Proposed Ontario County Landfill Expansion

FINAL Environmental Impact Statement

August 2012

Volume 1 of 2 Report Text Appendices AA—BB



State Environmental Quality Review Act (SEQRA)

Final Environmental Impact Statement for Ontario County Landfill

EIS Type: Final Environmental Impact Statement (FEIS)

Proposed Action: The Ontario County Landfill is proposing to expand their current landfill facility. The project includes an expansion of the existing Phase III landfill and associated support facilities, including soil borrow area. The proposed expansion project will require additional land acquisition to the existing property in support of borrow area operations. The proposed expansion project will be primarily located within the 389 acres currently owned by Ontario County with the exception of soil borrow activities which will require the acquisition of an additional land parcel situated south of the landfill property. An expansion of the existing Phase III landfill is proposed in accordance with the Operations Management Lease (OML) Agreement between Ontario County and site operator Casella. The Stage VIII (Wrap-around) expansion will include the construction of new cells totaling approximately 16.0 acres around the northern and western boundaries of the Phase III landfill. The Stage IX (Eastern) expansion will be located as named, adjacent to the eastern boundary of the Phase III landfill, covering approximately 27.5 acres including the area currently approved as a borrow area for soils. Additional site modifications include the relocation or modification of two stormwater ponds, the leachate storage lagoon, Ontario County Landfill's maintenance facility, and site access roads.

Location of Action: Town of Seneca, Ontario County, New York

SEQR Lead Agency: Ontario County

Contact Person: Ms. Karen DeMay, Ontario County Board of Supervisors

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FEIS Accepted By Lead Agency On: August 23, 2012

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Appendix CC – DEIS Public Hearing Transcript and Written Comments (Separately Bound)

I. Introduction

1.0 Project Summary

The Ontario County Landfill's Proposed Landfill Expansion Final Environmental Impact Statement (FEIS) is issued in accordance with Article 8 of the Environmental Conservation Law (State Environmental Quality Review Act, "SEQRA") and the regulations that implement SEQRA (6 NYCRR Part 617). The proposed action addressed in this FEIS is an expansion of the currently permitted landfill footprint at the Ontario County Landfill, located on Routes 5 & 20 in the Town of Seneca, NY. Ontario County, as the owner, and Casella Waste Services of Ontario, LLC (Casella), as the lessee and operator, propose an expansion of the existing Phase III landfill and associated support facilities, including soil borrow area. The proposed expansion project will be primarily located within the 389 acres currently owned by Ontario County with the exception of soil borrow activities which will require the acquisition of an additional land parcel situated south of the landfill property.

An expansion of the existing Phase III landfill is proposed in accordance with the Operations Management Lease (OML) Agreement between Ontario County and site operator Casella. The Stage VIII (Wrap-around) expansion will include the construction of new cells totaling approximately 16.0 acres around the northern and western slopes of the Phase III landfill. The Stage IX (Eastern) expansion will be located as named, adjacent to the eastern slope of the Phase III landfill, covering about 27.5 acres including the area currently approved as a borrow area for soils. Both expansion areas will require the liner system to be connected to the adjacent cells to provide a continuous liner system. The ultimate height of the proposed expansion is 1025 MSL, which is approximately 28 feet higher than the existing permit maximum elevation as contemplated in the OML.

Additional site modifications include the relocation or modification of two stormwater ponds, the leachate storage lagoon, Ontario County Landfill's maintenance facility, and site access roads. In order to accommodate the Wraparound expansion, the facility must relocate the two stormwater storage ponds elsewhere to maintain adequate capacity and to maintain compliance with the site specific SPDES permit and construct two additional ponds. The proposed leachate storage area will allow for greater storage volume due to the proposed additional lined area and corresponding increases in leachate generation. Modifications to the Stage I and II leachate collections systems will be required to maintain leachate collection and maintenance access following construction of Stage VIII. The Eastern expansion will require the relocation of the site's maintenance facility, utility lines and the removal of a site access road, as all lie directly within the proposed construction area.

A Draft Environmental Impact Statement (DEIS) for this project, dated December 2011, was made available for public review and comment following its acceptance by the Ontario County Board of Supervisors, as the SEQRA lead agency, on December 22, 2011. A public hearing on the DEIS was held on January 26, 2012, and the written comment period for the DEIS concluded on February 21, 2012.

2.0 Organization of the FEIS

Section I of this FEIS (Introduction), in addition to providing a summary of the project, describes the main section of the FEIS, provides a list of locations where the FEIS is available for public review, and summarizes the opportunities for public comment subsequent to issuance of the DEIS on December 22, 2011.

Section II of this FEIS (Revisions to the DEIS) describes the changes that have been made to the DEIS. These revisions are in response to the Ontario County Landfill's consideration of comments submitted with regard to the DEIS during the public comment period. Except for the DEIS revisions described in this FEIS, the information and environmental analyses contained in the DEIS remain unchanged and are incorporated by reference in this FEIS.

DEIS Documents (Dated December 22, 2011)	Location of DEIS Revisions Within FEIS (Dated July 2012)
DEIS Main Volume, including all table and figures bound therein	FEIS Main Volume, any changes to table or figures included therein
Attachment A: FAA Correspondence	No changes made
Attachment B: Threatened and Endangered Species Correspondence	No changes made
Attachment C: EAF and Public Notice	No changes made
Attachment D: State Historic Preservation Correspondence	No changes made
Attachment E: Phase 1A/1B Archaeological Investigation Report	No changes made
Attachment F: Visual Impact Assessment	Supplemental visual rendering completed and included in Appendix BB of this FEIS.

Presented below is a list of DEIS documents that identifies the location of revisions made, if any, to each document through this FEIS process.

DEIS Documents (Dated December 22, 2011)	Location of DEIS Revisions Within FEIS (Dated July 2012)
Attachment G: Air Quality Review	Supplemental Information to the Air Quality Review included as Attachment G of this FEIS.
Attachment H: Comprehensive Wetland Delineation Report	Figure 6 of the Comprehensive Wetland Delineation Report has been updated and is included in Appendix BB of this FEIS.
Attachment I: Ecological Wetland Assessment Baseline Report	No changes made
Attachment J: U.S. Army Corps of Engineers Jurisdictional Determination	Supplemental U.S. Army Corps of Engineers Jurisdictional Determination is included Appendix BB of this FEIS.
Attachment K: Initial Hydrologic Study	No changes made
Attachment L: Hydrogeologic Investigation Report	Supplemental information requested is included in Appendix BB of this FEIS.

The third section of this FEIS is Section III (Responses to Comments). Section III provides the Ontario County Landfill's responses to substantive comments that were submitted either at the DEIS public hearing or in writing prior to the completion of the public comment period on February 21, 2012. The comments and their associated responses have been grouped by commenter; Residents Comments – Section A, Town of Seneca Comments – Section B, City of Geneva Comments – Section C, Town of Geneva Comments – Section D, City of Canandaigua Comments – Section E, Finger Lakes Zero Waste Coalition Comments – Section F, New York State Department of Environmental Conservation (NYSDEC) Comments – Section. In Section A, since there were multiple commenters, the comments and responses in this section has been organized by topic to facilitate the reader's review and ease of locating specific comments. In Sections B-G, however, the comments are organized in the same order in which they were set forth in the written correspondence submitted by each of those commenting agencies.

The appendices that are included with this FEIS are listed in the Table of Contents. These appendices provide additional information with regard to the DEIS revisions or the comments and responses presented in the FEIS. Specific references to these appendices are provided, as appropriate, throughout the FEIS document. The transcript of the DEIS public hearing and copies of the comment letters and emails received during the comment period are included in Appendix CC (separately bound volume).

3.0 Document Availability

The FEIS is being made available for public review in the same manner and in the same locations that the DEIS was made available for public review. Hardcopies of this FEIS, including a full set of the FEIS and DEIS documents (including all separately bound appendices), may be reviewed at the Ontario County Planning Department (20 Ontario Street, Canandaigua, New York) or any of the Ontario County libraries.

Electronic copies of the FEIS and DEIS for the proposed Ontario County landfill expansion, including all separately bound documents, can be reviewed at the following website <u>http://www.co.ontario.ny.us</u>. A public notice will be issued in the Environmental Notice Bulletin and local publications informing the public of the acceptance and availability of the FEIS. In addition, as was conducted with the DEIS, hard copies and/or electronic copies (on disc) of the FEIS will be supplied to the following municipalities and agencies: NYSDEC, Town of Geneva, City of Canandaigua, Town of Seneca, Town of Phelps, and the City of Geneva.

4.0 DEIS Public Comment Opportunities

The DEIS for the proposed Ontario County landfill expansion was issued for public review and comment on December 22, 2011. Full sets of the DEIS were made available for public review at the Ontario County Planning office and at the Ontario County public libraries. In addition, the main volume of the DEIS was forwarded to the agencies and municipalities identified above for their review and comment. A Notice of Availability, detailing the issuance and accessibility of the DEIS, was published in the *Environmental Notice Bulletin*, the *Daily Messenger* and the *Finger Lakes Times*.

The DEIS Public Hearing was held at 6:30 P.M. on Thursday, January 26, 2012, at the Ontario County Court House, 3rd Floor, Sessions Room, Canandaigua, New York. This hearing location is approximately eleven (11) miles west of the Ontario County landfill site. Twenty-eight (28) persons presented oral comments on the DEIS at the Public Hearing. A stenographic transcript of the hearing is available for public review at the Ontario County Planning Office (20 Ontario Street, Canandaigua, New York) and is also reproduced as Appendix CC of the FEIS (bound separately).

Additional written comments on the DEIS were accepted by the Ontario County Planning Office until the end of the day on February 21, 2012. These submittals are available for public review at the Ontario County Planning office and are also presented in the FEIS as Appendix CC (separately bound). The Ontario County landfill has reviewed and considered the comments and prepared written responses. The Ontario County landfill's responses are provided in Section III of this FEIS.

An index of persons who presented or submitted comments on the DEIS is provided in Appendix AA of the FEIS. This index identifies the page number(s) on which each person's comment(s) can be found. The Ontario County landfill's response immediately follows each comment.

II. Revisions to the DEIS

1.0 Overview of Revisions

Following review and consideration of comments on the DEIS, portions of the DEIS have been clarified or amplified in this FEIS. Some errata were also identified subsequent to issuance of the DEIS. These errata have been corrected in this FEIS. These revisions are presented in the next section of this FEIS and are set forth in the same sequence and utilize the same numbering system as the sections and appendices in the DEIS.

