2540-PM-BWM0009 6/2005

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Permit For Solid Waste Disposal and/or Processing Facility FORM NO. 8

Permit No. 100403
Date Issued October 5, 2017
Date Expires October 5, 2024

Under the provisions of the Pennsylvania Solid Waste Management Act of July 7, 1980, Act 97, a permit for a solid waste disposal and/or processing at (municipality) Jackson and Lancaster Township in the County of Butler is granted to (applicant) Mailing Address: Seneca Landfill P.O. Box 1080 Mars, PA 16046 Site Address: 421 Hartmann Road Evans City, PA 16033 (address)

This permit is applicable to the facility named as Seneca Landfill and described as:

Latitude: 40° 48' 43"
Longitude: 79° 24' 22"

This permit is subject to modification, amendment and supplement by the Department of Environmental Protection and is further subject to revocation or suspension by the Department of Environmental Protection for any violation of the applicable laws or the rules and regulations adopted thereunder, for failure to comply in whole or in part with the conditions of this permit and the provisions set forth in the application no. 100403 which is made a part hereof, or for causing any condition inimical to the public health, safety or welfare.

See attachment for waste limitations and/or special conditions

Christina S. Wellen

FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

THIS PERMIT IS NON-TRANSFERABLE

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Section A – Site/Application Information

1. This permit is issued as a renewal of an existing permit for the construction and operation of the Municipal Waste Landfill identified as the "Seneca Landfill" pursuant to the following information:

   A. Application for permit renewal dated September 29, 2016, with supplemental information dated October 20, 2016, and September 27, 2017. The renewal application consisted of the following information:

      a. Form A, B, B1, C-1, D, E, F, G(A), G(B), GIF, H, I, J, K, L, P, Q-1 – Q-20, Q-1 - Q-7, Q-1, R, X, 1, 2, 3, 6, 7, 11, 12, 14, 18, 24, 25, 28, 45, 46, and 54.

      b. Phase I drawings P153-P100 through P153-P160 under cover dated September 27, 2017.

      c. Phase II drawings P153-P200 through P153-P336 under cover dated September 27, 2017.

   B. Original application for a permit dated December 14, 1990, recopied June 14, 1993, its subsequent revisions, and the March 1999 Area D Major Permit Modification, revised April 2000 and it subsequent revisions.

      This permit was originally issued July 20, 1993. The original permit and all renewals and modifications through September 19, 2017, pages 1 through 8G and attachments are available for viewing at the Department's Northwest Regional Office.

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Date Revised	March 30, 2018

Additional Permit Modification:

C. This permit is modified in accordance with the Minor Permit Modification entitled, "Minor Permit Modification to Build Tack-On Benches." The application was received on September 12, 2017 and revised January 23, 2018 and January 24, 2018. The modification is for the construction of tack-on benches incrementally on Cells 11 through 16 and revisions to the Settlement Accommodation Plan and final grade.

D. This permit is modified in accordance with the Minor Permit Modification entitled, "Minor Permit Modification – Formal Solidification Facility at Transfer Station." The application was received on January 22, 2018 and revised March 19, 2018. The modification is for the conversion of the compactor room into a mixing pit for waste solidification.

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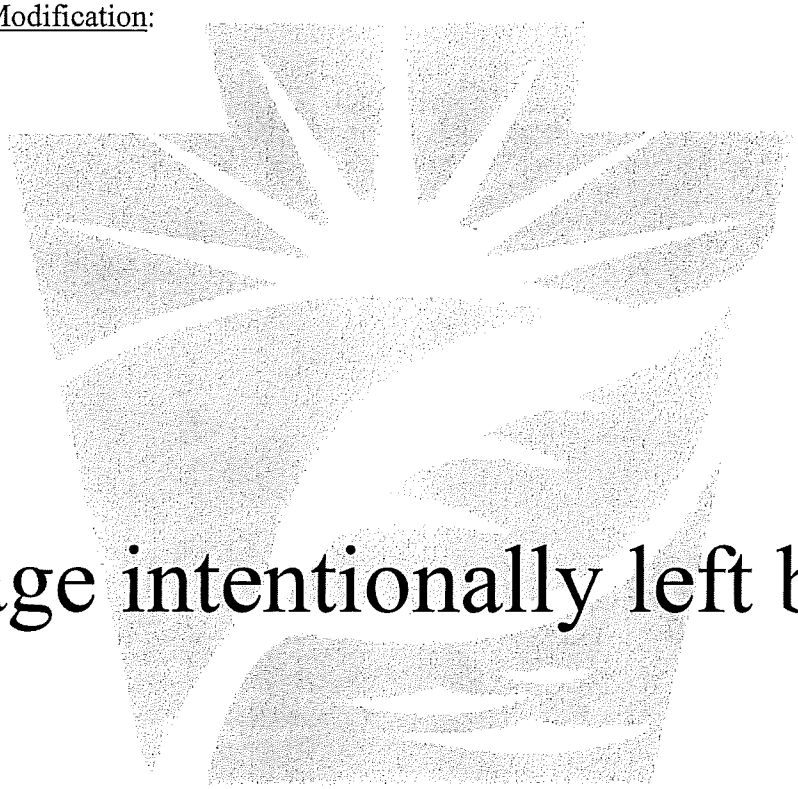
Additional Permit Modification:



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Where there is a conflict between an earlier and a later dated submittal, the later dated submittal shall take precedence.

This permit is based on the assumption that the information submitted in the application as identified above is accurate and that the facility will be constructed and/or operated as specified in the application. Any inaccuracies found in this information may be grounds for revocation or modification of this permit and potential enforcement action. The permittee must inform the Department of any deviation from a change in the information in the application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

2. All amendments or modifications to this permit shall be issued by the Department in writing. Such amendments shall be attached hereto and shall become effective on the date specified thereupon.

3. This permit is issued with a facility boundary and a waste disposal boundary as delineated on Sheets P153 - P203 of the design plans dated March 1999, revised April 2000.

4. No more than 3,800 tons of solid waste may be received at this facility for disposal on any single operating day. Up to 800 tons may be transferred off site from the transfer station daily, however the sum of the waste received at the facility and the waste transferred off-site from the transfer station may not exceed 3,800 tons per day. 3,800 tons per day represents the maximum and average daily volume of the facility, pursuant to Section 1112 of Act 101, the Municipal Waste Planning, Recycling and Waste Reduction Act, 53 P.S. Section 4000.1112, and has been set after consideration of weather, seasonal variations, community clean-up days, and other factors. Section 1112 provides that a mandatory civil penalty of $100 per ton applies to any excess volume received for disposal at this facility for any reason. Any penalty shall be calculated by the Department after determining the total tonnage of solid waste received for disposal at this facility during the calendar year quarter, divided by the number of permitted operating days that the facility is permitted to

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accept waste for disposal during that quarter. Each partial operating day shall be considered as one (1) operating day.

5. Pursuant to Section 1111 of Act 101, municipal waste processing and disposal capacity for Jackson Township, Lancaster Township, and Butler County will be reserved as described in the agreements between the municipalities and the landfill.

6. This facility is permitted to accept waste for disposal on six days during the week. The permitted days and hours of operation are:

   Monday through Saturday: 12:00 Midnight to 7:00 P.M.

   Pursuant to Section 304(b)(2) of the Municipal Waste Planning, Recycling and Waste Reduction Act, 53 P.S. Section 4000.304(b)(2), the host municipality may adopt reasonable ordinances concerning the hours and days during which vehicles may deliver waste to the facility, and the routing of traffic on public roads to the facility. For purposes of the calculation of the average or maximum daily volumes, each partial operating day shall be counted as one (1) day.

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Section B – General Conditions

1 If there is a conflict between the application, its support documents and/or amendments on one hand, the Rules and Regulations and/or Act 97 on the other hand, the Rules and Regulations and the Act shall apply unless a specific condition of this permit authorizes a specific variance to a requirement contained therein.

2. Under this permit, the permittee is responsible for the processing and/or disposal operations and the conditions at the site to the extent required by the Pennsylvania Solid Waste Management Act, the Clean Streams Law, the Rules and Regulations promulgated there under, as well as any decisional law interpreting the aforesaid statute and regulations.

3. All construction, operation, and procedures shall be in accordance with the application, submittals and supporting documentation, and such application, submittals and supporting documentation are hereby made a part of this permit.

4. This permit does not authorize, nor shall be construed to be an approval to discharge industrial waste, including without limitation, any leachate discharge from the permitted area to waters of the Commonwealth, absent a permit from the Bureau of Water Quality Management pursuant to the Clean Streams Law.

5. The operator may not cause or allow a point or non-point source discharge of pollution from or on the facility to surface waters of this Commonwealth.

6. Nothing in this permit shall be construed to supersede, amend, or authorize violation of, the provisions of any valid and applicable local law, ordinance, or regulation, provided that said local law, ordinance, or regulation is not preempted by the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, P.L. 380, No. 97, 35 P.S. Section 6018.101 et seq.

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7. As a condition of this permit and of the permittee's authority to conduct the activities authorized by this permit, the permittee hereby authorizes and consents to allow authorized representatives of the department, without advance notice or search warrant, upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas or adjacent areas to which solid waste management activities are being or will be conducted. This authorization and consent shall include consent to collect samples of solid waste, water or gases, to take photographs, to take measurements, to perform surveys and other tests, to inspect the method of operation, and to inspect and/or copy documents, books and papers required to be maintained by the Department. This permit condition is referenced in accordance with Sections 608 and 610.7 of the Solid Waste Management Act (Act 97).

8. Approval of any plans or facilities herein refers to functional design, but does not guarantee stability or operational efficiency. Failure of the measures and facilities herein approved to perform as intended, or as designed, or in compliance with the applicable Rules and Regulations of the Department, for any reason, shall be grounds for the revocation or suspension of this permit. Failure of the permittee to comply with the terms of the permit or conditions, of failure of the permittee to construct or operate the proposed facilities in conformity with the approved plans shall be grounds for the revocation or suspension of this permit.

9. Any final operation, design or other plan developed subsequent to permit issuance which exhibits changes in the structures, locations, specifications, or other changes of substance shall be submitted to the Department for subsequent permit action. Any deviation of plans herein approved shall not be implemented before first obtaining a permit amendment or written approval from the Department.

