post closure work. A total cost of approximately \$29,176,500 is projected for new cell construction, \$23,885,000 for facility closure, \$18,265,000 for the landfill gas collection system, and \$13,800,000 for post-closure work. CES will purchase goods and materials from local vendors, and sub-contract various aspects of these activities.

DEP Evaluation of Benefit: The purchasing of goods and services is a Social and Economic benefit for the life of the landfill.

7. **Wages and Benefits: (SE)** The yearly wages and benefits paid to landfill facility personnel totaled approximately \$3,614,573 in 2023. These annual wages will not decrease with the proposed expansion project and, in fact, are projected to increase, due to the addition of personnel and standard yearly wage increases. Over the 28-year operating life for the proposed expansion, the total value of this benefit will be [at least]

approximately \$101,200,000 (Note: This amount does not consider cost of living and performance-based raises that are highly likely to occur.). These wages will benefit individuals and their families and will likewise benefit the local community in the area surrounding the landfill as well as the Commonwealth of Pennsylvania as a whole, through discretionary income spending and the payment of wage taxes.

DEP Evaluation of Benefit: The continued employment of landfill employees will be considered to be a Social and Economic benefit of the project. It is noted that CES' description of this benefit mentions wage taxes; however, that is listed and counted as a separate benefit.

8. **Wage Tax Payments: (SE)** During the projected 28-year operating life of the proposed expansion, based on the estimated aggregate wages paid to facility employees and assuming an average total federal, state and local wage tax burden of 20 percent, the employees of the facility will pay, through the life of the expansion, roughly \$722,915 per year to total approximately \$20,250,000 over the facility's 28-year life. The annual wages paid to CES employees will not decrease with the proposed expansion project and in fact is projected to increase, due to adding personnel and standard yearly wages increases. The above-described taxes will be apportioned to various government agencies and will ultimately result in substantial public benefits. Locally, assuming a 1 percent local wage tax, aggregate local wage taxes paid by employees of the facilities will be approximately \$36,146 per year to total \$1,010,000 over the expected 28-year operating life of the facility. Assuming that employees at the proposed facility will pay a 3.1 percent state tax to the Commonwealth of Pennsylvania, aggregate wage taxes paid by employees of the facilities will be approximately \$112,052 per year to total \$3,140,000 over the expected 28-year operating life of the facility.

DEP Evaluation of Benefit: Wage taxes are a social and economic benefit of the project because additional tax revenue is generated by additional employment at the facility. It is related to the project because without the employment at the project site, the increased tax revenue would not be generated.

9. **Free Waste Disposal: (SE)** CES offers free waste disposal for household municipal waste generated within Foster, Frailey, and Reilly Townships. The tipping fee at the landfill is on average \$60/ton of waste. Based on historic annual free waste disposal quantities (approximately 800 tons per year), this benefit amounts to approximately \$48,000 per year, or \$1,344,000 over the 28-year life of the disposal area.

DEP Evaluation of Benefit: DEP considers the free waste disposal a Social and Economic benefit because CES is providing the monetary benefit of free disposal. Because this is a service that the Townships would not continue to receive without the expansion, this is a Social and Economic benefit for the life of the project.

10. **Free Recycling Program: (SE)** CES offers free recycling to facilities owned by Foster, Frailey, Reilly Townships, and Schuylkill County. The tipping fee at the landfill is on average \$60/ton of waste. Based on historic annual free recycling quantities

(approximately 40 tons per year), this benefit amounts to approximately \$2,400 per year, or \$67,200 over the 28-year life of the proposed expansion.

DEP Evaluation of Benefit: DEP believes that the free recycling program is a Social and Economic benefit because CES is providing the monetary benefit of free disposal. Because this is a service that the host municipalities and county would not continue to receive without the expansion, this is a Social and Economic benefit for the life of the project.

11. **Educational Benefit: (SE)** CES makes site-owned heavy equipment available to the local Vocational Education Facility.

DEP Evaluation of Benefit: Making site-owned heavy equipment available to the local Vocational Education Facility is considered a social and economic benefit of the expansion because it is an educational benefit related to the landfill's operations.

12. **Employment: (SE)** The proposed expansion will employ approximately 47 full-time workers (full-time equivalents) during the life of the proposed facility. The employee count will likely remain consistent over the life of the facility, but these jobs will be assured to exist through the projected 28-year operating life of the proposed expansion (approximately through 2058). In addition to the full-time workers controlling operations at the site, various third parties will be employed by CES to support the construction and maintenance of the expansion. Dozens of contracted individuals will likely be employed by the site through the 28-year operating life of the proposed expansion, and during the required 30-year post-closure period. Furthermore, CES Biogas LLC (CES Biogas) owns and operates the recently constructed Renewable Natural Gas facility and employs 12 full-time workers (excluding part-time workers).

DEP Evaluation of Benefit: The continued employment of 47 full-time landfill employees and 12 full-time CES Biogas employees will be considered to be a Social and Economic benefit of the project. The third party contracted employees are also considered a benefit of the project; however, the exact weight of this benefit is unknown as an exact number of contracted employees is unknown. Furthermore, it is noted that landfill employee wages and wage taxes are already counted in other benefits described above.