2.0 Revisions

Section: Summary of the DEIS (DEIS pp. S-1 to S-6)

Wetland Resources

The statement, "Landfill activities have been performed in the areas adjacent to these wetlands for almost 20 years with no impacts observed." has been removed from the DEIS. B&L agrees it is not possible to analyze historic impacts to State mapped wetland ST-5, identified as Wetland K within the Comprehensive Wetland Delineation Report (B&L. 2010). Landfill phases that surround ST-5 are previously permitted and inactive. That area of the County owned property will not be developed under the currently proposed expansion and as such is not being studied as part of this document. However, B&L and Casella do agree that data and information should continue to be collected for NYSDEC mapped wetland ST-6, identified as Wetland H in the Comprehensive Wetland Delineation Report (B&L, 2010), due to its close proximity to proposed landfill activities. To date no adverse impacts associated with borrow area activities has been noticed within ST-6 as identified in the December 2011 Ecological Wetland Assessment Annual Report (B&L). Currently, ecological reports will be issued annually for wetlands ST-6 for as long as borrow activities are ongoing, plus one year. Casella and B&L agree to incorporate the Annual Wetland H (ST-6) Ecological Assessment as a condition of the Article 24 and Part 360 permits.

Figure 6 has been revised to show the 100 foot adjacent area of the state regulated wetlands on the site. This revised figure is provided in Appendix BB as Attachment H.

Section: Glossary of Terms (DEIS pp. G-4)

Add the following term:

"Permitted Landfill Footprint – The limits of waste of the landfill currently permitted under a NYCRR Part 360 landfill construction and operation permit."

Section 1.0: Project Background and Description (DEIS pp. 1-18)

1.2.1.3 Phase III Landfill (DEIS pp. 3-5)

The last paragraph in Section 1.2.1.3 states Stage I, II and II-A, which should be revised to state Stage I, II-A, and II-B.

1.2.1.4 Liner System (DEIS pp. 5-6)

Based upon a review of the construction drawings (prepared by Fagan Engineers), the following description of the liner system for Stages I and II from top to bottom are to be revised in this section of the DEIS.

Stage I Liner (top to bottom):

-18" Primary Leachate collection sand

-80 mil HDPE liner

- -18" low-permeability soil
- -Geotextile filter (Type A)
- -12" secondary leachate collection sand
- -80 mil HDPE liner
- -12" groundwater suppression sand

Stage II Liner (top to bottom):

- -6" run of crush
- -10 oz/sy non-woven geotextile

-18" #1 stone

- -16 oz/sy non-woven cushioning geotextile
- -60 mil primary HDPE geomembrane
- -6" low-permeability soil (K</= 1x10^-7 cm/s) or GCL
- -12" structural fill
- -60 mil secondary HDPE geomembrane
- -secondary leachate drainage geocomposite
- -24" low-permeability soil (K</= 1x10^-7 cm/s)
- -4 oz/sy non-woven geotextile

-12" #2 crushed groundwater suppression stone media -4 oz/sy non-woven geotextile

1.2.1.5 Leachate Storage, Treatment and Disposal (DEIS pp. 7)

Delete the last sentence of the second paragraph and replace with the following: The existing 400,000 gallon leachate storage lagoon at the site was recently expanded and is capable of storing approximately 800,000 gallons of leachate.

1.2.1.6 Landfill Gas Collection System (DEIS pp. 8)

<u>Add the following</u>: Additional landfill gas control devices currently utilized at the facility (in addition to the Phase II flare, Phase III flare, and landfill gas to energy facility) include two (2) open flares approved by NYSDEC for temporary use for LFG control until permitted flares can be constructed.

1.8 <u>Regulatory Reviews and Approvals for Landfill Expansion</u> (DEIS pp. 17-18)

Add the following to the Article 24 Freshwater Wetlands Permit section: The NYSDEC may extend their jurisdiction to include Wetland J, I, and their adjacent 100-feet under Article 24. This is pending field confirmation of the connectivity of State mapped Wetland ST-12 to the delineated resources.

Section 2.0: Proposed Action (DEIS pp. 19-45)

2.2.1 <u>Service Area</u> (DEIS pp. 20-21)

The DEIS referenced waste origin data from 2008, more recent data from 2011 is available. Table 1 in this section should be replaced with the following table:

Table 1 - Top Ten Geographic Origins of Waste Delivered to Ontario County Landfill, 2011			
Rockland County, NY	27.57%		
Monroe County, NY	11.49%		
Ontario County, NY	8.81%		
Rensselear County, NY	6.69%		
Dutchess County, NY	5.63%		
Greene County, NY	4.75%		
Tompkins County, NY	4.47%		
Canada	3.68%		
Orange County, NY	2.68%		
Suffolk County, NY	2.67%		

Source: Casella, Facility Annual Report, 2011

Additionally, the second paragraph in Section 2.2.1 should be revised to read:

There is a regional component to the flow of waste, which is not confined to a single county. The Ontario County Landfill currently accepts waste from outside Ontario County and anticipates continued outside waste acceptance. Table 1 displays the top ten geographic origins to the Ontario County Landfill in 2011, which account for 78.4% of the total waste input for 2011. As indicated in the table, Ontario County waste accounts for approximately 8.81 percent of the total amount of waste accepted at the Ontario County Landfill. Besides Ontario County, several other solid waste planning units rely heavily on the Ontario County Landfill for the responsible disposal of solid waste remaining after reduction, reuse and recycling. These percentages do not include BUD material.

2.3 Property Ownership and Control (DEIS pp.23)

The statement that "Acquisition and use of the proposed soil borrow area will only occur should the facility receive the permit modification for the landfill expansion" should be revised to say that acquisition will occur after completion of the SEQR process and prior to the submittal of the Part 360 Application documents. 2.4.3 Leachate Storage, Treatment, and Disposal (DEIS pp. 28-30)

In the last sentence of the first paragraph, "400,000-gallon should be replaced with "800,000-gallon".

A revised version of Figure 10 as referenced in the third paragraph of this section is provided below.



Figure 10 - Leachate Generation Estimate

2.5.3 Soil Management (DEIS pp. 34-35)

The chart within Section 2.5.3 should be revised to the following:

- I. Remaining Phase III Excavation: 19,800 cubic yards
- II. Permitted Soil Borrow Area (within proposed expansion area): 335,000 cubic yards

Year

- III. Total Net Subgrade Excavation: 958,700 cubic yards
- IV. Soil Utilization:
 - a. Construction (i.e., roads, ponds, liner system, bedrock replacement): (37,800) cubic yards
 - b. Landfill Operations (i.e., cover excluding alternate materials): (3,195,900) cubic yards at 20 percent cover by volume
 - c. BUD Material 1,664,200 cubic yards at 20 percent by weight

- d. Landfill Closure: (620,000) cubic yards
- V. Soil Balance: 876,000 cubic yards deficit (i.e., required from borrow area)

Note: All numbers are based on a November 2011 aerial survey.

Additionally, the fourth paragraph in Section 2.5.3 should be revised to read:

It should be noted that BUD material usage can be upwards of 25%; however, for the purposes of this soil balance analysis the percent of BUD utilized for cover was lowered to 20% to provide a conservative estimate associated with the soil balance.

2.5.4 Noise Control (DEIS pp. 35-36)

A supporting document "Operating Noise Impact Assessment" has been prepared as part of this FEIS, which includes cumulative impacts of the landfill and landfill gas to energy (LFGTE) facility. This document is provided in Appendix BB as Attachment M.

2.5.5 Environmental Monitoring Plan (NEW) (DEIS p. 36)

As part of the permit documents required by 6 NYCRR Part 360 to be completed upon acceptance of the FEIS, the Environmental Monitoring Plan (EMP) will be revised to include the proposed expansion area. This plan will outline a monitoring program for groundwater, surface water, leachate, and landfill gas and include the relevant sampling locations and schedule, the analyses used on the sampling data and the reporting requirements for said data. Based on geotechnical data compiled for the Hydrogeologic Investigation Report, which established a site gradient to predict the flow of groundwater, surface water, and potential leachate outbreaks, relevant sampling locations are known, and the site is considered monitorable. In general, monitoring analyses will occur on a quarterly basis and continue for the life of the landfill and the 30-year postclosure period.

2.6.5.3 Odor Control (DEIS p. 41)

Supplemental Information to the Air Quality Review includes a description of combustion devices at the existing landfill and a LFG production chart, which is included in Appendix BB as Attachment G of this FEIS.

Additionally, the following language can be added at the end of this section: An Odor Management Plan will be prepared and submitted to the Department for review during the Part 360 Solid Waste permitting for the proposed landfill expansion project. The Odor Management Plan will include the specific procedures for documenting complaints, conducting follow up, and documentation resolution of the complaint.

2.6.5.4 Dust Control (DEIS p. 41)

The following paragraph should be added to the end of this section:

Additional measures include: a water truck is available at all times to water down haul roads during dry periods to minimize dust generated by vehicles moving over exposed soils. Casella hires outside contractors to sweep Route 5 & 20 three times per week. On-site roads are watered daily if needed. Temporary workers are on site to clean tires to prevent tracking of mud onto the highway.

2.6.5.8 Control of Tracking of Mud and Debris (New Section)

The following paragraph should be added to the end of this section:

Because the landfill access is directly off from Routes 5 & 20, a State highway, tracking of mud and debris onto the highway by vehicles delivering waste and other material is of concern. As mentioned in section 2.6.5.4, temporary workers are on site to clean tires during muddy periods to prevent the tracking of mud onto the highway. In addition to hiring the outside contractors to sweep Route 5 & 20, Casella also uses on site staff and temporary workers, as needed, to pick up litter along the highway in the event that it is tracked there by landfill vehicles.

2.9 <u>Regulatory Reviews and Approvals for Landfill Expansion</u> (DEIS p. 45)

The bullet related to Article 24 Freshwater Wetland permit should be revised to also include the area adjacent to ST-12.

Section 3.0: <u>Existing Environmental Setting, Potential Environmental</u> <u>Impacts and Proposed Mitigation Measures</u> (DEIS pp. 46-110)

3.1.2.2 Potential Impacts (DEIS p. 52)

The text of the DEIS lacked a discussion regarding bedrock excavation, handling and stockpiling procedures. The following paragraph will be added to Section 3.1.2.2:

"In portions of the Stage XII development area, excavation of bedrock will be required in order to meet proposed subgrade elevations. This has been required previously at the site for the subgrade excavation for other portions of the Phase III landfill. As has been the case in the past, it is anticipated that he bedrock material will be removed through the use of an excavator and/or a bulldozer equipped with a ripper. Blasting will not be performed during excavation of bedrock.