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10. The operator shall submit a certification by a registered Professional Engineer, registered in Pennsylvania, on Form 37 "Certification of Facility Construction Activity" upon completion of each major phase or sequence of construction at the facility in accordance with the approved plans and also in compliance with 25 PA Code 273.203.

    a. Construction of the groundwater monitoring system
    b. Construction of the subbase
    c. Construction of the secondary liner
    d. Construction of the leachate detection zone
    e. Construction of the protective cover and the collection system within the protective cover
    f. Construction of the sedimentation ponds
    g. Construction of the leachate treatment and conveyance facility
    h. Construction of the gas management system
    i. Closure
    j. Final Closure

    Prior to waste disposal in a newly constructed cell, the applicable certifications shall be approved by the Department in writing.

11. The Department shall be notified at least five (5) business days prior to the commencement of each stage of construction and the acceptance of wastes at the facility.

12. The sump areas of all landfill cells shall be hydrostatically tested to determine the integrity of those areas prior to waste disposal.

13. The horizontal grid control system shall be controlled and tied to a minimum of two (2) mutually visible permanent physical markers or objects located on-site. The vertical control shall be tied to an elevation established for the permanent marker. The permanent marker shall be established prior to construction.

14. The permit area shall be staked out with a minimum of three (3) foot high markers prior to the construction of each stage. This permit area shall remain identified throughout the life of the site. Staking should occur in each stage before earthwork or ditch installation commences on that stage.

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15. This facility shall be operated to prevent and control surface and groundwater pollution. An operator shall operate and maintain necessary surface and groundwater treatment facilities until surface or groundwater pollution from, or on the facility, has been permanently abated.

16. The facility shall be operated to prevent and control surface and groundwater pollution. All erosion and sedimentation control structures shall be constructed, implemented, and maintained as set forth in the plans contained in the application and in full compliance with Chapter 102 of the regulations. No earthmoving or earth disturbance activities may be conducted until the appropriate erosion and sedimentation control measures are constructed and fully operational.

17. Within ninety (90) days after closure of the disposal site, the owner of the property on which a disposal facility is located shall record a notation on the Deed to the facility property--or on some other instrument which is normally examined during the title search that will in perpetuity notify a potential purchaser of the property that the land has been used to dispose of solid waste.

    Additionally, the permittee shall submit to the Department and to the municipality in which the facility is located a survey plat indicating the location and dimension of landfill cells or other disposal areas with respect to permanently surveyed benchmarks. The plat filed with the municipality shall contain a note prominently displayed which states the owner's obligation to restrict disturbance of the site so that post-closure use does not disturb the integrity of or interfere with the proper functioning of any component of the containment or monitoring system.

18. This permit does not authorize the discharge of air emissions unless the Air Quality Control Program has approved the discharge of these emissions.

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Section C – Operating Conditions

1. A copy of the Preparedness, Prevention, and Contingency Plan (PPC Plan) shall be readily available on-site and shall include detailed drawings of the permitted and surrounding areas

2. A daily operational record must be maintained describing the types and amounts of materials processed at the site meeting the requirements of Section 273.311 of the Rules and Regulations

3. Soils to be utilized as daily and intermediate cover material must fall within the USDA textural classes as indicated in Sections 273.232 and 273.233 of the Rules and Regulations.

4. Soils to be utilized for final cover material must fall within the USDA textural classes as indicated in Section 273.234 of the Rules and Regulations.

5. An Annual Operations Report shall be submitted to this Department on or before June 30 of each year meeting the requirements of Section 273.313 of the Rules and Regulations.

6. A current certificate of insurance, as specified in §271.374(a) evidencing continuous coverage for public liability insurance as required by §271.371, shall be submitted in conjunction with the annual report form.

7. A written update of the total bond liability under Section 271.331 of the Rules and Regulations must be submitted in conjunction with the annual report form. If additional bond is determined to be necessary, it shall be submitted to the Department within ninety (90) days after the annual report is due.

8. Leachate shall be monitored and analyzed pursuant to Section 273.276 of the Rules and Regulations and Form 50. The volume and flow rate is to be measured on a daily basis.

9. The top six inches of the final layer of intermediate cover (i.e., layer in contact with cap geomembrane) is termed Select Intermediate Cover. The surface of this material will be inspected for smoothness, stability, and coarse fragments exceeding ¾ inch will be removed unless covered by a layer of cap cushion as specified in the Construction Quality Assurance Plan.

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10. This facility may not operate to receive waste unless the operator has established at least one drop-off center for the collection and sale of at least three recyclable materials chosen from the following: clear glass, colored glass, aluminum, steel and bimetallic cans, high-grade office paper, newsprint, corrugated paper and plastics. The drop-off center must be located at the facility or at a location that is easily accessible to substantial numbers of persons generating municipal waste that is processed or disposed of at the facility. The drop-off center shall be operated in compliance with Section 1502(b) of the Municipal Waste Planning, Recycling and Waste Reduction Act, 53 P.S. Section 4000.1502(b).

11. A topographic survey of the site must be performed each year and a topographic map of the area utilized the previous year shall be submitted to the Department with the annual operations report form. This map must bear the seal of a Registered Professional Engineer or Surveyor. In addition to the map, the permittee shall provide statistics of the waste volumes received and the remaining waste capacity.

12. In accordance with the July 8, 2008, minor permit modification application entitled "Landfill Gas Processing and Recovery System," received July 9, 2008 and revised September 5, approval is granted for the processing and beneficial use of landfill gas (LFG) generated by the landfill disposal of municipal waste or residual waste co-disposal.

    A. The approved processing is limited to water and particulates removal, filtration, temperature adjustment, compression, and, if needed, excess hydrogen sulfide and carbon dioxide removal.

    B. The approved beneficial use of processed LFG is limited as follows:

        1) Beneficially used as a substitute high or medium British Thermal Units (Btu) LFG for natural gas or other fuel.

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2) Beneficially used as a substitute for natural gas or other fuel that will be:

a) Transported in a pipeline to be interconnected with another pipeline for consumer use.
b) Transported in a pipeline to be directly interconnected with a near-by industrial facility.
c) Used by the landfill operator for the landfill's daily needs.

3) Beneficially used as an alternative fuel for the electric generators to produce electricity that will be:

a) Used by the landfill operator for the landfill's daily needs.
b) Transmitted to the local electric utility grid for consumer use.
c) Distributed for direct consumer use.

C. The permittee shall comply with the fugitive emissions regulations under 25 Pa. Code, Chapter 123 (Standards for Contaminants) issued under the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, 35 P.S. §4005 and shall comply with all the applicable provisions of the Fugitive Emissions §§123.1 and 123.2, as they apply to the permittee's operations.

D. The permittee shall immediately notify the DEP regional office in the event of a discharge or spill of liquid waste to soil in the amount of 5 gallons or more and shall take appropriate immediate action to protect the health and safety of the public and the environment.

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E. The following records shall be retained by the permittee and shall be available to the Department upon request: analytical evaluations conducted on the LFG which shall include, at a minimum, the dates of testing, each parameter tested, the results, the laboratory name, sampling procedures, analytical methodologies and person analyzing the sample; BTU value and amount of LFG processed daily; documentation that the processed LFG meets each users specifications; amount of LFG generated by the permittee and the disposition of that LFG; records of inspections of the facility by facility personnel. The records required in this Condition shall be retained by the permittee at the permittee's processing facility, for a minimum of 5 years, and made available to the Department upon request.

13. All electronic waste that falls under the Covered Device Recycling Act, 35 P.S. §§ 6031.101 – 6031.702 ("CDRA"), being sent to a facility in Pennsylvania, must be sent to a recycling facility that has certification by the CDRA to recycle covered devices.

14. Electronic devices containing refrigerants including air conditioners, refrigerators, freezers and dehumidifiers must be sent to a recycler having the certifications required under 40 CFR Part 82, Subpart F.

15. All electronic waste received and stored at the facility must be stored under a roof or in watertight containers with labels identifying the contents as electronic waste.

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Section D – Groundwater Monitoring

1. The groundwater monitoring system for this facility consists of the following units:

Aquifers	Surface Water Monitoring Points	Upgradient	Downgradient
	SW-2	MW-25U	MW-6D
	SW-4		MW-27D
	SW-5		MW-29D
			MW-30D
			MW-31D

The location of the wells is indicated on Drawing VOGEL-059D002 dated March 26, 2013.

2. The permittee shall monitor the wells listed in the Condition above as follows:

Quarterly: Parameters listed in Section 273.284(1-3) and the items outlined in Form 19.

Annually: Parameters listed in Section 273.284(4-6) and the items outlined in Form 19.

The permittee shall monitor the surface water monitoring points listed in Section D, Condition 1 as follows:

Quarterly: Parameters listed in Section 273.284(1-3) and the items outlined in Form 19, excluding volatile organic compounds

Annually: Parameters listed in Section 273.284(4) and the items outlined in Form 19., excluding volatile organic compounds

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3. Groundwater monitoring reports shall be submitted to the Department on Form 19. The wells shall be monitored in accordance with Section D, Condition 2 of this permit and the Rules and Regulations. The analyses should be submitted to the Department within sixty (60) days from the end of the quarter or fifteen (15) days after completion of the analyses, whichever is sooner.

4. Within 48 hours after the permittee affects the quality or quantity of any water supply, it shall replace the supply with a temporary source of water of at least equal quality and quantity. If the temporary supply is purchased from a drinking water purveyor, the purveyor shall be licensed by and be in good standing with the Commonwealth of Pennsylvania. The permittee shall continue to provide the temporary supply until the quantity and quality of the original supply is restored or a permanent alternate water supply is provided.

   Within 15 days after the permittee affects the quality or quantity of any water supply, the permittee shall submit a remedial plan to the Department for its approval. The plan shall set forth the means by which the permittee will either provide a permanent alternate water source of at least equal quality, quantity, and convenience of-use, or restore the original source and shall include a schedule of implementation. The plan for restoration or permanent alternate supply shall be completely implemented within 60 days after the permittee receives Departmental approval.

5. After construction of the monitoring well system has been completed, the geological cross-sections shown on Drawing Sheets 153 - 133 through 153-141, where appropriate, shall be revised to reflect all new information gathered during the construction of the monitoring wells. In addition, any other geological or subsurface information which exhibits significant changes from the conditions provided in the permit application shall be updated and provided to the Department. This information shall be submitted within six (6) months after completion of the monitoring well system.