### **BALANCING OF HARMS AND BENEFITS**

The regulations require that the benefits of the project to the public clearly outweigh the known and potential harms. The harms and benefits were evaluated individually and collectively taking into account duration, intensity, frequency, who will be affected, sensitivity of the receptor, whether the harm or benefit is known or potential, public comment, input from other agencies, and DEP's knowledge and experience related to CES' past performance and compliance history. The following discussion summarizes this evaluation.

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

<b>Known Environmental Harms:</b>	<b>Known Social and Economic Harms:</b>
fugitive landfill gas emissions	road deterioration
head of hollow impacts	Visibility and aesthetics
wetlands	
<b>Potential Environmental Harms:</b>	<b>Potential Social and Economic Harms:</b>
litter and odors from traffic	unsafe/overweight vehicles
leachate releases/oil spills	
noise from traffic	
odors	
vectors	
dirt/mud	
dust	
noise from landfill operations	
litter	
groundwater impacts	
fire potential	

CES' Chapter 105 Joint Permit Application provides mitigation for the harms this expansion will cause to tributaries, streams, and wetlands, and the value the 105 project provides outweighs those harms. Potential harm to threatened/endangered species is mitigated through the Bat Conservation Plan.

Through the design and operational controls utilized at its existing facility, CES has been largely successful in mitigating many of the harms associated with odors, litter, noise, vectors, dirt/mud, dust, unsafe vehicles, and fires. This indicates that CES should be successful in mitigating the harms from the proposed project to the same extent. CES' effective mitigation is expected to limit the duration and frequency of any occurrences. The intensity of the harm is also impacted by the effectiveness of CES' controls in reacting and responding to the incident. Based on past experience, CES' design, operational controls, and responsiveness should result in only infrequent occurrences of harms related to odors, litter, noise, unsafe vehicles, and fires. These controls should also minimize the severity, or intensity, of any such occurrence. DEP is committed to oversight and monitoring of these controls and CES' operations.

The potential for water quality impacts will persist beyond the cessation of active landfill disposal operations. CES is currently in a groundwater assessment/abatement process due to elevated constituents observed in the groundwater monitoring wells in the Southern Expansion Area. The concentrations appear to be decreasing, and operational controls implemented by CES have likely minimized the potential for a similar issue to occur moving forward.

Visual impacts are a known harm of the proposed expansion because the peak elevation of the landfill will increase by 170 feet. However, due to the topography and rural nature of the surrounding area the expansion will actually only be visible to a small fraction of the local community. The landfill is visible from traffic traveling on I-81 and Route 25; however, the

intensity of the harm is low because the landfill is only visible for a short time as traffic passes by.

Fugitive landfill gas emissions and road deterioration are the other known harms of the expansion; however, both these harms have low and limited reach and 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 Southwest expansion:

<b>Known Environmental Benefits:</b>	<b>Known Social and Economic Benefits:</b>
	Schuylkill County Host Fee
	Local Township Host Fee
	Recycling Fee
	Environmental Stewardship Fee
	Operating Costs
	Purchase of Goods and Services
	Consulting Fees
	Wages and Benefits
	Wage Tax Payments
	Free Waste Disposal
	Free Recycling Program
	Educational Benefit
	Employment

There are significant social/economic benefits to the local community in the form of host fees, with additional benefits arising from the purchase of goods and services, direct employment, tax revenue and free waste and recycling services. These benefits directly impact the local community, and that impact can be very significant as far as the municipalities' revenue and jobs. The landfill provides 47 jobs as well as third party contracted employees and jobs at CES Biogas. The landfill also has significant operating expenditures. DEP received several letters in support of CES' expansion proposal including from all three host municipalities and Schuylkill County. The social/economic benefits will continue for the duration of the expansion.

The continued employment of 47 full-time landfill employees and 12 full-time CES Biogas employees will be considered to be a Social and Economic benefit of the project. The third party contracted employees are also considered a benefit of the project; however, the exact weight of this benefit is unknown as an exact number of contracted employees is unknown.

The remaining accepted benefits of the project are being considered; however, they are considered to be limited in scope. PA Disposal Fees are mandated and dependent on the volume of waste received. They are significant in dollar amount over the life of the project; however, because they are state fees, they do not directly benefit the host communities. CES identified additional benefits; however, DEP determined they either 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 are expected to be minimized. The potential harms are not likely to occur or, should they occur, would be infrequent or of low intensity or short duration, as long as the proposed mitigation measures are implemented properly. With the exception of the increase in visual impacts, all of the harms associated with the proposed expansion are already associated with the existing landfill operation, albeit these harms would be extended in duration. DEP's experience based on inspections and oversight is that CES generally operates in compliance and has effective mitigation measures in place.

Based on the information provided during the Phase I/EAP review pursuant to 25 Pa. Code § 271.127, DEP has determined that CES has demonstrated that the benefits to the public from the project clearly outweigh the known and potential harms. Following its Phase II/technical review, which includes further consideration of whether the project will cause unreasonable degradation and diminution of the environment, DEP may act to deny, approve or approve with condition the permit for CES' Southwest expansion.

### **TECHNICAL REVIEW**

Before DEP can proceed with the technical review of the application, CES must provide a revised Form 25. CES has had to frequently haul leachate over the past few years. Neither regular hauling nor emergency hauling is mentioned in the Form 25. CES should evaluate what measures can be taken to prevent frequent hauling (operational controls to reduce leachate generation and/or the addition of storage/treatment capacity) and revise/update the application as necessary.