Once the bedrock is removed, it will be stockpiled on the site in the mining area or future development areas for use in the construction of landfill access roads. As has been performed in previous cell developments at the site, the areas where bedrock is removed will be backfilled with low permeability soils in controlled lifts in order to maintain ten feet of separate between the remaining bedrock and the subgrade."

3.1.3.1 <u>Environmental Setting - Surface Water - Drainage Patterns -</u> <u>Drainage Area (DA 4)</u> (DEIS p. 58)

The fifth paragraph under the Drainage Patterns heading in Section 3.1.3.1 states that the NYSDEC concluded that the borrow area would not have an impact on the wetland so that no Article 24 permit was required. This sentence should be changed to indicate that *B&L's Baseline Ecological Wetland Assessment Report (2010) and the Borrow area groundwater intercept calculations (2010)* came to this conclusion and the DEC concurred with B&L.

3.1.4.1 <u>Environmental Setting — Overburden Groundwater Flow Zone</u> (DEIS pp. 63-64)

The following paragraph has been added to the end of this section:

"Based on B&L's 2010 assessment of the proposed Eastern Borrow Area, groundwater does not contribute significant flow to the wetland (ST 6); therefore, the proposed development is not expected to significantly reduce flow to the wetland from groundwater. The assessment concluded that stormwater runoff from the area surrounding the wetland is its major source of water. Since the proposed southern borrow area is entirely within a separate drainage basin, it is not anticipated that its construction will alter the hydrologic regime of the ST 6 wetland."

3.1.4.1 Environmental Setting - Groundwater Use (DEIS p. 64)

This paragraph has been revised to read:

The geologic materials in the site vicinity (particularly the upper weathered bedrock zone) are capable of providing limited yields suitable for individual residential wells or small farms. However, the area surrounding the landfill is served by the Town of Seneca's public water system. A residential well survey conducted by B&L personnel was completed in March 2011 by interviewing the residents at the properties identified within a distance of 0.25 miles upgradient of the landfill and 1.0 miles downgradient of the landfill. The interview consisted of general questions regarding the nature and construction of the well, and water usage and quality (if applicable). B&L recorded the interviewee responses on individual field forms, which are included in this FEIS in Attachment L. The completed field forms indicate the date and time that each property was visited. Please note that on the basis of confidentiality the field forms have been reproduced with the omission of personal comments. A total of 86 properties were included in the survey, with 67 responses received. Only one property owner (located on Number Nine Road to the east of the landfill) was identified with a residential water well in use as a potable source. Two residents who were on the Town system indicated they used a well on their property for non-potable uses (residential agriculture).

3.1.5.2 Air Quality - Potential Impacts (DEIS pp. 68-71)

A supplement to the Air Quality Review provided in the DEIS is attached to this FEIS in Appendix BB as Attachment G. This document includes the cumulative impact assessment of both the landfill emission sources and the separately owned and permitted LFGTE facility emission sources.

In addition, revised leachate emission estimates to incorporate update leachate generation and storage estimates, hydrogen sulfide ambient air sampling results and hazardous air pollutant air screening results are provided in this supplemental document. Results of ambient air sampling and air screening indicate that fugitive landfill gas HAP emissions are below NYSDEC guidance concentration values.

3.1.6.3 Greenhouse Gases - Mitigative Measures (DEIS pp. 75-79)

A supplement to the Air Quality Review provided in the DEIS is attached to this FEIS in Appendix BB as Attachment G. This document includes the cumulative impact assessment of both the landfill emission sources and the separately owned and permitted LFGTE facility emission sources.

A revised Table 5 that includes the peak year methane generation and emission estimates from the existing landfill and proposed expansion landfill during peak year landfill generation is provided below:

Project	CH4 Modeled Generation ¹ (tons/yr)	CH4 Mitigated ² (tons/yr)	CH4 Fugitively Emitted (tons/yr)	
Existing Permitted Landfill	37,230	29,784	7,446	
Proposed Expansion Landfill	52,612	42,090	10,522	
Cumulative Peak Year (Expansion LFG + Remaining Permitted Landfill LFG)	68,793	55,034	13,759	
 Per LandGEM model for peak methane generation for existing permitted landfill and for proposed expansion landfill. ² Methane mitigated based on estimated GCCS collection efficiency. 				

 Table 5 - Peak Methane Generation & Emission Estimates

3.1.7.1 Site Ecology - Environmental Setting (DEIS pp. 79-80)

The Vegetation and Wildlife sections lack references to the proposed borrow area; therefore, the following statements are added to this section "The proposed borrow area has been used for agricultural purposes for numerous years. Crops known to have been planted and harvested on the proposed borrow area parcel include corn and alfalfa. The parcel has routinely been disturbed by agricultural practices and does not provide habitat for endangered species."

3.1.7.1 Site Ecology - Proposed Impacts - Wetlands (DEIS p. 83)

The statement "Landfill activities have been performed in the areas adjacent to these wetlands for almost twenty years with no direct impacts observed." has been removed from this section.

3.2.7.2 <u>Transportation Facilities and Traffic – Potential Impacts</u> (DEIS pp. 96-97)

The 12 total round trips per day referenced in the following statement "Based on the preliminary leachate generation data included in Figure 10 and current hauling practices at the facility (7,500 gallon tanker truck capacity, hauling six days per week), the peak three month leachate generation quantity from the existing facility and the proposed expansion could be removed from the site in 12 total round trips per day, or approximately 3 total truck trips to/from the site per hour with the increased leachate storage capacity." should be revised to 7 total round trips per day. 12 should be changed to 7.

3.2.10 Noise Analysis (DEIS pp. 101-105)

A supporting document "Operating Noise Impact Assessment" has been prepared as part of this FEIS, which includes cumulative impacts of the landfill and LFGTE facility. This document is provided in Attachment M. This provides an update to the assessment methodology presented in DEIS by including attenuation factors due to ground effects and atmospheric absorption in addition to the attenuation due to increased distance from a source. Additional information including sound level measurement data and analytical results are provided in this Attachment. The analysis included conservative sound level estimates and propagation to offsite receptors to ensure the assessment presents a "worst case" view of potential noise impacts from the landfill expansion facility, as typical operations will generate less noise and be further from offsite receptors. Results of the analysis conclude that offsite receptors will experience sound level increases of less than 6 dBA.

3.2.10.2 <u>Noise Analysis – Potential Impacts</u> (DEIS p. 102)

The last sentence of the third paragraph of this Section has been removed and replaced with the following statement. "A purchase agreement has been signed with the willing landowner for the property and the property is expected to be transferred to either the County or Town prior to operation. Under either scenario, Casella will retain operational control of the property during the term of the OML subject to the limitation that the property may not be used for waste disposal activities. "

3.2.10.2 Noise Analysis – Potential Impacts (DEIS p. 103)

In the statement, "Using this analysis, potential sensitive receptor locations were chosen to represent the closest boundaries of developed residential properties surrounding the landfill property not under the ownership of Casella," another kind of property should be included as an exception to properties subject to noise analysis. The clause "or a noise easement" should be added at the end of the sentence. Properties with noise easements will not considered potential sensitive receptor locations.

Section 6.0: <u>Cumulative and Growth Inducing Impacts</u> (DEIS pp. 115-117)

6.2 <u>Noise</u> (DEIS pp. 115)

A supporting document "Operating Noise Impact Assessment" has been prepared as part of this FEIS, which includes cumulative impacts of the landfill and LFGTE facility. This document is provided in Attachment M.

The LFGTE facility has underwent a separate SEQR review for the existing 8-engine and future 3-engine LFGTE facility which states that no significant noise impacts are associated with the operation of these facilities. A detailed noise report provided with the FEIS of the Ontario County Landfill Expansion evaluated to combined noise impacts from the LFGTE facility and the landfill expansion project. The evaluation determined that there will not be a significant noise impact as a result of the combined noise from these facilities on nearby residential receptors.

6.3 <u>Air</u> (DEIS pp. 115-116)

A supplement to the Air Quality Review provided in the DEIS is attached to this FEIS in Appendix BB as Attachment G. This document includes the cumulative impact assessment of both the landfill emission sources and the separately owned and permitted LFGTE facility emission sources. The sources are considered separate for air permitting and air regulatory review; however, the combined emissions from the two sources operating together are considered for this environmental impact evaluation.

Attachment F: Visual Impact Assessment

An additional rendering was completed based on a photograph taken at the corner of Rilands Road and County Road 5 to illustrate the view of the screening berm. It is included in Appendix BB as Attachment F.

Attachment G: Air Quality Review

A supplement to the Air Quality Review Attachment in the DEIS is provided in Appendix BB as Attachment G.

Attachment H: Comprehensive Wetland Delineation Report

6.2 <u>Delineated Wetland Descriptions</u>

The State was in the process of claiming Article 24 jurisdiction over Wetland H at the time the Comprehensive Wetland Delineation Report was being issued. The following sentence has been added to the end of the Wetland H description (pp.24): "Wetland H has a clear connection to NYSDEC mapped wetland ST-6. The NYSDEC has extended their Article 24 jurisdiction over Wetland H."

The sections associated with Wetland I and J have been updated to include information regarding their potential Article 24 jurisdiction pending field confirmation by the NYSDEC. The following sentence has been added to the end of the Wetland I description (pp.25): "Wetland I has the potential to be regulated under Article 24 by the NYSDEC. Status of this is pending field verification by NYSDEC staff of Wetland I and its hydrologic connection to mapped wetland ST-12." Also, the following sentence has been added to the end of the Wetland J description (pp.28): "Wetland J has the potential to be regulated under Article 24 by the NYSDEC. Status of this is pending field verification by NYSDEC staff of Wetland J has the potential to the end of the Wetland J description (pp.28): "Wetland J has the potential to be regulated under Article 24 by the NYSDEC. Status of this is pending field verification by NYSDEC staff of Wetland J and its hydrologic connection to mapped wetland ST-12."

7.0 Summary & Conclusions

The Summary & Conclusions section has been updated to include information regarding the NYSDEC's jurisdiction over Wetlands H, I, J, and

K due to these wetlands having potential hydrologic connections to mapped NYSDEC wetlands (Article 24). The following sentence has been added to the end of Section 7.0 (pp.31): "Wetland I and J are potentially regulated by the NYSDEC through Article 24. Both of these wetlands have hydrologic connections to state mapped wetland ST-12 and will require NYSDEC staff confirmation prior to being identified as a continuation of mapped wetland ST-12. Wetland K is already recognized as a mapped state wetland, ST-5, but was determined to be isolated with identifiable outlet or inlet."