6. Prior to sampling, monitoring wells shall be purged, with the report noted to indicate the same. All monitoring reports shall be submitted to:

   Manager
   Waste Management Program
   Department of Environmental Protection
   230 Chestnut Street
   Meadville, PA 16335

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Section E – Waste Acceptance

1. The permittee shall not accept, receive, dump, discharge, process, or dispose of hazardous waste as defined in 25 PA Code Chapter 261 and 40 CFR Part 261.

2. No lead acid batteries shall be placed into mixed waste at this facility, discarded, or otherwise disposed of at this facility.

3. The permittee shall not violate, or cause violation of, any provision of the Municipal Waste Planning Recycling and Waste Reduction Act, 53 P.S. §§4000.101 et seq., or the terms or conditions of any municipal waste management plan approved by the Department under that Act. Nothing in this paragraph shall be construed to restrict acceptance of source separated/recyclable materials at this facility for the purpose of recycling those materials.

4. The permittee shall notify all municipalities using the facility, in writing, when the facility's remaining capacity has decreased to three years. The rate of filling at the time of notice cannot be increased. This notification should also state that all customers may need to seek an alternate disposal site.

5. Seneca Landfill is hereby authorized to accept the generic residual and special handling waste streams as delineated in Form R, with the following conditions:

   a. All wastes from new generators shall be consistent with the requirements stated in the Form R, Waste Analysis and Classification Plan. The permittee may accept generic residual waste specifically stated in the Form R as long as the wastes are consistent with the Waste Analysis and Classification Plan. The following general waste categories may be accepted:

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General Residual Waste Code (RWC) Series

000 --Combustion Residues
100 --Metallurgical Process Residues
200 --Sludges, Scales, and Sediments
300 --Chemical Wastes
400 --Generic Manufacturing Wastes
500 --Special Handling Wastes
700 --Industrial Equipment, Maintenance Waste/Scrap
800 --Non-Coal Mining Wastes, Oil and Gas, and Other Well Drilling Wastes
900 --Miscellaneous

b. The permittee shall not accept any residual waste, residual special handling waste or municipal special handling waste whose chemical constituents are in excess of the maximum acceptance concentrations as delineated in the Waste Analysis and Classification Plan, without written approval from the Department.

c. The permittee shall electronically submit a request to dispose residual waste and the source reduction strategy on the appropriate forms supplied by the Department for each waste which is proposed for disposal. These documents must be, at a minimum, administratively complete. The forms shall be sent to the Department's Northwest Regional Office via the DEP GreenPort web-based system prior to accepting the waste. If the Department does not object during the fifteen (15) day review period, the permittee may accept the waste as long as acceptance of the waste described in the request is consistent with the Waste Analysis and Classification Plan. If after the fifteen (15) day period the Department determines that the waste which is accepted is not consistent with the request or the Waste Analysis and Classification Plan, the permittee shall be subject to any or all applicable enforcement actions of the Solid Waste Management Act or the Department's Rules and Regulations promulgated there under. Approval for disposal of each waste must be received from the Department prior to acceptance at the landfill.

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Electronic submissions shall be made for all wastes, including but not limited to:

- Form U, Request to Process or Dispose Residual Waste
- Form 43, Request for Approval to Process or Dispose of Sewage Sludge
- Form FC-1, Notification of Intent to Dispose of Soil Contaminated by Virgin Petroleum Fuel
- Form 35, Request for Approval to Process or Dispose of Processed Regulated Medical or Chemotherapeutic Waste Stream(s)

d. The permittee shall send copies of the forms described in paragraph c to the Host County and Municipality. These copies shall be sent quarterly, or more frequently if requested by the recipient.

e. The permittee shall submit completed forms for each generator of residual waste which qualifies for waivers of chemical analysis listed in the application (Form U, Section D (4) Chemical Analysis Waiver). A source reduction strategy shall be included for any analysis-waived residual waste as required by Section 271.612 of the Rules and Regulations. The permittee shall not accept any residual waste as analysis-waived prior to submission of the completed forms to the Department. The Department waives the 15-day review period as referenced in paragraph c for these wastes as long as they meet all requirements of the original application for analyses-waived residual wastes.

f. The permittee shall submit, quarterly to the Department's Northwest Regional Office, an amended Appendix to the permit which lists all municipal special handling wastes, residual wastes, residual special handling wastes and municipal waste-like residual wastes currently approved for disposal at the facility. The amended Appendix shall provide the information by waste type, generator, and approved quantity for all municipal special handling wastes, residual wastes, residual special handling wastes and municipal waste-like residual wastes including small quantity generators and small quantity waste types from large quantity generators.

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g. The permittee shall not accept residual waste from any generator who is subject to 25 Pennsylvania Code, Chapter 287.54 that does not provide the permittee with the chemical analysis of the waste, or certification that the physical and chemical properties of the waste and the process generating the waste has not changed (60 days after the anniversary date of waste acceptance at the disposal facility), and the permittee shall not accept residual waste from any generator who does not provide all information as required by the Waste Analysis and Classification Plan.

h. For generators meeting the conditions of 25 Pennsylvania Code, Chapter 271.601 (a)(2 or 3)(Small Quantity Generators and Small Quantity Waste Types), the acceptance of waste shall be as delineated in the Waste Analysis and Classification Plan for these generators; except the Permittee shall submit to the Department a complete application on the appropriate form (Form U) for all generators of industrial waste types that are generated in quantities of 2,200 pounds or less of that residual waste type per generating location in each month (Small Quantity Waste Type). The Department waives the detailed analysis of physical properties and chemical composition, and the evaluation of leachability for these small quantity waste types; except as required under 25 Pa. Code Chapter 261, Subchapters A-D for a hazardous waste determination. Additionally, the Department waives the 15-day review period as referenced in paragraph c for these small quantity waste types. Before the Permittee accepts residual waste from a generator whose total combined residual waste is 2,200 pounds or less (Small Quantity Generator), the generator of the residual waste must submit a letter of certification to the Department and demonstrate the waste is not hazardous. The Permittee shall submit to the Department the certification and demonstration received from the generator.

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Candidate Waste

6. Candidate waste may only be stored onsite for 60 days and must pass through the radiation monitors the day it arrives or during the next business day if it arrives after hours. All candidate waste must be disposed of within 5 days of Department Form U approval. Rejected loads must be removed from the site within 15 days of the Department or Seneca's determination of rejection.

7. Candidate waste will count towards the average and maximum daily tonnage volumes for the day the waste is actually disposed.

8. A container ID system must be in place for the candidate waste. The ID system must include the date the candidate waste was received, an ID number, and a note stating the candidate waste has not been approved for disposal.

9. All candidate and approved waste must be stored in water tight containers and stored within areas with constructed stormwater controls.

Composting

10. All non-compostable, solid wastes, and plastic bags will be removed prior to incorporating the yard waste into windrows. The Department's "Guidelines for Yard Waste Composting Facilities" should be followed for composting activities.

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11. The following conditions apply to the liquid waste received at the on-site Centralized Wastewater Treatment Facility (CWTF):

    a. The liquid waste received at the CWTF shall count towards the landfill's waste acceptance rate as specified in Condition 4, Section A of this operating permit.

    b. Fees:

        1. Based on Waste Received:

            i. The permittee shall pay the required Host Municipality Benefit Fee as described in Section 1301 of the Municipal Waste Planning, Recycling, and Waste Reduction Act – Act 101 of 1988.

            ii. The permittee shall pay the required Environmental Stewardship Fee as described in § 6112 of the Environmental Stewardship and Watershed Protection Act – Act 68 of 1999.

        2. Based on Waste Disposed:

            i. The permittee shall pay the required Recycling Fee as described in Section 701 of the Municipal Waste Planning, Recycling, and Waste Reduction Act – Act 101 of 1988.

            ii. The permittee shall pay the required disposal fee as described in § 6301 of The Waste Transportation Safety Act – Act 90 of 2002.

    c. The annual operations report shall document the weight of liquid waste received and the solid waste fraction weight removed by the CWTF.

    d. The catch basins inside the liquid waste unloading bay shall be inspected monthly and cleaned out every 6 months or sooner if required.

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Section F – Specific Variances – Design

1. The landfill final grade configuration is modified as follows: a minimum 15- foot wide drainage bench for every 50-foot maximum rise in elevation on the slope with a grade between benches of 3 horizontal to 1 vertical (33%). The different slope configuration is approved under Section 273.234(f) of the Municipal Waste Regulations.

2. The option to utilize either 6 inches of soil or a geosynthetic clay liner as the subbase layer of the liner system with the following conditions:

   a. The Department shall be notified which subbase option will be utilized at least five (5) business days prior to the commencement of new cell construction.
   b. The final subgrade surface shall consist of materials having 100% passing the 1inch sieve and a minimum of 40% passing the #10 sieve on a weight basis.
   c. The surface of the subgrade shall be hard, uniform, smooth and free of debris, rock, plant materials and other foreign material.

3. The utilization of geosynthetics as the leachate detection zone drainage layer with the following conditions:

   a. The use of two layers of geonet placed along the base slope of the liner system.
   b. The use of a double-sided drainage geocomposite along the side slope of the liner system.

4. The utilization of a geosynthetic drainage layer as part of the leachate collection zone layer.

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5. The utilization of protective cover material meeting the following gradations:

a. Protective Cover Aggregate Without Cushion

Sieve Size	%Passing By Weight
3/4 inch	100
No. 200	5 or less

Note:
1. Rounded to subangular material required

b. Protective Cover Aggregate With Cushion

Sieve Size	%Passing By Weight
1-1/2 inch	100
No. 200	5 or less

Notes:
1. Rounded to subangular material requires a minimum of one layer of 16-oz/sy non-woven geotextile cushion.
2. Angular material requires a minimum of two layers of 16 oz/sy geotextile cushion.