Attachment J: U.S. Army Corps of Engineers Jurisdictional Determination

The U.S. Army Corps of Engineers issued a revised jurisdictional determination that included the sub-tributary to Flint Creek. A copy of this letter is provided in Appendix BB as Attachment J.

Attachment L: Hydrogeologic Investigation Report

Residential well survey field forms and well development logs are included in Appendix BB as Attachment L. Additionally, the final Hydrogeologic Investigation Report will be submitted as part of the Part 360 permitting documents.

Attachment M: Operating Noise Impact Assessment

A supporting document "Operating Noise Impact Assessment" has been prepared as part of this FEIS, which includes cumulative impacts of the landfill and LFGTE facility.

III. Responses to Comments

A. Residents' Comments

- A.1 Air Quality/Odor
 - A.1.1 Submitted by R. and L. Pedersen (W -1/20/12)

The next concern is with the odor (and noxious gases) that currently are emitted from the landfill. This problem has gotten noticeably worse in the past 5 years. Noxious odor is present near the landfill every day and can be detected, sometimes at very high levels, miles away on many days and nights. The health effects of breathing this gas are totally unknown. It has decreased the quality of life for every local resident. I go out of my house some evenings and cannot stand to breathe the air. How awful is that in a beautiful, quiet, rural area? Go out and feel choked by noxious odors? If this problem exists now, and apparently cannot be adequately fixed, how can an expansion be allowed, which will undoubtedly make this worse? The solution to spray some odor disguising mist is almost worse! So we can't smell it, but it is still there and instead we smell some cheap perfume?

The DEIS has not adequately addressed the concerns of citizens about odor.

<u>Response</u>:

The landfill gas collection system is continuously expanded to allow for the collection and control of landfill gas generated from the landfill. Excessive odors that were observed during 2011 were the result of abnormal atmospheric conditions and landfill operational conditions. During 2011, the region experienced much higher than average rain fall during the late fall, and unseasonably warm winter conditions. Although seemingly harmless, these two combined factors provided for an unusually wet winter for the landfill. Under these conditions, landfill gas production actually increased during the fall and winter, when typically dryer and colder conditions would have slowed landfill gas production. The problem with higher than normal gas production was compounded by the unusually wet surface conditions which prevented heavy equipment from being able to access areas where landfill gas wells were needed in order to control the gas being produced. Under normal atmospheric and landfill operating

conditions, including operation of an active landfill gas collection system, placement of daily cover materials, and capping of closed landfill areas, as described in the DEIS, these odors would be mitigated and the odors experienced during 2011 would not happen. The facility has remained in compliance with applicable regulations and has performed modifications to the landfill as approved by the NYSDEC.

Additionally, in January, February, and March, 2012, under approval from the NYSDEC, Casella was able to significantly expand the landfill gas collection system, install additional flare/combustion capacity, and cover exposed areas of the landfill, at a capital expenditure of approximately \$1,000,000. Initial quarterly surface monitoring has shown drastic reduction in surface methane concentrations, and additional monitoring for hydrogen sulfide during the surface monitoring event found no measureable levels. Further fence line monitoring for hydrogen sulfide (H2S) has found that existing concentrations are well below the U.S. Department of Health and Human Services Agency for Toxic Substances and Disease Registry (ATSDR) Minimal Risk Levels and NYSDEC Annual Guidance Concentration levels. In order to evaluate future operations, an ambient air screening assessment was conducted for the full build-out of the expansion landfill. Results from the screening indicate that fugitive hazardous air pollutants (HAPs) assuming peak potential landfill gas generation are less than NYSDEC annual guidance concentration levels.

The landfill expansion will be designed to collect and control landfill gas, and will be subject to state and federal monitoring requirements and permit conditions to limit landfill gas emissions. An Odor Management Plan will be prepared and implemented to address odor concerns prior to expansion landfill operation.

A.1.2 Submitted by D. Galleher (W -1/18/12)

Fumes which may or may not be hazardous, are at the very least, foul and objectionable.

<u>Response</u>:

Refer to response to A.1.1, above. Fence line Hydrogen Sulfide (H2S) monitoring at the facility has shown that ambient air concentrations are less than applicable guidance concentration levels. H2S odor thresholds are significantly less than hazardous concentration levels.

Further detail regarding this is provided in a supplement to the Air Quality Review in the FEIS.

The landfill expansion will be designed to collect and control landfill gas, and will be subject to state and federal monitoring requirements and permit conditions to limit landfill gas emissions. An Odor Management Plan will be prepared and implemented to address odor concerns prior to expansion landfill operations.

A.1.3 Submitted by B. Kauffman (W -1/13/12)

The list of carcinogenic chemicals (and suspected carcinogens) that are generated in this process are numerous. There is no way that any landfill expansion should be undertaken, or even considered until the problem of this pervasive garbage smell is resolved.

<u>Response</u>:

Refer to response to A.1.1, above.

A.1.4 Submitted by J. and T. Bonacci (W -1/18/12)

Our concerns include...Air quality, already compromised, threatened to degrade even further.

<u>Response</u>:

Statement noted. An air quality review was conducted and is presented in Sections 2, 3, 4, 6 and Attachment G of the DEIS.

A.1.5 Submitted by J. Vaughn (W -1/8/12)

The area immediately around the landfill is filled everyday with the stink and toxic gas coming off the ever increasing mountain of rotting garbage. And now the methane is spreading to a wider area and making eastern Ontario County less and less desirable as a clean and safe environment.

<u>Response</u>:

Refer to response to A.1.1, above.

A.1.6 Submitted by K. Vaughn (W -1/17/12)

As a long term resident of the city of Geneva, I find the smell of methane from the landfill objectionable already, much less after expansion.

Response:

Refer to response to A.1.1, above.

A.1.7 Submitted by K. Niles (W -2/8/12)

Among many unknowns that may be impacting the environment, and many health issues that are occurring to town residents and beyond, we have a constant, unacceptable odor of Hydrogen Sulfide Gas as well as Methane coming from the dump 24/7. This has gotten proportionately worse with the importation of treated human feces from all over the Northeast and Canada.

<u>Response</u>:

Landfill gas odors are produced by bacterial or chemical processes and can emanate from both active or closed landfills. These odors can migrate to the surrounding community. Potential sources of landfill odors include sulfides, ammonia, and certain NMOCs, if present at concentrations that are high enough. Landfill odors may also be produced by the disposal of certain types of wastes, such as manures and fermented grains.

• Sulfides. Hydrogen sulfide, dimethyl sulfide, and mercaptans are the three most common sulfides responsible for landfill odors. These gases produce a very strong rotten-egg smell—even at very low concentrations. Of these three sulfides, hydrogen sulfide is emitted from landfills at the highest rates and concentrations.

Humans are extremely sensitive to hydrogen sulfide odors and can smell such odors at concentrations as low as 0.5 to 1 part per billion (ppb). At levels approaching 50 ppb, people can find the odor offensive. Average concentrations in ambient air range from 0.11 to 0.33 ppb (ATSDR 1999a). According to information collected by the Connecticut Department of Health, the concentration of hydrogen sulfide in ambient air around a landfill is usually close to 15 ppb (CTDPH 1997; ATSDR 1999a).

 Ammonia. Ammonia is another odorous landfill gas that is produced by the decomposition of organic matter in the landfill. Ammonia is common in the environment and an important compound for maintaining plant and animal life. People are exposed daily to low levels of ammonia in the environment from the natural breakdown of manure and dead plants and animals. Because ammonia is commonly used as a household cleaner, most people are familiar with its distinct smell.

Humans are much less sensitive to the odor of ammonia than they are to sulfide odors. The odor threshold for ammonia is between 28,000 and 50,000 ppb. Landfill gas has been reported to contain between 1,000,000 and 10,000,000 ppb of ammonia, or 0.1% to 1% ammonia by volume (Zero Waste America n.d.). Concentrations in ambient air at or near the landfill site are expected to be much lower.

• NMOCs. Some NMOCs, such as vinyl chloride and hydrocarbons, may also cause odors. In general, however, NMOCs are emitted at very low (trace) concentrations and are unlikely to pose a severe odor problem.

Refer to response to A.1.1, above, and to response to A.1.13, below. Additional information related to health impacts can be found in the responses A.2.2 and A.2.5 in the Public Health Impacts section.

A.1.8 Submitted by K. Mitchell-DePorter (W -1/25/12)

Currently, the odor emitted from the waste is not being properly managed. If you drive by the facility, the odor is noxious. I live several miles from the landfill and at times the odor can be smelled at my home. The smell is so intense that it makes my children physically ill. They are unable to be outside on days when the odor is present.

<u>Response</u>:

Refer to response to A.1.1, above.

A.1.9 Submitted by M. Francis (W -1/18/12)

I have noticed a bad odor often in the warmer parts of the year, and am glad I don't live closer to these mushrooming mounds, but that doesn't help the people who do, or the general appearance to those who visit the area.

<u>Response</u>:

Increases in temperature stimulate gas particle movement, tending also to increase gas diffusion, so that landfill gas might spread more quickly in warmer conditions. These odors are intended to be mitigated under normal atmospheric and landfill operating conditions, including operation of an active landfill gas collection system, placement of daily cover materials, and capping of closed landfill areas, as described in the DEIS.

A.1.10 Submitted by P. LeBrun (W -1/16/12)

I travel by it almost every day and the odor and noxious fumes are awful. It makes me gag and I have to hold my nose for about 2 miles on either side of passing that landfill. Night or day, it does not matter, it stinks! Reeks!

<u>Response</u>:

Refer to response to A.1.1, above.

A.1.11 Submitted by V. Aliperti (W -1/17/12)

By pushing this expansion forward it will increase noise, odors, toxic emissions, truck traffic and overall pollution which we are already dealing with downwind in Geneva.

<u>Response</u>:

As detailed in Section 3.2.7 of the DEIS, since the annual tonnage limit of the landfill will not be increased as a result of the proposed expansion, there are no anticipated changes in operations that would increase noise, odors, truck traffic and overall pollution.

A.1.12 Submitted by S. Kenyon (W -2/8/12)

I often drive Co Rd 4 to Geneva. Most days I can smell the dump by the time I get to Whintey Rd. That is over 2 miles away!

<u>Response</u>:

Refer to response to A.1.1, above.

A.1.13 Submitted by R. Hoyt (W -2/28/12)

In the fall of 2011, I was woken up in the middle of the night by noxious odor from the Ontario County landfill. I closed my windows but the odor was so strong it penetrated the house anyway. Extremely unpleasant landfill odors were significantly perceptible on three other dates that fall, and have been present as recently as Jan. 21 of this year. I wanted to know what the frequency and intensity of such odors for Geneva residents is expected to be. I also wanted to know what reassurance residents have that the odors are not accompanied by airborne substances that may present health risks. DEC regulations state that "odors must be effectively controlled so that they do not constitute nuisances or hazards to health, safety or property". The Ontario County landfill has failed to comply with the "nuisance" part of this regulation on a number of occasions. If there is evidence that airborne emissions have not constituted a hazard to health it seems very hard to find.

<u>Response</u>:

Excessive odors that were observed during 2011 were the result of abnormal atmospheric conditions and landfill operational conditions. During 2011, the region experienced much higher than average rain fall during the late fall, and unseasonably warm winter conditions. Although seemingly harmless, these two combined factors provided for an unusually wet winter for the landfill. Under these conditions, landfill gas production actually increased during the fall and winter, when typically dryer and colder conditions would have slowed landfill gas production. The problem with higher than normal gas production was compounded by the unusually wet surface conditions which prevented heavy equipment from being able to access areas where landfill gas wells were needed in order to control the gas being produced. Under normal atmospheric and landfill operating conditions, including operation of an active landfill gas collection system, placement of daily cover materials, and capping of closed landfill areas, as described in the DEIS, these odors would be mitigated and the odors experienced during 2011 would not happen.

As referenced in Section 3.1.5 of the DEIS, landfill gas primarily contains methane, carbon dioxide, and non-methane organic compounds (NMOCs). Landfill methane emissions and odors associated with other landfill gas constituents are currently controlled through the operation of an active gas collection and control system (GCCS).

Based on various studies reviewed, key findings related to landfill gas health impacts are summarized below:

- Landfill gas constituents are typically found in ambient air at low concentrations and are unlikely to cause health effects.
- Odor-producing chemicals (i.e., hydrogen sulfide and ammonia) are not likely to produce long-term adverse health effects at the levels typically associated with landfill emissions. The odors associated with these chemicals can, however, cause acute (short-term) effects, such as nausea and headaches. Acute effects from other chemicals found in landfill gas are usually produced only when an individual is exposed at relatively high concentrations (i.e., at concentrations greater than those expected to be present in ambient air near a landfill). Acute effects are usually reversed when the exposure ends.
- Hydrogen Sulfide. Researchers have not identified any long-term health effects associated with exposure to the low-level hydrogen sulfide concentrations that normally occur in communities near landfills.
- Ammonia. Concentrations of ammonia in the ambient air near a landfill are expected to be well below the levels at which any adverse health effects are expected to occur.
- NMOCs. In general, levels of individual landfill gases in ambient air are not likely to reach harmful levels. In other words, low levels of

landfill gases are unlikely to cause obvious, immediate health effects.

A.1.14 Submitted by T. Allen (W -1/31/12)

...specifically the recent increase in the odors. The odors have been a problem for some time, but recently they have gotten much worse. In the morning when we step outside we are greeted with the smell from whatever they were doing at the landfill during the night. I don't really recognize the smell, but to me the odor seems like a combination of methane gas and garbage. In the morning there is a visual and odorous blanket over our area. Then, when they start dumping the garbage for the day, we are exposed to the smell of raw garbage. This has a further effect on my lifestyle because I can no longer tolerate being outside, having to smell that disgusting odor. ...As soon as they begin dumping, we get the odor of raw garbage, gas being burned off and "who knows what" else is being added to the mix of offensive odors. I suspect it is the sludge that is being dumped there.

All of our elected town officials, who are supposed to represent their constituents, need to demand an action plan to control the foul odor coming from the landfill. We cannot afford for this issue to get even further out of Casella's control than it already is. All of the towns and the county officials need to demand that Casella be proactive in the future and not reactive to these problems, as they have been in the past. Being proactive and/or reactive does not mean putting some spray bars around the dump to use "perfume" to cover up the odor. What a joke that is. If what I smell is "perfume", Casella should stop wasting their time and money. It isn't working. What I smell is a combination of methane gas and decaying garbage. How would anyone ever expect to mask the overwhelming smell of garbage coming from such a large area? All town officials should make it clear that any odor coming from that landfill is unacceptable.

We need to confirm what the odors really are. Do we really know what is being burned/emitted at the landfill? Some say methane gas smells like rotten eggs. Well, if that's what methane gas is supposed to smell like, it is not methane gas I smell because it does not smell like rotten eggs. I know what rotten eggs smell like. I grew up in Clifton Springs. So, what are we being exposed to? I really don't think we can be confident in what we are being told. Whatever they are burning over night just lingers in the area most of the morning. It blankets the entire area in the morning. Would it be helpful to have a taller chimney on the facilities that I see huge volumes of heat exhaust coming from? Has anyone researched a better technology to burn off the gas or control whatever is causing the unbearable smell coming from the landfill?

<u>Response</u>:

Excessive odors that were observed during 2011 were the result of abnormal atmospheric conditions and landfill operational conditions. Under normal atmospheric and landfill operating conditions, including operation of an active landfill gas collection system, placement of daily cover materials, and capping of closed landfill areas, as described in the DEIS, these odors would be mitigated and the odors experienced during 2011 would not happen.

Additionally, please note that only landfill gas collected from the landfill is combusted by both flares at the facility, and engines generating electricity at the nearby landfill gas to energy facility. Combustion of landfill gas by flares and/or internal combustion engines is considered to be the Best Available Control Technology as defined by the USEPA.

Landfill gas odors and their constituents were previously discussed in the responses to A.1.1, A.1.7 and A.1.13. In addition, detailed information regarding landfill gas constituents is presented in Attachment G – Air Quality Review, of the DEIS.

A.1.15 Submitted by T. Allen (W -2/19/12)

Casella cannot control the odors coming from the landfill now. More garbage and sludge will only make it worse for us here in Seneca Castle. All they have are excuses as to why there is the odor. They are not proactive in controlling potential problems cause by the landfill.

<u>Response</u>:

Excessive odors that were observed during 2011 were the result of abnormal atmospheric conditions and landfill operational conditions. During 2011, the region experienced much higher than average rain fall during the late fall, and unseasonably warm winter conditions. Although seemingly harmless, these two combined factors provided for an unusually wet winter for the landfill. Under these conditions, landfill gas production actually increased during the fall and winter, when typically dryer and colder conditions would have slowed landfill gas production. The problem with higher than normal gas production was compounded by the unusually wet surface conditions which prevented heavy equipment from being able to access areas where landfill gas wells were needed in order to control the gas being produced. Under normal atmospheric and landfill operating conditions, including operation of an active landfill gas collection system, placement of daily cover materials, and capping of closed landfill areas, as described in the DEIS, these odors would be mitigated and the odors experienced during 2011 would not happen.

Additionally, please note that due to seasonable construction schedule, some control measures were unable to be performed during poor weather conditions and/or were prevented until air permits could be applied for and approved by the NYSDEC. Since that time and under the approval of the NYSDEC, the facility has spent nearly \$1,000,000 in placement of cover materials, installation of new landfill gas extraction wells, installation of gas collection headers, and installation of new flares for combustion of landfill gas. This effort has allowed the facility to better collect and control landfill gas and has mitigated the odorous conditions. Initial quarterly surface monitoring has shown drastic reduction in surface methane concentrations, and additional monitoring for hydrogen sulfide during the surface monitoring event found no measureable levels. The landfill gas collection system will be continually expanded in order to control landfill gas emissions.

A.1.16 Submitted by K. Bennett Roll (W – 2/21/12)

I am also concerned that the current permit states that the County and Casella must be in compliance with certain noise and odor regulations imposed by the NYSDEC and the US EPA. I am certain that the landfill is out of compliance on these regulations, and would ask how an expansion can be sought at a time when the Landfill is out of compliance.

<u>Response</u>:

The facility has remained in compliance with applicable regulations and has performed modifications to the landfill as approved by the NYSDEC. Compliance with regulations is verified by a NYSDEC monitor that visits the site on a weekly basis as well as unannounced random site inspections by various NYSDEC divisions. In addition, the facility is also subject to Title V air permit compliance inspections. Extensive environmental monitoring of air, groundwater, and surface water is also performed and submitted to the NYSDEC to ensure compliance with applicable regulations and standards. In addition, annual reports are submitted to the appropriate NYSDEC divisions to prove compliance with permit conditions.

A.1.17 Submitted by R. Camera (W - 2/20/12)

However, the current version of the draft DEIS assumes that there are no negative impacts on economic development and does not address or present mitigation strategies to address the following relevant issues/impacts:

- a. Odors on quality of life in City of Geneva and the east side of the County.
- b. Odors on tourism during high season from April to October.
- c. Odors on prospective students considering HWS as a four-year college.
- d. Fugitive and direct emissions of hazardous air pollutants (HAPs) on long- term public health.

<u>Response</u>:

Odor control and mitigation strategies are addressed in Sections 2.6.5.3, 3.1.5, and 3.2.4 of the DEIS. An Odor Management Plan will be prepared and implemented to address odor concerns prior to expansion landfill operation. Fugitive and direct emissions of HAPs are quantified in Attachment G – Air Quality Review, of the DEIS.

Refer to responses to A.1.1, A.1.7, and A.1.13, above for more information regarding odors. Additional information related to health impacts can be found in the responses A.2.2 and A.2.5 in the Public Health Impacts section. Refer to response to A.4.1, below, for information regarding impacts on tourism.
A.1.18 Submitted by C. Hsu (W – 2/21/12)

Information on air quality is lacking. Significant sections for assessing, controlling and mitigating air pollution emissions are missing, including dust emissions, and reliance on default parameters instead of empirical evidence to estimate emissions.

<u>Response</u>:

A complete review of the air quality impacts was included in the DEIS, which included an assessment of current and future potential emissions, mitigation measures for landfill gas control, and dust suppressant and control measures. A combination of site specific data and EPA approved and published emission factors for landfills were utilized to estimate emissions. In addition to the information contained in the DEIS, a supplemental air quality attachment that further describes fugitive emissions from landfill gas, leachate storage, and dust is included in Appendix BB as Attachment G of this document

A.1.19 Submitted by K. Whiteleather (W - 2/20/12)

The draft does not seem to completely deal with air emissions. In the past year odors from the landfill have become common in Geneva. These events are generally noticed late night/early morning, often strong enough to wake my family in the middle of the night. More recently there have been noticeable odors in the late morning as we go to work and school. I am not convinced that expanding the landfill will solve this problem.