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5. A variance to use a combination protective cover system consisting of a 15-inch layer of tire material placed on top of a minimum twelve (12) inch layer of granular soil material. The following conditions apply:

   a. The permittee shall implement the testing procedures of the Construction Quality Assurance Plan as outlined in Form Q-2 to ensure the tire chip material used as protective cover conforms to the specific design standards.

   b. The tire chip material shall satisfy the following criteria:

      i. Maximum tire chip size of 3 inch by 5 inch square with no protruding wire greater than 1.5 inches in length.

      ii. A minimum of 60% of the tire chip material shall have dimensions greater than 2 inch by 2-inch square (i.e. a random sample of 100 chips must have 60 chips with dimensions greater than 2 inch by 2 inch). The permittee shall implement the sampling and testing procedures contained in the application to ensure the tire chips conform to the specified criteria.

   c. The tire chip material shall be clean material and shall contain no dirt, debris or plant material.

   d. The tire chip material placement shall be performed by low ground pressure equipment (i.e. equipment with ground pressure less than 8 pounds per square inch).

   e. The initial lift of tire chip material shall be placed at a minimum depth of twelve (12) inches.

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f. The permittee shall store whole and processed waste tires in a manner consistent with 25 Pa. Chapter 299. The maximum number of whole waste tires stored at the facility shall not exceed 10,000 passenger tire equivalents (i.e. 1 truck tire equals 5 passenger tires). Additional storage volume shall be allowed provided the permittee obtains approval from the Department in writing. All stored waste tires shall be processed within 1 year of receipt of the facility.

6. Utilization of a geonet stack trench system in-place of leachate detection zone piping and aggregate material.

7. The utilization of a minimum 12-inch thick layer of protective cover with the following requirements.

   a. A 16 ounce/square yard geotextile or material with an equivalent puncture resistance shall be placed over the geosynthetic liner system.
   b. The protective cover material shall be classified as GW or GP by the Unified Soil Classification System.
   c. All leachate collection pipes shall be enclosed in a minimum 18-inch thick layer of pipe bedding material. The minimum width of the enclosure shall be two (2) feet.
   d. All leachate collection sump areas shall contain a minimum 18-inch thick layer of bedding material.

8. The Department hereby grants permission to perform a demonstration project using Closure Turf as an alternative final cover system. Any additional use of closure turf shall meet the requirements of the letter from the Department dated June 12, 2015 including maintaining bond for the entire cost of installing a traditional final cover system.

   a. Should the permittee decide to use a different but similar, as determined by the Department, alternative cap the permittee will not be required to submit a separate demonstration project. The permittee will be required to submit additional information on the similar alternative cap material to adequately describe all design and inspection changes before being permitted to install the different alternative cap.

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Section G - Settlement Accommodation Plan:

1. While implementing the settlement accommodation plan, the facility must remain in overall operational compliance regarding landfill gas odors, surface emissions, leachate outbreaks, nuisance controls, etc. If DEP determines that the facility is unable to maintain overall operational compliance, DEP may suspend future Settlement Accommodation Plan (SAP) implementation.

2. Upon construction of the Settlement Accommodation Plan (SAP) grades, SAP fill elevations must be surveyed. The survey elevations shall be reviewed by either a PA licensed land surveyor or PA Registered Professional Engineer. Records of the survey information must be maintained.

3. The Annual operation report must contain a separate report evaluating the Settlement Accommodation Plan (SAP). The SAP report must include the following:
   - A narrative evaluating the SAP plan
   - Calculations, if necessary, concerning proposed SAP settlement verses actual settlement, and validation of assumptions/estimates used in the SAP.
   - Drawings of proposed SAP settlement verses actual settlement on 100 foot cross sections successively each year in addition to the annual topographic survey.
   - Conformance with permitted capping schedule
   - An analysis of changes in waste stream in the past year that may affect changes in future settlement.
   - Any changes in the bond relative to the status of the SAP.

4. If revisions to the SAP or capping schedule are necessary, a minor permit modification application must be submitted to and approved by the Department, prior to implementation.

5. If SAP elevations are not at permitted elevations in each respective area of filling at the projected 5 year timeframe, (taking into account the thickness required for placement of final cover materials), the excess grade must be removed within 6 months, unless otherwise approved by the Department in writing, or if it is addressed by an approved permit modification of the SAP plan.

6. If SAP elevations settle below permitted elevations during the projected 5 year time frame, a one time addition of waste to reach permitted elevations will be allowed. Final cover must be placed within one year of the one time addition of waste.

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Section H – Specific Variances – Daily Cover & Intermediate Cover

1. The utilization of the following material as daily cover 25 Pa. Code §273.232.

* Coal Ash
* Foundry Sand
* Steel Mill Slag
* Coal Ash conditioned with cement kiln dust
* Processed petroleum contaminated soil
* Sludge Derived Synthetic Soils (SDSS) stabilized by the N-Viro process (or approved equivalent) which is a "Process to Further Reduce Pathogens" (PFRP).
* Sewage Sludge stabilized with fly ash and the N-Viro process of approved equivalent.
* Soil/compost mixture (3 parts daily cover soil to 1 part composted yard/wood waste.)
* Stabilized Lead contaminated soils
* 1:1 soil/compost mixture
* 1:3 mixture of soil and construction/demolition waste fines
* Dredge material
* Clay loam soils
* Concrete Wall Production Waste
* Gas drilling residuals containing at least 16.5% solids
* Paper sludge
* Paper de-inking sludge
* Industrial Wastewater sludge
* Metal Processing sludge
* Slag
* Posi-shell
* Wood Ash
* Fuel contaminated soils
* Nonpetroleum contaminated soils
* Construction/Demolition waste with low percentages of paper and wood
* Municipal Solid Waste incinerator ash

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* Geosynthetic Covers; Cormier WP-40FR; Integra 12FR; or equivalent
  a. The permittee shall deploy a geosynthetic material panel when that panel is capable of providing complete and unbroken coverage of the working face. Any panel that sustains damage shall be removed by the permittee and not reused until the panel has been properly repaired.
  b. Once deployed, all panels shall be adequately anchored to restrict movement of the cover by wind, reduce the likelihood of associated wind damage and prevent the lateral escape of odors and intrusion of vectors. The permittee shall place the panels with a minimum of 3-foot overlap onto the existing cover or adjacent panel.
  c. The permittee shall maintain an operational log on a daily basis during the use of geosynthetic materials.
* Foams; Rusmar AC-645; Con-Cover-180; or equivalent
  a. The permittee shall apply the material at a thickness sufficient to assure complete coverage of all exposed surfaces on the working face.
* Broken & Commingled Glass
  a. Glass waste is limited to the working face slopes where waste hauling vehicles do not travel
  b. Any glass used under this approval cannot be considered a recycled material or be counted as recycled to meet a grant or recycling condition.
* Auto Fluff
  a. No more than 500 cubic yards of auto fluff shall be stockpiled over the lined areas of the landfill prior to use as daily cover. All rainwater that comes in contact with the auto fluff shall be managed as leachate. No auto fluff shall be stockpiled off of the lined area of the landfill.

i. The waste materials as alternative covers must satisfy the requirements of the Waste Acceptance Plan of the operating permit.

ii. If any of the alternative covers cease to meet the performance standards for cover materials outlined under the Chapter 273 Regulations, at any time and for any reason, the permittee shall immediately apply cover material meeting the design requirements of the Chapter 273 Regulations.

iii. The Department reserves the right to revoke approval and require a return to the utilization of conventional soils in the event of substandard performance which is inconsistent with the Chapter 273 Regulations.

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2. The utilization of the following as intermediate cover in-place of the soil requirements of 25 Pa. Code 273.233.

   * Sludge Derived Synthetic Soils (SDSS) stabilized by the N-Viro process (or approved equivalent) which is a "Process to Further Reduce Pathogens" (PFRP).
   * A minimum 12 inch alternative cover application consisting of a six inch layer of foundry sand as the base with a 6 inch cover soil meeting the requirements of 25 Pa. Code 273.233(c).
   * A minimum 12 inch alternative cover application consisting of a six inch layer of coal ash conditioned with cement kiln dust as the base with a six inch cover soil meeting the requirements of 25 Pa. Code 273.233(c).

   The three alternative covers listed above are limited to areas where runoff drains to the leachate collection zone, and intermediate cover grades that have not reached final landfill configuration

   * Soil/compost mixture (3 parts daily cover soil to 1 part composted yard/wood waste).
   * Processed petroleum contaminated soil.

Section I – Environmental Assessment, Benefits and Mitigation

1. The permittee has proposed mitigation of harms and has identified benefits of the project to the public in the application submissions included as part of this permit modification. Based upon the Department's evaluation of the environmental assessment, of which the harms/benefits analysis is part, it has been determined that the benefits of the project clearly outweigh the known and potential harms as required by Chapter 271.127(c) of the Municipal Waste Regulations. Failure to complete all mitigation measures in the application submissions or failure to provide for all the benefits accepted by the Department based on its analysis may result in permit suspension, permit revocation, and/or other appropriate enforcement actions.

2. The Department's analysis and review of the Environmental Assessment for the Major Permit Modification entitled "Consolidation of Transfer Station and Landfill Permits" is attached to this permit as Exhibit EA1.

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Exhibit EA1

Environmental Assessment

Consolidation of Landfill and Transfer Station Permits

THIS PERMIT IS NON-TRANSFERABLE

Environmental Assessment (Harms/Benefits)

Consolidation of Transfer Station and Landfill Permits
Seneca Landfill
Seneca Landfill, Inc.

Jackson Township
Butler County
Id No. 100403

Prepared by:
Pa. Department of Environmental Protection
Northwest Regional Office
Waste Management –Facilities Section
May 2017

I. Project Description

Seneca Landfill (Seneca Landfill, Inc.) has submitted a major permit modification application to consolidate the existing Seneca Transfer Station and existing municipal waste landfill permits into one permit. The facilities are located in Jackson Township, Butler County and have been operating under Solid Waste Permit No.100403 (landfill) and 101602 (transfer station) since July 20, 1993 and March 2, 1992 respectively.

The landfill and transfer station are both located within the permitted area of Seneca Landfill. The site is located off Hartmann Road, about a mile and a half off Exit 88 on I-79. Currently, the landfill can accept an average daily volume/maximum daily volume (ADV/MDV) of 3,000 tons per day and the transfer station can accept an ADV/MDV of 800 tons per day. The transfer station may also transfer 200 tons per day out to a different landfill. Currently, all waste arriving at the transfer station is disposed of at Seneca Landfill.