<u>Response</u>:

Refer to responses to A.1.1 and A.1.18, above.

A.1.20 Submitted by W. Lamboy (W - 2/19/12)

Odor diminishes property owners' ability to enjoy and utilize their property. It is impossible to remain outdoors when the stench is present, and in the summer months it comes in through open windows!

Statements noted.

A.1.21 Submitted by J. and J. Gerling (W - 2/20/12)

Currently, the odors around the landfill are offensive. The smell carries to Geneva. This negatively impacts the quality of life for all of those in a large circumference surrounding the landfill.

<u>Response</u>:

Refer to response to A.1.1, above.

A.1.22 Submitted by J. O'Brien (W - 2/21/12)

The gas emissions for the landfill and the gas-to-energy facility should be considered combined as the total emissions may exceed acceptable public health standards. They should be considered together under "common control" for prediction for air emissions.

<u>Response</u>:

Per NYSDEC letter dated January 5, 2012, the facilities operate under separate ownership and are considered not to be under common control. However, the facilities have been evaluated for cumulative impacts, which are discussed in Section 6.3 and Attachment G of the DEIS. In addition to the information contained in the DEIS, a supplemental air quality attachment that further describes the cumulative impacts from the two facilities is included in Appendix BB as Attachment G.

A.1.23 Submitted by M. Davis (W - 2/19/12)

I am concerned that the Ontario County landfill DEIS is inadequate in anticipating adverse impacts to residents and visitors due to increased air emissions of VOCs with much larger leachate pools on-site.

Section 3.1.5 and Attachment G – Air Quality Review, of the DEIS review the VOC emissions from leachate storage from the existing facility, as well as projected future VOC emissions from the expanded landfill.

A.1.24 Submitted by C. and N. Santy (W - 2/20/12)

We have experienced odor from the current landfill in the Summer and Fall of 2011 and we live about 6 miles north of the landfill. We have heard that the propsed [sic] expansion will be capturing the majority of the gasses, however from experience, it seems that Casella cannot capture the gasses with the landfill at its current size. Who will be enforcing this? As Ontario County residents, we do NOT appreciate smelling the landfill gasses, and it is not a welcoming odor for people who are touring our region.

<u>Response</u>:

Refer to responses to A.1.1 and A.1.15, above.

A.1.25 Submitted by D. Dressner (W - 2/20/12)

...they only do air quality testing quarterly. I have been told that these tests are done on closed portions of the landfill only 4 times a year. It seems to me that if this company was reputable it would go way above all standards and do testing on a daily basis. That it would seek out and repair its hot spots every day and that it would babysit the flare 24 hours a day. That all gas emissions would be anticipated and plans already in place to capture and have it removed. That professional disaster firefighters be in place to coordinate a disaster situation. That all kinds of monitoring devices be in place to make sure there is no fugitive gas seeping into the air, and no radiation being snuck into our counties borders. That all water ways in its vicinity would be its priority, cared for and flowing healthy. What about a disaster plan? What happens if there is a disaster at this ground zero? Where are air quality detectors, radiation detectors? What happens if the more unstable gasses of the landfill explode? (What happens if there is a huge tornado that tears up the ground or demolishes the gas plant. Why is there only quarterly air quality testing's being done and only on the closed area of the landfill?

Air quality testing is conducted in accordance with NYSDEC and U.S. EPA air regulations and per the facility's Title V Air Permit. Quarterly monitoring is required on the active landfill in addition to monitoring conducted on the closed landfill. The facility also maintains appropriate Operations and Maintenance procedures and practices to monitor the landfill on a daily basis and to address issues immediately as they arise. The landfill gas collection and control system is an automated system that continuously operates to collect and control landfill gas.

A.1.26 Submitted by H. and B. Aldwinckle (W - 2/20/12)

It does not properly or fully consider the issue of air pollution by methane which would be greatly increased by the expansion. The methane odor is already intolerable, and the extension would make it much worse. The methane odor is detrimental to our health and well being. It will greatly reduce property values for a considerable distance downwind from the landfill.

<u>Response</u>:

Landfill gas odors and their constituents were previously discussed in the response to A.1.1, A.1.7 and A.1.13. The landfill expansion will be designed to collect and manage landfill gas in accordance with NYSDEC and EPA regulations to limit offsite emissions. Landfill gas collection and control systems will be designed and implemented to meet this objective. Refer to response to A.10.1 for information on impacts to property values.

A.1.27 Submitted by S. Foster (W - 2/21/12)

...portions of the EIS covering predicted air emissions are currently incomplete. The County needs to consider the public comments, amend the draft EIS and issue a revised draft EIS for public review that includes more detail, conclusions based on more recent data, and includes a more comprehensive discussion on air emissions.

The draft EIS frequently uses old data even though more recent data is available, or it relies on old data that is not a realistic predictor of future impacts. The findings should be updated to reflect the most recent data available. Data prior to 2009 is not useful in many cases because the landfill increased its allowable tonnage to 2,999 tons per day in 2008. Environmental impact predictions for the future should be based on data collected after the tonnage increase, not from data collected prior to the tonnage increase.

<u>Response</u>:

The calculation of emissions relies on historic data for actual waste placement volumes, gas collection volumes, and historic landfill gas analyses in order to estimate future gas production and emission estimates. This historic data more accurately depicts actual site conditions, rather than using published estimates. Also, historic information is used for existing combustion devices, as this data is accurate for estimation of emission from those devices. Moving forward, new emission factors are obtained from equipment manufacturers on proposed control devices, and estimates of landfill gas production are based on anticipated waste placement and modeled future gas production.

Environmental impacts were assessed based on the landfill's approved design capacity of 2,999 tons per day, which will remain the same for the proposed landfill expansion project.

A.1.28 Submitted by S. Foster (W - 2/21/12)

The draft EIS assumes that gas emissions will be assessed separately for the landfill and the gas-to-energy facility. This is a VERY important issue because if gas emissions for the two facilities are considered combined, technically called "common control", then the total emissions may exceed acceptable public health standards. If the two facilities are allowed to be considered independently, then they individually will be able to meet public health standards. The assumption in the draft EIS that emissions from the landfill and the gas-to-energy facilities will be allowed to be evaluated separately and not under "common control" is not justified. The US Environmental Protection Agency (EPA), not the NY Department of Environmental Conservation (DEC) will make a final determination on this question during the evaluation of Title V Air Permits. Until that determination is made, the draft EIS needs to include predictions for air emissions based on an assumption of "common control" and predictions for air emissions evaluating the facilities separately.

Response:

Refer to response to A.1.22, above.

A.1.29 Submitted by S. Foster (W - 2/21/12)

Section 3.1.5.2 This section of the draft EIS states "Emissions from leachate storage may increase slightly due to the potential for increased leachate generation and storage resulting from the landfill expansion."

Attachment G predicts estimates of volatile organic compounds (VOCs) from leachate will increase from a baseline of 3,004 lbs to 4,006 lbs. This is a 25% increase, not a slight increase. Attachment G also provides calculations that predict that fugitive emissions of landfill gas will increase from 7,445 tons of methane per year to 10,522 tons of methane per year. This is a 29% increase in emissions.

A table should be provided illustrating how estimates of Hazardous Air Pollutants (HAPs) in leachate and fugitive gas emissions combined will change from current levels to final levels after the proposed expansion is complete.

The data in this table should be presented in the same units as Agency for Toxic Substances and Disease Registry Minimal Risk Level (ATSDR MRL) units so a direct assessment of potential health impacts can be assessed.

For any HAP that is exceeding the ATSDR MRL, the potential public health risks associated with each HAP should be clearly described as well as mitigation strategies to minimize these risks.

Response:

A table summarizing fugitive emissions HAP emissions is provided in the supplement to the Air Quality Review Attachment, which can be found in Appendix BB as Attachment G. A.1.30 Submitted by L. Henry (W - 2/20/12)

The odors that are emitted from the landfill are far worse than any I have every smelled publicly. This issue is not new, is not one that has come about in the last couple years, but a issue that indicates a landfill that is not operated properly, supervised properly, is operated without concern for the public in general. The smell or odor is one problem, but what are the emissions and what volatile compounds are we inhaling? It is a concern for my family health being in the windward of unmonitored and unknown volatile compounds. If they cannot be contained for the past years, the last step you want to initiate is to increase the public exposure with an expansion and a compounding of the emissions.

<u>Response</u>:

Refer to response A.1.15, above. The facility has remained in compliance with applicable regulations and has performed modifications to the landfill as approved by the NYSDEC.

A.1.31 Submitted by R. Kiss (W - 2/19/12)

The Main Report: "Landfill gas is currently mitigated through the use of an active gas collection and control system (GCCS)" Capturing greenhouse gases is obviously important. The fact that the area smells bad, even with the windows up, when driving by with the car windows up suggests that not all of these gases are currently being captured. It has been suggested that the current increase in obnoxious odors is simply a function of the landfills on the west side. Whereas my experience simply driving by on the highway on Feb. 15th gave the clear impression that the worst area was a half mile to the east. Whether this is always true is less important. The bigger question is whether in fact the landfill's quarterly evaluations of methane gas are in fact capturing accurate and appropriate effects on the landfill and surrounding areas. Since the surrounding areas are not included in the current air quality tests the answer must be no. Increasing the size of the landfill, and most likely the smell, would in no way contribute to a more positive experience for Ontario Country residents nor for people traveling on 5 and 20 in general. Put simply the current tests are inadequate measures of the effects on air quality in the area and the report has made it clear that the current problems are not even being acknowledged.

Refer to responses A.1.1 and A.1.15, above.

A.1.32 Submitted by P. DeBolt (W - 2/21/12)

The odors reaching my home, from the landfill (7-8 miles away +/-), for well over a decade are extremely disgusting and cannot be good for ones health.

NOTE: I have lived in this neighborhood, a about a block from Seneca Lake for more than 50 years. We used to smell the lake, now we only smell the landfill! If the technology is there to safely eliminate these odors, why has it not been used and why should I rely on Casella's statements as to the elimination of odors?

Where is the reference to the air quality emissions from the gas to energy facilities. Why are the predictions not included in the DEIS?? Will emissions from a gas to energy facility be within EPA guidelines? If either considered individually or combining the two facilities?? It is one landfill and should meet EPA guidelines either way.

<u>Response</u>:

Refer to responses A.1.1, A.1.7, A.1.13, and A.1.28, above.

A.1.33 Submitted by G. Foster (W - 2/21/12)

Section 3.1.5.2 of the draft EIS states "Emissions from leachate storage may increase slightly due to the potential for increased leachate generation and storage resulting from the landfill expansion." Attachment G predicts estimates of volatile organic compounds (VOCs) from leachate will increase from a baseline of 3,004 lbs to 4,006 lbs. This is a 25% increase, not a slight increase. Attachment G also provides calculations that predict that fugitive emissions of landfill gas will increase from 7,445 tons of methane per year to 10,522 tons of methane per year. This is a 29% increase in emissions. Please provide a table illustrating how estimates of Hazardous Air Pollutants (HAPs) in leachate and fugitive gas emissions combined will change from current levels to final levels after the proposed expansion is complete. Please present the data in this table in the same units as Agency for Toxic Substances and Disease Registry Minimal Risk Level (ATSDR MRL) units so a direct assessment of potential health impacts can be assessed. For any HAP that is exceeding the ATSDR MRL, please describe potential public health risks associated with each HAP and describe mitigation strategies to minimize these risks.

The draft EIS frequently uses old data even though more recent data are available, or relies on old data that is not a realistic predictor of future impacts. Please update the findings to reflect the most recent data available. Data prior to 2009 is not useful in many cases because the landfill increased its allowable tonnage to 2,999 tons per day in 2008. Environmental impact predictions for the future should be based on data collected after the tonnage increase, not from data collected prior to the tonnage increase.

The draft EIS assumes that gas emissions will be assessed separately for the landfill and the gas-to-energy facility. This is a VERY important issue because if gas emissions for the two facilities are considered combined, technically called "common control", then the total emissions may exceed acceptable public health standards. If the two facilities are allowed to be considered independently, then they individually will be able to meet public health standards. The assumption in the draft EIS that emissions from the landfill and the gas-to-energy facilities will be allowed to be evaluated separately and not under "common control" is not justified. The US Environmental Protection Agency (EPA), not the NY Department of Environmental Conservation (DEC) will make a final determination on this question during the evaluation of Title V Air Permits. Until that determination is made, the draft EIS needs to include predictions for air emissions based on an assumption of "common control" and predictions for air emissions evaluating the facilities separately.

<u>Response</u>:

Refer to responses to A.1.22, A.1.27 and A.1.29, above.

A.1.34 Submitted by E.M. Buckley (W - 2/21/12)

Data on air and ground testing is not current. Testing should be no more than a year old as our products, and therefore garbage in this dump, is rapidly changing. What existed in days of yore is meaningless. Gas emissions have to be a composite not each taken individually. If I am downwind one gas may not be harmful, a second gas may not be harmful alone, but the two combined traveling over the nearby neighborhoods together might be dangerous. It is intellectually insulting to the citizens to evaluate each gas separately when they will not be breathing them each in separately.

<u>Response</u>:

Refer to responses A.1.1 and A.1.28, above. Surface monitoring to detect landfill gas emissions are conducted on a quarterly basis, and include a scan of all required areas of the landfill to determine whether excess fugitive emissions are escaping. In addition, sampling was conducted over a 10 day period to obtain actual composite, ambient air concentrations of H2S at several locations surrounding the landfill site. Results of the sampling indicated the H2S levels were below ATSDR and NYSDEC guidance levels.

A.1.35 Submitted by S. Brown (W - 2/21/12)

I work at Cornell's NYSAES and can smell odors from the landfill there almost every morning the last several weeks and also have noted odors at my home, but less frequently. If this is the case now in winter, what will it be like this summer?

<u>Response</u>:

Refer to responses A.1.1 and A.1.15, above.

A.1.36 Submitted by J. Hicks (W – 1/13/12)

The Town of Seneca is 85% an agricultural district. We have a good number of dairy operations that adhere strictly to CAFO regulations in the spreading and incorporation of manures into the soil, which on occasion can cause a brief odor. I fear this process will become the target of odor complaints when in fact they are coming from an unacceptable landfill operation.

<u>Response</u>:

Statements noted.

A.1.37 Submitted by D. Minns (W - 2/16/12)

Over the years since our home was built the landfill grew and grew, as did the noise and the odor.... The stench of others garbage should not be ours to bear.

<u>Response</u>:

Statements noted.

A.1.38 Verbalized by R. Eaton (T - 1/26/12)

The rotten smell -- garbage smell is sickening to say the least and forcing us to keep our doors and windows shut to avoid it. This is a violation of 360-1.14 which says odors must be effectively controlled so they do not constitute a nuisance. It's a nuisance to me.

Most of that smell is hydrogen sulfide. It's listed on OSHA as a hazardous gas. It settles in low areas. I don't need to be a doctor to know it's more dangerous to old, young, athletic and people with breathing problems. If you have one of these, that gas isn't helping you a bit.

There is no secret where it comes from. It comes from deteriorating gypsum board or wall board. It comes from construction debris dumped in there.

As Casella has already proven they are willingly -- to ignore the parts of the 360-1.14 when it's convenient for them. I'm sure they will continue.

<u>Response</u>:

Landfill gas odors and their constituents were previously discussed in the responses to A.1.1, A.1.7 and A.1.13.

A.1.39 Verbalized by R. Hoyt (T – 1/26/12)

In the language of the environmental impact statement I made up potential receptors of fugitive emissions.

Last fall I was an actual receptor. I was woken up in the middle of the night by odors from the landfill. I shut my windows. It was still powerful enough to permeate the house.

Since then I've been trying to find information about how often we can expect such odors and at what intensity.

I've also been trying to find information that can reassure me that there are not negative health effects. I searched through the environmental impact statement for that information. Maybe it's there, but I have not been able to find it.

That is I think my main criticism of the environmental impact statement why I think it should not be supported until it can provide information that does reassure us that our health is not threatened by emissions from the landfill and give us some reasonable explanation if there are going to continue to be fugitive emissions which there is going to be. They always talk about minimize. It doesn't say eliminate. Realistically they probably couldn't ever eliminate these emissions.

So for those us who live downwind of the landfill I think we have a right to know what to expect so we can make decisions about whether our homes are going continue to be habitable.

<u>Response</u>:

Landfill gas odors and their constituents were previously discussed in the responses to A.1.1, A.1.7 and A.1.13.

A.1.40 Verbalized by J. Hogan (T - 1/26/12)

My name is Jim Hogan. I live in the Town of Geneva and I have a business in the City of Geneva.

My family and I bought the land in the town and built a home. When I moved in thirteen years ago it did not smell. It smells terrible now. It smells nearly every day.

I'm about two miles downwind from it. That's unacceptable. That is a health risk perhaps, but beyond that it's a quality of life issue. So we don't need to argue over the language of whether or not we can mitigate the smell. We are not going to mitigate the smell.

I have called Ontario County numerous times and then directed to Casella and gotten nothing out of it. What are they going to do, release more of the chemical misting on 5 & 20? What's in that stuff? What chemical spray are you putting in the air that is going to capture and get rid of the smell?

Most air fresheners are releasing stuff that deadens your sense. Is that what they're releasing? We don't really know.

<u>Response</u>:

Landfill gas odors and their constituents were previously discussed in the responses to A.1.1, A.1.7 and A.1.13. The perimeter misting system used at the site is a safe non-hazardous water based odor neutralizing agent which contains trace essential oils similar to those found in air fresheners. The material also contains an odor absorbing agent. The material is biodegradable, VOC (volatile organics) free, pH neutral, and contains no biocide.

A.1.41 Verbalized by S. Kent (T - 1/26/12)

I'm Sue Kent. I live on County Road 20 which is normally upwind of the dump, but it wasn't this morning. I wish I could have bottled it up and brought it so everybody could have enjoyed it as much as I did this morning.

My sympathies to the people that live downwind. I'm not even concerned so much with the stink as what is attached to it. That odor -that's coming out. It's carrying toxins. Casella has said yes the DEC makes us measure the closed portions of the dump. What's coming off the open portions?

<u>Response</u>:

Landfill gas odors and their constituents were previously discussed in the responses to A.1.1, A.1.7 and A.1.13. A.1.42 Verbalized by C. Hsu (T - 1/26/12)

They do air quality monitoring every quarter. They only take samples from the areas of the landfill that -- so there is no required monitoring -- of the area that is in active operation.

They do that monitoring for methane. There is no required monitoring for hydrogen sulfide. For you to be able to detect hydrogen sulfide it has to be at a certain concentration for your body to respond and say I smell rotten eggs.

So that concentration level I don't know off the top of my head, but that's the minimum concentration. When you can smell it -- part of DEIS says that as long as this county fulfills and Casella fulfills all the required regulations of the state and federal government there will be no impacts on public health.

Now, a lot of us who have been working on environmental regulations realize that for many public health issues there are no regulations. ...

There are so many chemicals in our environment. Some of them have no threshold set. So while it is accurate that the county will strive to meet all required regulations, it is insufficient to assume that the regulations will protect the public.

<u>Response</u>:

Landfill gas odors and their constituents were previously discussed in the responses to A.1.1, A.1.7 and A.1.13. The facility has remained in compliance with applicable regulations, which are designed to protect public health and the environment, and has performed modifications to the landfill as approved by the NYSDEC.

A.1.43 Verbalized by D. Dreshner (T - 1/26/12)

The reason I am here tonight was to just let you know that I'm very concerned about the report about the extra thirty percent gas emissions that they are predicting. I kind of think it's going to be a lot more considering what we have already. It's pretty bad.

The landfill emissions that I have been subjected to land in my basin around my house and they just sit there. This morning I was awakened to the stench of it. I have been doctored for headaches. I can't wear my contacts because my eyes burn, nausea. The headaches are the worst part.

It's too much already and thirty percent more is way too much. I think that the responsibility of Ontario County and for our own township is to make sure that because this mountain is here it needs to be fixed so that we are not having these emissions that our air is clean and clear again.

When I bought our property back in the early -- the late eighties, I'm sorry, we didn't have this smell. We didn't have the problem with the hydrogen sulfide gas coming in the dryer vent into my house. That's how it comes in.

These gas emissions are dangerous to people. If I'm feeling the headaches, I don't know about anybody else, if anybody has had any issues with their eyes burning. I do know that the gas is too heavy and especially in my area where the property is low and the gas drops. It's heavier than air.