As a result of the consolidation Seneca proposes to have a new average daily volume (ADV) of 3,800 tons per day. Should Seneca accept waste at 3,800 tons per day the remaining site life would decrease from approximately 4.4 years to approximately 3.5 years. All incoming waste will be able to be processed at the transfer station. Seneca also proposes to be able to haul up to 800 tons per day out of the transfer station provided the sum of the waste hauled out and received at the landfill doesn't exceed 3,800 tons per day.

The landfill permit is set to expire on October 5, 2017. The transfer station permit is set to expire February 22, 2022. There are no proposed changes to the operation of either facility.

The application was submitted to the DEP on April 30, 2014. Notices of the submission were printed in The Butler Eagle, a local newspaper, on April 27th, May 4th, and May 11th 2014. The permit application notice also was published in the Pennsylvania Bulletin on May 31, 2014.

II. Environmental Assessment Process

25 Pa. Code § 271.126 and § 127 (relating to environmental assessments) require that an applicant conduct an environmental assessment and demonstrate that the benefits of the project clearly outweigh the known and potential environmental harms that will remain after the proposed mitigation. The benefits of the project can be social and economic, and/or environmental. Social and economic (SE) benefits are evaluated after offsetting them with SE harms. Environmental harms are evaluated after offsetting them with acceptable mitigation plans. 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. The environmental harms are then balanced against the benefits to determine if the benefits clearly outweigh the harms. Therefore, the proposed modifications from Seneca Landfill, Inc. are compared to the conditions that would exist if the entire project did not move forward. In addition, the scope of this evaluation is limited to the information that relates to the proposed modifications to the facility and any changes to areas covered by previous environmental assessments and does not re-evaluate the entire facility or other operations at the facility that are not being modified. The findings and conclusions in this review are limited to the duration of the

proposed permit term. An expansion to this facility would be considered a change in the areas covered by this assessment and would necessitate a new evaluation be completed.

Seneca Landfill, LLC. submitted an environmental assessment in this application that provided an 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 harms that will remain after implementation of the proposed mitigations and whether the benefits of the proposed project clearly outweigh the remaining harms.

Each harm is discussed individually below to determine if it has been fully mitigated. If the 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 of the harms and the benefits to ensure that the total effect of the project is such that the benefits clearly outweigh the harms.

Among other things, the degree to which a harm or benefit affects the DEP's balancing turns on the following factors:

1. *Harms and benefits.* Harms are identified as known or potential. Benefits must be associated with the project and not be speculative. A known harm or benefit is one that the DEP concludes is certain to occur in the future. A potential harm is one that would result from the proposed project under some circumstances, but not others. A known harm carries greater weight than if it were a potential harm for a particular project.

2. *What is the duration, frequency, and intensity of the benefit or harm?* "Duration" refers to <u>how long</u> a harm or benefit continues. "Frequency" refers to <u>how often</u> it will occur; it can be measured on a daily, weekly, or yearly basis, or it may be constant. "Intensity" refers to <u>how much</u> the harm or benefit will be if or when it occurs. For example, a loud noise is more intense than a softer noise. All other things being equal, the longer a harm or benefit lasts, the more frequently it occurs, and the more intense it is, the more it will affect the DEP's balancing.

3. *How many people are impacted by a benefit or harm?* All other things being equal, the more people impacted by a harm or benefit, the more that harm or benefit will affect the DEP's balancing.

4. *How sensitive are the receptors?* All other things being equal, the more sensitive the receptors are to a harm or benefit, the more that harm or benefit will affect the DEP's balancing. For example, if a harm would impact children more than adults and the proposed project is in an area with a high population of children, that harm would affect the DEP's balancing for that project more than if the project would be located in an area without children nearby.

III. Harms and Mitigation Discussion

Each harm is identified and then discussed using narrative pulled from the submitted application. This is followed by the DEP's brief comments in bold text on the harm and any mitigation measures where applicable.

A. Social Harms

1. Truck Safety Hazards and Public Safety

Seneca's Application States: The first potential harm to be considered in an increase in ADV/MDV is that of an increase in truck traffic to and from the facility. Truck traffic hauling waste to any landfill site provides for a potential health and safety harm due to truck accidents, spills, damage to roadways, etc. Typically, as waste volumes increase, so will trucks bringing the waste to the facility. However, since Seneca Landfill is currently approved for 3,800 tpd between the combination of the landfill and the transfer station permits, this proposal for a combined total ADV/MDV of 3,800 tpd will not result in an increase in truck volume to the site. The previously approved traffic impact study (TIS) prepared for the site including both facilities assumed traffic associated with 4,000 tpd.

As a further check, actual truck counts from the facility were adjusted to reflect the proposed increase in tonnage. Seneca selected a week of operations in which tonnages neared the current ADV/MDV of 3,000 tpd, and used gate receipts to determine the number of trucks by weight class. These counts were inflated to adjust for an ADV/MDV of 3,800 tpd and compared to the estimated truck counts in the approved TIS. Based on these calculations, the estimated number of trucks received at the Seneca Landfill at an ADV/MDV of 3,800 tpd would be lower than the number of tucks assumed in the TIS.

Please note that Seneca has been in communication with PaDOT about this proposal and PaDOT representatives have indicated that they have no concerns about the project as presented nor believe an additional traffic study is required. Further, it is anticipated that the increase in ADV/MDV will primarily result in an increase in long-haul trailers and roll-offs not the smaller packer trucks. With this in mind, the estimated truck counts discussed above can be considered conservative. Therefore, there will not be an increase in truck traffic, and thus no increased harm with regards to truck safety hazards and public safety.

DEP Comments on the Proposed Mitigation – **The Department disagrees that combining the landfill and transfer station permits could not result in an increase in truck traffic. Under the current conditions 3,000 tpd could go to the landfill and 800 tpd to the transfer station. 600 tpd or more being delivered to the transfer station is then being transferred to the landfill. This means that the maximum total volume of waste being received on-site is actually 3,200 tpd. The 3,200 tpd breakdown is 800 tpd to the Transfer Station, 600 tpd of which is then transferred to the landfill, 200 tpd that could have been transferred to another facility, and 2,400 tpd that could be delivered directly to the landfill.**

Under the proposed combination of permits 3,800 tpd of waste can enter the transfer station and ultimately end up at the landfill. The increase from 3,200 tpd to 3,800 tpd amounts to approximately 3 additional truck trips on average per hour per day. As mentioned above PaDot representatives have indicated no concerns about the proposed project. The existing access roads can accommodate this additional truck traffic as determined by the TIS. For the purposes of the Environmental Assessment Process (EAP) no additional harm will be considered with regards to truck safety hazards.

2. Reduction in Site Life

Seneca's Application States: Increasing the ADV/MDV of a finite volume of disposal capacity typically results in decreased site life. This harm should likely be mitigated by the possibility of future expansion of the facility in order to ensure continuation of service. The harm is also offset by the *current* need for local airspace capacity. The industry cannot predict the duration or rate of gas well development. Drilling activity and the local need for disposal of drilling and other residual wastes is a current reality. It serves no purpose to "save" disposal capacity for a future unknown need when the current need is known and substantial. Given the documented increase in residual waste generation in the geographic region requiring disposal facilities (discussed above), the harm can be considered to be very small. Conversely, if the demand for local waste disposal is not as substantial as outlined herein, there will not be a realized increase in the actual tonnage of waste received at the facility, thereby mitigating this and many, if not all, of the other harms identified in this analysis. However, the recent disposal trends identified in the sections above support the notion that there is indeed a growing demand for cost-effective disposal options in this area.

Additionally, this potential harm will be partially mitigated by the expected higher waste density achieved through the acceptance of the denser drilling wastes. The ground rock and high moisture content of the drilling residual tailings average approximately 1.5 tons per cubic yard. It is expected at the current time that the majority of waste received through the increased ADV/MDV will be drilling residuals and other dense residual wastes. Also, Seneca is approved to use drilling residuals as alternate daily cover, thereby reducing airspace consumed by soils used as daily cover. For these reasons, the proposed increase in ADV/MDV does not correspond to a direct decrease in facility life, although it was conservatively calculated as such earlier in this evaluation. Further, a decrease in site life results in a decrease in longevity for many of the harms/potential harms identified earlier.

The current need for local disposal, the increase in density, and use of drilling residuals as alternate daily cover substantially mitigates the reduction in site life from the increased ADV/MDV while increasing the amount of host fees and other per ton fees paid to the host municipality and State.

DEP Comments on the Proposed Mitigation – **The Department agrees the increase in ADV/MDV could result in decrease in site life. Based on the information submitted and other landfills being in the area with additional capacity available, the Department believes there to be no harm as a result of the potential for decreased site life.**

Seneca is required to notify the host county and host municipality of its ability to negotiate a protection of capacity under 25 Pa Code § 273.138 when the ADV/MDV is proposed to be increased. Seneca has not submitted the required notification at this point. The DEP will require Seneca to make the proper notification as part of the technical review process.

B. Environmental Harms

3. Dust

Seneca's Application States: Dust is recognized as a potential harm from a landfill and typically, an increase in truck traffic could potentially increase this nuisance. However, it is important to note that the overall footprint of the facility is not changing and daily landfill operations are not expected to result in significant additional vehicle traffic, so there is no construction-related or operations-related dust harm attributable directly to the increased ADV/MDV that has not been considered and approved previously by PaDEP in the previous Environmental Assessment.

Potential harm from dust would only be associated with additional waste trucks travelling on landfill access roads between the transfer station and the disposal area. The facility has a proven track record of successfully mitigating this nuisance. Seneca has taken and will continue to take proactive steps to mitigate dust impacts. This plan is outlined in detail in the Form G(A) previously submitted and approved for the facility. A tire wash facility has been installed and is in use at the facility as required by the facility permit. Site operators maintain the access and landfill roads used by truck traffic as needed through watering, etc. Paving from the site entrance to the northwest corner of Cell 2 is a substantial means to mitigate dust, as is the tire wash. These measures are in place daily and substantially mitigate the potential harms from dust regardless of the number of trucks using the facility.

According to the approved Form G(A), the site generates 161 tons/year of PM10; however, a review of recent air quality reports submitted annually to the Department indicates that the actual PM10 emissions are only a small fraction of that volume, i.e., one order of magnitude lower. Therefore, it is expected that whatever small increase may be realized will not be discernible and certainly would not bring the facility anywhere near the previously calculated 161 ton limit. So while the potential that more waste will be disposed onsite rather than processed and sent back out from the transfer station, the resulting change will have a negligible impact on dust emissions.

Also, please note that potential increases in dust emissions on an annual basis from increased waste acceptance rates will be offset by the shortening of the life of the landfill. Therefore, any remaining impact from dust emissions on an annualized basis will be for a shorter period of time as the landfill reaches capacity earlier. Therefore, total emissions over the life of the landfill should not increase.

Seneca has not been issued any Notices of Violation for dust issues, nor are they aware of complaints received in this regard. Therefore, considering the mitigation measures already in place and the facility's compliance record, this potential harm from this project has been substantially mitigated.

DEP Comments on the Proposed Mitigation – **Dust emissions as a result of landfill operations will continue to be substantially mitigated by the measures currently used to control dust. Seneca has not received any notices of violation over dust. As a result of the proposed increase in ADV/MDV, the overall amount of dust generated is expected to stay the same. The dust generated could potentially occur over a shorter period of time resulting in more dust per day, but for less total days. Any small amount of unmitigated dust that is generated should not leave the site. For the purposes of the EAP, the DEP finds no additional harm resulting from dust emissions.**

4. Odors and Landfill Gas Emissions

Seneca's Application States: Odors generated from waste operations are a recognized potential harm from any municipal waste facility, although the applicant does not feel that an increase in volume of waste accepted will result in an equal potential for an increase in odor. The working face should not be substantially larger than that of current operations. Additionally, residual waste from Marcellus Shale drilling operations will likely be a substantial portion of the additional waste received if the ADV/MDV is increased. These wastes have not been malodorous, nor do they generate significant quantities of gas. Because the increased ADV/MDV will result in shorter site life than would be realized at the current permitted ADV/MDV, and since the base disposal rate of MSW is not expected to increase significantly, this project will likely result in less overall gas generation. This should mitigate this potential harm.

Seneca continues to take precautions to mitigate potential odor-related nuisances through effective operation of the landfill gas management system, gas monitoring as currently required at the facility, and installing final cover in stages to contain the refuse mass to control potential odors. Seneca also maintains misters/deodorizers onsite in the event odors are detected.

On rare occasion, Seneca has been notified by individuals about perceived odors. When these occasions arise, Seneca has investigated its presence and whether they are attributable to the landfill. The notifications have been very infrequent. Seneca takes odor notifications seriously and understands the necessity of being proactive with respect to odor control. Seneca will continue to investigate odors when warranted to determine if proactive measures should be taken.

With regard to this item, it is important to note that Seneca beneficially reuses LFG to generate electricity and high BTU gas for commercial use. Therefore, Seneca has an incentive to collect odor causing LFG. In fact, Seneca has recently been placing temporary capping over a significant portion of their landfill to collect increased quantities of LFG as well as to control odors and reduce leachate generation.

Odor from facility operations is a temporary, minor potential harm of short duration when it does occur, and will continue to be substantially mitigated as outlined above.

Increased landfill gas emissions is a potential harm of landfills that has the potential to increase with a higher disposal rate of waste accepted. However, there is not expected to be an increase in total emissions over the life of the landfill but rather the yearly emissions may increase due to the shorter term of life. In order to evaluate the potential yearly increase in landfill gas (LFG) emissions associated with the proposed tonnage increase, potential peak emissions from the remaining airspace were modelled from the beginning of 2014. The calculations assume that the increase in disposal rate would not be approved until mid-2015. Therefore, to model the potential increase in peak emissions from the remaining airspace, the model assumes a disposal rate identical to that of the most recent Annual Report (i.e. 525,912 tons) was used for the period of January 2014 until June 2015. At the time, the model assumes that 3,000 or 3,800 tpd is disposed until the landfill life is expended. The model also assumed that 70% of the disposal volume was municipal solid waste able to decompose to LFG consistent with landfill records for 2013. The difference in the "go vs. no-go" (or 3,000 tpd vs. 3,800 tpd) model calculations was an approximate 4% increase in peak LFG generation. This is a small increase in comparison to the 27% increase in potential disposal rate. Further, Seneca has an economic incentive to collect LFG to be processed for beneficial reuse.

As noted, the total emissions are not expected to increase in sum for the remaining life, only the annualized emissions.

This is a minor potential harm associated with this increase that is negligible.

DEP Comments on the Proposed Mitigation - **The proposed increase in ADV/MDV has the potential to result in a slight increase in odor and landfill gas generation per day at the site which will last until site closure. The site capacity is not changing. Should Seneca accept additional waste, the site life and time to cap the site would be reduced. As a result, the length of time odor and increased gas production to exist would be shorter than existing conditions. Therefore, the overall impact is not expected to change. Landfill controls include an active gas collection system, temporary capping, daily cover, intermediate cover and odor neutralizing misters. These measures will continue be used to control odors generated at the site. For the purposes of this EAP, the DEP has determined that no additional harm will be considered for odors or landfill gas emissions.**

It should be noted that Seneca does have a history of odor complaints. They have made efforts to eliminate the odors leaving the site. Those efforts include the use of misters to neutralize any odors and periodic assessment of odors around the site each day. An updated odor control plan has recently been added to Seneca's permit by the Department and will be followed moving forward.

5. Litter

Seneca's Application States: Litter is a recognized harm of landfills that has the potential to increase with an increase in the volume of waste accepted. Litter is generally local to the permit area and has not been a problem at this facility, nor have any complaints been made. As a good corporate citizen that recognizes the potential for blowing litter to be a nuisance to neighboring businesses and residences, Seneca goes to great lengths to minimize this potential minor harm

and will continue these efforts. Blowing litter is mitigated by the use of tarps over haul trucks. Trucks do not remove the tarps until ready to dump. Seneca also performs periodic litter pickup for any waste that may escape the working face. In addition, Seneca utilizes litter fences downwind of the working face that acts as a barrier for blowing litter. Therefore, Seneca expects that the increase in tonnage will not correspond to a significant increase in the potential for blown litter.

Seneca has not had violations because of blowing litter and is not aware of complaints from neighbors or the Department on this issue. Overall, litter is a minor potential harm that will be substantially mitigated with specific effective actions. The potential harm will remain nonexistent to low with current mitigation efforts.

DEP Comments on the Proposed Mitigation – **Seneca Landfill will continue to utilize the current methods of controlling litter as described above. The proposed increase in ADV/MDV has the potential to result in more litter being produced each day, however the ADV/MDV increase would also result in a shorter site life thus reducing the total number of days litter could be produced. For the purposes of the EAP no harm will be considered.**

6. Noise

Seneca's Application States: Noise is a recognized potential harm from any industrial site. The overall footprint of the facility is not changing, so noise levels and distances from operations to residents will remain the same.

A certain amount of noise will be associated with additional waste trucks along the approach route and entering the site. However, the approach route is not populated with a significant number of homes and is rather rural in large part especially in comparison to some other landfill approach routes. The landfill itself is located in a large scale industrial zoned area. Additionally, Seneca is currently approved to accept 3,800 tpd of waste through the combination of the landfill and transfer station, so the increase in noise above what is currently permitted is expected to be negligible.

Seneca is not aware of significant complaints received for noise at the facility. Noise levels represent a minor harm with a limited number of potential receptors occurring only during the business hours of the day.

DEP Comments on the Proposed Mitigation – **The amount of noise generated on site as a result of the ADV/MDV increase and the combining of the transfer station permit with the landfill permit is expected to be negligible. Should Seneca actually accept more waste per day, the duration of waste acceptance would decrease. Noise has not been an issue at the landfill and should not be a problem moving forward. For the purposes of the EAP, the Department finds no harm as a result of noise.**

IV. Benefits

Each benefit is identified and the discussed using narrative pulled from the submitted application. This is followed by DEP's brief comments on the benefit in bold text.

A. Social Benefit

1. Providing Disposal Needs for the Region

Seneca's Application States: Seneca has realized increasing demand for competitive waste disposal over the last several years. This is evident in the review of the tonnages for the last several years. Based on the tonnages reported in the facility's Annual Operating Reports for the period between 2009 and 2013 (as summarized below), Seneca's annual waste tonnage has increased approximately 40% over the last 5 years.

- 2009 – 373,912 tons
- 2010 – 456,976 tons
- 2011 – 511,846 tons
- 2013 – 493,988 tons
- 2014 – 525,912 tons

Although Seneca experienced a slight decrease in tonnage in 2013, overall there is an increasing trend in tonnage received at the site. More importantly, Seneca is coming close to operating at their existing permitted ADV/MDV of 3,000 tpd with more increased regularity, and has inadvertently exceeded the ADV/MDV on one occasion. In the past year, Seneca has had to turn waste loads away because of the permitted ADV/MDV. Furthermore, Seneca is aware of several large municipal contracts that will be up for bid in the near future which they would not be able to solicit at the current permitted ADV/MDV.

The increase in tonnage may be partially related to the increase in gas well drilling in the area. The Marcellus Shale rock formation, believed to hold trillions of cubic feet of natural gas, has recently become accessible due to advances in drilling technology. This has recently attracted much interest in developing the formation. Constructing the infrastructure and assets of this formation has resulted in substantial and steady development in the western portions of Pennsylvania as well as neighboring areas of the surrounding states. Indeed, Butler County where the facility is located has seen significant drilling activity during the last few years. Based on DEP's Oil and Gas Reports for wells drilled by county, since January 2013, 170 wells have been drilled. In addition, 422 wells have been drilled in the counties contiguous to Butler County. Well drilling has resulted in large volumes of drill cutting and other related wastes requiring landfill disposal. In addition to the drill cutting wastes from gas development activity, the potential volume from other types of waste generated by the industry is considerable. The process also requires far greater amounts of water than traditional natural gas exploration. The generated wastewater requires treatment resulting in residual waste sludges. Seneca has an approved Solidification Plan that would permit the acceptance of liquid wastes to be solidified on-site and disposed at the Seneca Landfill. The Solidification Plan allows the landfill to accept liquid and semi-solid wastes generated by natural gas extraction as well as other liquid waste

sources. Additionally, midstream and other pipeline infrastructure systems are also being increasingly developed which result in the generation of RSW. The preceding examples are just a few of the more significant waste categories impacted by the ongoing development in the area. Further, wastes generated just outside Butler County and its contiguous counties could also utilize the Seneca Landfill for disposal.

Another waste generated in higher abundance is that associated with pipeline infrastructure. These pipelines are associated with the transmission of natural gas. Coupled with the development of Marcellus Shale is the development of gas transmission lines.

It is acknowledged that there has been a slowdown in drilling activity in some parts of the Commonwealth; however, drilling is expected to increase as gas prices rebound and pipeline infrastructure is further established. According to a special report in The Economist[1], natural gas production from the Marcellus and other shale formations is likely to keep growing for decades despite the current price of natural gas. The Marcellus is arguably the country's largest shale play due to its proximity to the premium east coast market, according to Arthur Sterngold as reported in the Marcellus Business Central[2]. Additionally, natural gas drilling is only likely to increase as natural gas consumption continues to increase.

Without adequate disposal capacity in the western region of Pennsylvania, where much of the drilling activity is occurring, waste will be transported greater distances for disposal, and in some cases outside the Commonwealth due to the close proximity of the Ohio/Pennsylvania border. The transport of waste into Ohio results in loss of revenues not only for the local host municipality but also results in a significant loss of "per ton" fees payable to the Commonwealth. As drilling activity steadily continues in western Pennsylvania, so does the need for disposal capacity. In addition, with an ever-increasing population, there is also a growing demand for disposal of municipal waste in the area. The proposed application to increase permitted acceptance rates will provide a much needed current disposal option for waste generated in this region of Pennsylvania.

The potential benefits of increased current capacity at the facility are clear when compared to other disposal options in the vicinity. Several facilities are located to the south to serve the greater Pittsburgh area, but Seneca is one of only two active landfills in the Butler, Mercer, Lawrence, Clarion, and Armstrong County area. The nearest facility to the north is Northwest Sanitary Landfill in Butler County, approximately 36 miles away. The nearest facility to the south is Imperial Landfill, approximately 40 miles away. Although the JJ Brunner Landfill is located approximately 10 miles to the west, the landfill is only permitted for an ADV of 425 tpd. There are no landfills located immediately to the east.

In addition to the increase in drilling wastes, Seneca has also seen an increase in waste generated by local industrial businesses. Although this waste is local, Seneca has had to be selective in receiving this waste at times when they are approaching their ADV/MDV. This has been occurring with increasing regularity.

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[1] Taken from the print edition of The Economist, July 14, 2012.

[2] Taken from Marcellus Business Central, Vol. 2, No. 3 entitled "Are Marcellus drillers running out of gas?"

The increase in natural gas exploration in the immediate area of the facility, an increase in other industrial wastes, and a rising population creates a substantial and specific waste disposal need. While Seneca is not proposing to limit the increase to only gas-related residual wastes, providing for the waste disposal needs of the area is a significant benefit due to this project. This increase in demand shows that Seneca is providing a competitive service to meet the demand for close, inexpensive waste management services in the area. Seneca anticipates that demand for disposal in the area will increase, and is proposing an increase in the ADV/MDV for the facility to meet this increasing demand.

DEP's Comments on the Proposed Benefit - **Seneca's average daily volume of waste accepted in 2015 was 1,322 tons/day as they received 413,940 tons during the year. This is significantly less than what Seneca is currently allowed to accept under the current permit terms. Simply, adding daily capacity does not establish need.**

While it's possible the local area will require additional disposal volume in the future what Seneca would gain by being able to take more waste per day would be mitigated by the decrease in site life. Furthermore, as noted by Seneca there are several other landfills in the area with disposal capacity. The ability to accept a higher ADV/MDV would simply adjust which landfill in the area received the waste. For the purposes of the EAP, no benefit will be considered.

B. Environmental Benefits

2. **Decrease in Fuel Consumption and Truck Exhaust Emissions**

Seneca's Application States: As discussed above, a benefit will be realized from lower total truck miles. As a result, consumption of fuel as well as a corresponding decrease in emissions relating to exhaust from waste hauling vehicles would be realized as their travelling distance is lowered.

Using the assumptions above, operating at 6 days per week and 52 weeks per year, the 200 tpd able to be processed through the transfer station and shipped out amounts to a reduction of 202,000 miles per year. Using the exhaust emissions calculations described in more detail in the Harms section below, these extra miles contribute the following emissions from exhaust:

The NOx emission calculation is:

For heavy-duty diesel trucks, Conversion Factor = 3.06 bhp-hr/mile

(3.06 bhp-hr/mile)(4.0 g/bhp-hr) = 12.24 g/mile

(202,000 miles)(12.24 g/mile)(2.205 x 10-3lb/g) = 5,452 lbs/year

(5,452 lb/day) ÷ (2,000 lb/ton) = 2.7 tons/year

The HC/VOC emission calculation is:

For heavy-duty diesel trucks, Conversion Factor = 3.06 bhp-hr/mile

(3.06 bhp-hr/mile)(1.3 g/bhp-hr) = 3.98 g/mile

(202,000 miles)(3.98 g/mile)(2.205 x 10-3lb/g) = 1,773 lbs/year

(1,773 lb/day) ÷ (2,000 lb/ton) = 0.9 tons/year

Furthermore, at an average of 5 miles per gallon, fuel consumption for haul trucks would be reduced by 40,400 gallons per year.

Based on these calculations, the decrease in fuel consumption and exhaust emissions represents a significant environmental benefit due to providing local disposal options, thereby decreasing related air emissions.

DEP Comments on Proposed Benefit – **It appears Seneca is indicating the higher ADV/MDV will eliminate the need to transfer 200 tpd from the transfer station to another facility, but Seneca very rarely transfers waste to another facility now. Insufficient information has been submitted to support the claim of lower truck miles, emissions, and fuel consumption. Simply being able to accept a higher ADV/MDV does not guarantee the additional waste incoming will travel a shorter distance. In addition, it's likely that this claim of lower truck miles, emissions, and fuel consumption would amount to the mitigation of a harm. For the purposes of the EAP, no benefit will be considered.**

C. Economic Benefits

3. **Net Present Value of Increased ADV**

Seneca's Application States: Numerous economic benefits were previously identified as benefits in the prior Environmental Assessment for the facility. Economic benefits that are affected by this application include:

- Jackson and Lancaster Townships are under a host agreement with Seneca to receive $1.50/ton of waste received. Jackson Township receives 78.61% of this fee ($1.18/ton), and Lancaster Township receives 21.39% ($0.32/ton).
- Butler County is under a host agreement with Seneca to receive $0.35/ton of waste received.
- Act 101 Recycling Fee of $2.00/ton on net waste accepted at the facility, not including nonprocessible waste, process residue or ADC waste.
- Environmental Stewardship Fee of $0.25/ton on total waste accepted at the facility.
- Waste Disposal Program Fee of $4.00/ton on net waste accepted at the facility, not including nonprocessible waste, process residue or ADC waste.

Remaining Site Life at Current and Proposed ADV

In order to evaluate the net present value of these confirmed economic benefits that result from the proposed increase in ADV/MDV, it is necessary to compare the remaining life of the facility based on the currently approved average acceptance rate versus the remaining life based on the proposed increased rate. The values of the economic benefits spread over the current remaining site life are then compared to the values of the economic benefits in the reduced site life assuming a present-to-future value ratio of 1.6% based on the implicit price deflator over the past several years.

Based on a survey of the site performed on June 28, 2014, the permitted disposal area was calculated to have an estimated 6,539,083 cubic yards (cy) of remaining airspace, following adjustment for relocation of waste from the Area B Landfill. Using a waste density of 0.82 tons/cy as reported in the 2013 Annual Operating Report for the site, there is approximately 5,362,048 tons of capacity remaining. It has been further assumed that this modification would not take effect until mid-2015. Therefore, this analysis assumes that one additional year of waste acceptance/filling has occurred. Using the tonnage reported in the 2013 Annual Operating Report (525,912 tons), and increasing it 5% to account for the increasing trend in waste receipt, it has been assumed that an additional 552,208 tons will be received by mid-2015, reducing the total capacity remaining to 4,809,840 tons. From the current conditions, the minimum expected life of the facility on the basis of the Average Daily Volume of 3,800 tpd can be calculated:

4,809,840 tons / (313 days/yr x 3,800 tpd) = 4.05 years

Using these same current conditions, the minimum remaining expected life of the facility at the current 3,000 tpd can also be calculated:

4,809,840 tons / (313 days/yr x 3,000 tpd) = 5.12 years

The resulting estimated site life for an 800 tpd increase in ADV yields a reduction of 1.07 years of anticipated site life.

Calculation of Net Present Value of Proposed ADV Increase

The table below summarizes current per tonnage fees that can be considered economic benefits.[3] The annual value of these benefits has been adjusted for the assumed remaining life of the facility with the tonnage increase as calculated above (4.05 years at 3,800 tpd and 5.12 years at 3,000 tpd). It is noted that payment of certain fees are waived under certain circumstances such as use as alternative daily cover. However, for simplicity, such instances are excluded from the analysis herein since their occurrence would apply to both scenarios.

As shown in the table, increasing the average daily volume of waste received at the landfill will provide an increase in the present value worth of fees and expenditures of $319,648. The annualized benefit represents an increase of 34.6%.

The increased net present value of the recognized economic benefit to the local municipalities, county, and the Commonwealth of Pennsylvania, collectively and individually represents significant social and economic benefit to these entities and residents. This benefit is specific to the proposed project. Pennsylvania courts have expressly held that payment of these fees to local municipalities as a result of an increase in ADV represent a significant economic benefit for purposes of an Environmental Assessment. Browning-Ferris Industries v. Department of Environmental Protection, 819 A.2d 148, 153 (Cmmwlt Ct. 2003).

[3] The calculations presented herein are averages over the proposed life of the facility. The actual net present value will fluctuate based on the actual tpd accepted at the facility.

Present Worth Analysis of Be

Benefit Description		Jackson & Lancaster Township Host Fee = $1.50/ton ($1.18/ton to Jackson Twp, $0.32 to Lancaster Twp)			Butler County Host Fee = $0.35/ton			Act 101 Recycling Fee ($2.00/ton)			Environmental Stewards ($0.25/ton)		
Year		Fee	3,000 tpd	3,800 tpd	Fee	3,000 tpd	3,800 tpd	Fee	3,000 tpd	3,800 tpd	Fee	3,000 tpd	38
1		$1.50	$1,408,500	$1,784,100	$0.35	$328,650	$416,290	$2.00	$1,878,000	$2,378,800	$0.25	$234,750	$
2		$1.50	$1,408,500	$1,784,100	$0.35	$328,650	$416,290	$2.00	$1,878,000	$2,378,800	$0.25	$234,750	$
3		$1.50	$1,408,500	$1,784,100	$0.35	$328,650	$416,290	$2.00	$1,878,000	$2,378,800	$0.25	$234,750	$
4	(1)	$1.50	$1,408,500	$1,784,100	$0.35	$328,650	$416,290	$2.00	$1,878,000	$2,378,800	$0.25	$234,750	$
5		$1.50	$1,408,500	$78,360	$0.35	$328,650	$18,284	$2.00	$1,878,000	$104,480	$0.25	$234,750	
6	(2)	$1.50	$177,260		$0.35	$40,194		$2.00	$229,680		$0.25	$28,710	
Total Benefit:			$7,214,760	$7,214,760		$1,683,444	$1,683,444		$9,619,680	$9,619,680		$1,202,460	$1

(1) Year 5 for 3,800 tpd option depicts 0.05 of a year of benefits to estimate 4.05 years of life.
(2) Year 6 for 3,000 tpd option depicts 0.12 of a year of benefits to estimate 5.12 years of life.
(3) Implicit Price Deflators for Gross Domestic Product
U.S. Department of Commerce (http://www.bea.gov/iTable/iTable.cfm?ReqID=13&step=1)

Year	IPD	%	
2009	100.000		
2010	101.211	0.01211	
2011	103.199	0.01964213	
2012	105.002	0.0174711	
2013	106.588	0.01510447	
		0.018	*Average*

efits

Fee	Waste Disposal Program Fee ($4.00/ton)		Sum of Yearly Fees and Benefits at 3,000 tpd	Present Worth of Annual Benefits at 3,000 tpd (0 Base Year)	Sum of Yearly Fees and Benefits at 3,800 tpd	Present Worth of Annual Benefits at 3,800 tpd (0 Base Year)
tpd	Fee:	3,000 tpd 3,800 tpd	3,000 tpd	IPD=0.016(4)	3,800 tpd	IPD=0.016(4)
4350	$4.00	$3,756,000 $4,757,600	$7,605,900	$7,485,518	$9,634,140	$9,481,657
7350	$4.00	$3,756,000 $4,757,600	$7,605,900	$7,367,042	$9,634,140	$9,331,587
6350	$4.00	$3,756,000 $4,757,600	$7,605,900	$7,250,441	$9,634,140	$9,183,897
7450	$4.00	$3,756,000 $4,757,600	$7,605,900	$7,135,686	$9,634,140	$9,038,535
3060	$4.00	$3,756,000 $208,960	$7,605,900	$7,022,746	$423,104	$390,701
	$4.00	$459,360	$930,204	$845,290		
2460		$19,239,360 $19,239,360				
	Total Benefit Value in Present Worth:			$37,106,724		
	Annual Benefit Value in Present Worth:			$6,498,50059		
	Total Benefit Value in Present Worth:					$37,426,377
	Annual Benefit Value in Present Worth:					$8,744,479.36

Total Benefit:	$319,648
Annualized Increase in Present Worth:	34.6%

DEP Comments on Proposed Benefit – **The Department agrees increasing the permitted ADV/MDV could result in a reduction of site life. The numbers above are based off the 2013 annual report and the expectation of the permit modification to being issued in 2015. Based on the 2015 annual report, using the same assumptions used above 4,172,652 tons of airspace will remain following 2016. At 3,800 tons per day the site life remaining is 3.5 years. At 3,000 tons per day the site life remaining is 4.4 years indicating the site life could be reduced by as much as 0.9 years.**

Should Seneca accelerate the waste acceptance rate the host municipality and related fees would also be accelerated. The time value of money is the idea that money available at the present time is worth more than the same amount in the future due to its potential earning capacity. The idea is money is worth more the sooner it is received. The time value of money is a standard economic project comparison method and has previously been recognized by the Department as a benefit. How much of a benefit will be realized will vary based upon the increase in daily waste received at the landfill following the ADV/MDV increase. For the purposes of the EAP, a benefit will be considered.

4. Increased Revenues to Offset Increased Expenses

Seneca's Application States: It is a recognized fact that operating costs are increasing. A few examples are the cost of employee benefits, especially health insurance, and fuel. Traditionally, businesses try to offset increasing expenses by increasing revenues. For landfills, this is often achieved by increasing disposal tonnage or by increasing disposal rates. Seneca has limited ability to raise rates due to local competition in southwestern Pennsylvania and in Ohio. Even without the competition, Seneca is committed to keeping disposal rates low to benefit residents whose trash is collected by Seneca as well as a number of businesses and industries that utilize Seneca Landfill for disposal. These savings in turn allows businesses and industries to keep expenses to the consumer low. Therefore, the only viable option to raise revenues is a volume increase to allow the facility to accept more waste. This increase in annual revenues would increase the collection of host municipality/county fees as discussed above.

Without the increase in ADV/MDV, waste generators will be required to find alternate disposal options for their waste. Often, if these generators are unable to dispose their waste at Seneca Landfill, they haul the waste to disposal facilities in Ohio, which has very competitive disposal rates compared to Pennsylvania. Waste rarely is transported from Ohio into Pennsylvania; the far more prevalent direction of flow is from Pennsylvania into Ohio. When these generators haul their waste out of state, they are not required to pay any host fees to Pennsylvania, or the local municipalities/counties, resulting in lost economic benefits.

Furthermore, revenue generated from the additional tonnage would also be used towards funding of planned expansions of their disposal sites. An expansion of the landfill capacity will be needed within the next decade even without this proposed tonnage increase. However, the increased revenue will allow for funding needed to plan and construct additional disposal area for providing continuous waste disposal to Seneca's service area.

DEP Comments on Proposed Benefit - **The Department gave Seneca a benefit for the time value of money as discussed in Item 3 above for the increase in host municipality and county fees related to the ADV/MDV increase. Seneca's assertion that increasing the ADV/MDV will lead to customer's costs being low is speculative. There is no guarantee that Seneca will actually receive more waste per day as a result of the proposed application. There is also insufficient information for the Department to confidently say that Seneca will use any increase in revenue to keep costs to the customer low or determine how much the customer would save. For the purposes of the EAP, no benefit will be considered for keeping customers costs low.**

Seneca's statement that increasing the permitted ADV/MDV will lead to increased revenue that will be used to fund the planning and construction of additional disposal area is a benefit to Seneca, not to the public. Furthermore, there is no guarantee that a landfill expansion application would be approved. For the purposes of the EAP, the Department rejects this claim as a benefit.

5. Donation to the Local Fire Company

Seneca's Application States: If this permit modification is approved, Seneca agrees to make a donation to the local fire company serving the landfill facility. The Harmony Volunteer Fire Company is the primary responder to the site. Seneca Landfill will donate $5,000 to the local fire company over the course of two years following approval of this permit modification. Seneca is willing to provide these funds either as a single donation or through a series of installments. No matter how many installments are made, the full donation amount will be made by the end of two calendar years following approval.

DEP Comments on Proposed Benefit - **The DEP accepts the contribution to the local Fire Company as a benefit of the project. For the purposes of the EAP, a one-time benefit of $5,000 will be considered.**

6. Free Disposal to Local Charitable Organizations

Seneca's Application States: Seneca Landfill agrees to provide up to 5 tons of free disposal for a period of two years following approval of this permit modification to the Boy Scouts of America of Lancaster Township, Butler County. The Scouts conduct a fundraising auction annually. At the conclusion of the auction, the scouts need to dispose of considerable refuse and unwanted items. Upon approval of this application, Seneca commits to provide this troop with free disposal of up to 5 tons for each of the next two annual auction events following approval should the auction remain in place. This benefit has a total benefit value of $650.00 (or 2 yrs x 5 ton/yr x $65.00/ton).

DEP Comments on Proposed Benefit – **DEP agrees that 2 years of free disposal of up to 5 tons/year for the Boys Scouts of America of Lancaster Township is a benefit to the local community.**

Balancing Discussion

The DEP evaluates the harms and benefits individually and collectively taking into account various relevant factors such as duration, frequency, reach, and sensitivity among others when analyzing this information. First, the social and economic benefits are reviewed. For this project the potential economic benefit of the net present value of host municipality fees increasing if the ADV increases will be considered. The amount of economic benefit resulting from an increase in ADV will depend on how much additional waste Seneca accepts each day. The DEP also accepts the one time donation of $5,000 to the Harmony Volunteer Fire Company and up to 5 tons of free disposal for the next two years to the Boy Scouts of America of Lancaster Township as a social and economic benefit to the local community.

In the Benefits/ Harms Analysis the DEP offsets any social and economic benefits with any social and economic harm associated with the project then adds any environmental benefit. For this project no social or economic harm has been identified. As a result the social and economic benefits accepted for this project will not be offset by any social and economic harm.

All of the benefits were then balanced against the identified environmental harms that are not fully mitigated. As described in the analysis no harms remain after mitigation. Because no harms remain after mitigation, the social and economic benefits of the project outweigh the harms.

Conclusion

The DEP has concluded its review and balancing of the harms and benefits associated with the ADV/MDV increase and the consolidation of the transfer station and landfill permits at Seneca Landfill. The DEP has reviewed the assessment and mitigation plans to confirm that all applicable harms were considered and the extent to which the harms are mitigated. The DEP evaluated each mitigation measure to establish that, individually and collectively; those measures adequately protect public health, safety, welfare and the environment. The DEP has determined that the proposed landfill ADV/MDV increase and permit consolidation provides benefits to the public and these benefits outweigh the harms. In this analysis no additional harms were identified. Based on the findings of this assessment, the DEP concludes that the requirements of 25 Pa. Code Section 271.127 are met and that the pending application for modification of Solid Waste Permit No. 100403 should proceed to technical review.