<u>Response</u>:

Landfill gas odors and their constituents were previously discussed in the responses to A.1.1, A.1.7 and A.1.13.

A.1.44 Verbalized by Supervisor J. Sheppard (T - 1/26/12)

Over the past ten months late spring, summertime there has been an increased report of odors from the landfill. To myself and my fellow councilmen I suspect -- in the county level and even an acknowledgement of such -- the concern I have despite significant remediation recently to the tune of three hundred thousand dollars and above.

My concern is as the DEC permit is issued for -- of operation for the next seventeen years the termination of the OML at 2028, what recourse does the DEIS have in it as a mitigation effort that would prohibit a like occurrence of what we have experienced the last ten months.

Refer to response to A.1.1, above.

- A.2 Public Health/Health Risks
 - A.2.1 Submitted by R. and L. Pedersen (W 1/20/12)

The DEIS has not adequately addressed the concerns of citizens about perception of food safely [safety].

Response:

As referenced in Section 3.2.4 of the DEIS, the proposed expansion will comply with all NYSDEC established regulations regarding water quality and air quality. Additionally, state and federal regulations (referenced in Section 2.9 of the DEIS) applicable to the Ontario County Landfill have been established to ensure that such projects do not have significant adverse impacts on the health of surrounding communities and populations.

A.2.2 Submitted by J. McLellan (W - 2/9/12)

The smell is extremely overpowering now so it is likely to worsen with an expansion. I am concerned about the incidence of asthma and respiratory problems for those who live within the landfill area, and I believe we should study that and incidence of cancer as well as test the water and air more extensively. The public health part of the DEIS is woefully inadequate.

<u>Response</u>:

Ontario County Health Department together with S2AY Rural Health Network, complete Community Health Assessments (CHA) every three (3) years using the MAPP (Mobilizing for Action through Planning and Partnership) process. The assessment includes a look at Community Health Status Indicators (CHSI), which are determined both by looking at key statistics available regarding various health indicators and by conducting a comprehensive survey among a random sample of community residents to determine their opinions, health behaviors and health needs. Based on the findings of the report a Community Report Card is prepared which identifies areas that need a closer look or areas that indicate favorable results compared to State and/or National Data. Given that a CHA is completed county wide every three (3) years, a supplemental survey is not necessary.

According to the 2010-2013 CHA, respiratory disease rates in the County are better than NYS rates except for Chronic Obstructive Pulmonary Disease (COPD) or Chronic Lower Respiratory Disease (CLRD) where the county has an age adjusted rate of 48.7 compared to the NYS rate of 31.3. According to CLRD death rates, Ontario County's rate of 52.1 is higher than the Western New York Region, Seneca County, Finger Lakes Region and NYS, but lower than the following counties: Schuyler, Steuben, Wayne and Yates. Asthma hospitalizations in the County are lower than the State wide rate. However, based on the COPD Adult Prevention Quality Indicators, hospitalizations in the 14561 zip code (Town of Seneca area) were less than other areas of the county. Similarly based on the Respiratory Adult Prevention Quality Indicators, which includes asthma, COPD and bacterial pneumonia cases, hospitalizations in the 14561 zip code were less than other areas of the county. Based upon this information, it does not appear that the higher rates of respiratory diseases in Ontario County are representative of the incidence in the 14651 zip code (areas surrounding the landfill).

Additionally, fence line monitoring for hydrogen sulfide (H2S) has found that existing concentrations are well below the U.S. Department of Health and Human Services Agency for Toxic Substances and Disease Registry (ATSDR) Minimal Risk Levels and NYSDEC Annual Guidance Concentration levels. In order to evaluate future operations, an ambient air screening assessment was conducted for the full build-out of the expansion landfill. Results from the screening indicate that fugitive hazardous air pollutants (HAPs) assuming peak potential landfill gas generation are less than NYSDEC annual guidance concentration levels.

A.2.3 Submitted by J. Tornow (W - 2/11/12)

Public health, the effect of constant odor on tourism and quality of life are not addressed adequately, if at all, in the DEIS.

<u>Response</u>:

Refer to responses to A.2.2 and A.4.1.

A.2.4 Submitted by K. Mitchell-DePorter (W - 1/25/12)

What are the health effects on our community with waste penetrating the ground, water and air supplies?

<u>Response</u>:

As referenced in Section 3.2.4 of the DEIS, the proposed expansion will comply with all NYSDEC established regulations regarding water quality and air quality. Additionally, state and federal regulations (referenced in Section 2.9 of the DEIS) applicable to the Ontario County Landfill have been established to ensure that such projects do not have significant adverse impacts on the health of surrounding communities and populations.

Refer to responses to A.2.2, above, and A.2.5, below, for additional information.

A.2.5 Submitted by R. Hoyt (W -2/28/12)

I have searched the draft environmental impact statement for answers to my questions but have not found them. I have learned, however, a name for people downwind of the landfill: we are "potential receptors of fugitive emissions". ... The DEIS repeatedly refers to minimizing, and "mitigating to the greatest extent possible" such emissions, but so far as I can determine never says what we can expect the frequency and intensity of fugitive emissions to be. Minimize and mitigate do not mean prevent. With respect to public health risks, the document simply asserts landfill operations are in compliance with New York State DEC (6NYCRR part 360) and federal (SEQRA 40 CFR-60 subpart www) regulations. In the time I have had to review those regulations, I do not find a basis to be reassured that airborne emissions from the landfill will not pose a significant health risk to people (potential receptors).

If the landfill is expanded then emissions, including the fugitive kind, obviously will increase. I also wonder about the by-products of combustion of the captured emissions which enter the atmosphere. Are there emissions that we don't smell that might still hurt us? I respectfully request that the draft environmental impact statement be rejected on the basis of its failure adequately to address the expected frequency, intensity and health risk of the increased airborne emissions.

As a city resident, I need to know what to expect regarding quality of life and health effects of future landfill emissions. The current DEIS does not provide that information.

<u>Response</u>:

Refer to response to A.2.2 Ontario County Health Department together with S2AY Rural Health Network, complete Community Health Assessments (CHA) every three (3) years using the MAPP (Mobilizing for Action through Planning and Partnership) process. The assessment includes a look at Community Health Status Indicators (CHSI), which are determined both by looking at key statistics available regarding various health indicators and by conducting a comprehensive survey among a random sample of community residents to determine their opinions, health behaviors and health needs. Based on the findings of the report a Community Report Card is prepared which identifies areas that need a closer look or areas that indicate favorable results compared to State and/or National Data. Given that a CHA is completed county wide every three (3) years, a supplemental survey is not necessary.

According to the 2010-2013 CHA, respiratory disease rates in the County are better than NYS rates except for Chronic obstructive pulmonary disease (COPD) or Chronic Lower Respiratory Disease (CLRD) where the county has an age adjusted rate of 48.7 compared to the NYS rate of 31.3. According to CLRD death rates, Ontario County's rate of 52.1 is higher than the Western New York Region, Seneca County, Finger Lakes Region and NYS, but lower than the following counties: Schuyler, Steuben, Wayne and Yates. Asthma hospitalizations in the County are lower than the State wide rate. However, based on the COPD Adult Prevention Quality Indicators, hospitalizations in the 14561 zip code (Town of Seneca area) were less than other areas of the county. Similarly based on the Respiratory Adult Prevention Quality Indicators, which includes asthma, COPD and bacterial pneumonia cases, hospitalizations in the 14561 zip code were less than other areas of the county. Based upon this information, it does not appear that the higher rates of respiratory diseases in Ontario County are representative of the incidence in the 14651 zip code (areas surrounding the landfill).

Based on various studies reviewed, key findings related to landfill gas health impacts are summarized below:

- Landfill gas constituents are typically found in ambient air at low concentrations and are unlikely to cause health effects.
- Odor-producing chemicals (i.e., hydrogen sulfide and ammonia) are not likely to produce long-term adverse health effects at the levels typically associated with landfill emissions. The odors associated with these chemicals can, however, cause acute (short-term) effects, such as nausea and headaches. Acute effects from other chemicals found in landfill gas are usually produced only when an individual is exposed at relatively high concentrations (i.e., at concentrations greater than those expected to be present in ambient air near a landfill). Acute effects are usually reversed when the odor or exposure ends.
- Hydrogen Sulfide. Researchers have not identified any long-term health effects associated with exposure to the low-level hydrogen sulfide concentrations that normally occur in communities near landfills.
- Ammonia. Concentrations of ammonia in the ambient air near a landfill are expected to be well below the levels at which any adverse health effects are expected to occur.
- NMOCs. In general, levels of individual landfill gases in ambient air are not likely to reach harmful levels. In other words, low levels of landfill gases are unlikely to cause obvious, immediate health effects.

A.2.6 Submitted by T. Allen (W -2/19/12)

There is no significant concern for health hazards and odors impacting our area written into the DEIS.

<u>Response</u>:

Public health and odors have been addressed in sections 2.6.5.3, 2.9 and 3.2.4 of the DEIS and are also discussed above in comments A.1.1, A.1.7, and A.1.13.

A.2.7 Submitted by R. Eaton (W -1/18/12)

Casella is not following the DEC Operational Requirements Part 360 Subpart 1.14 with the present operation. It can only get worse if they expand.

Section M, Odor Control: States odors must be effectively controlled so that they do not constitute nuisances or hazards to health, safety or property. The town has received numerous complaints of the odor from the dump, some complaints at town board meetings. These odors do constitute a nuisance and cause a decrease in property values for properties around the land fill. The smell has been identified by Casella's people as Hydrogen Sulfide Gas. OSHA describes hydrogen sulfide gas as an extremely dangerous gas with a rotten egg smell. OSHA describes Hydrogen Sulfide as both an irritant and a chemical asphyxiate with effects on both oxygen utilization and the central nervous system. Its health effects can vary depending on the level and duration of exposure. Repeated exposure can result in health effects occurring at levels that were previously tolerated without effect. Other references cite the gas as dangerous to persons with asthma or other breathing related disorders, as well as the elderly.

<u>Response</u>:

Refer to responses to A.1.15, A.2.2 and A.2.5, above.

A.2.8 Submitted by R. Camera (W - 2/20/12)

The current DEIS makes no attempt to model the deposition area of windswept particulates in the form of dust, ash, and spores and assure that population centers are safe. We do not know how far these particles are carried or their potential toxicity.

The current DEIS (Section 3.2.4.3) makes the assumption that if State and Federal guidelines are followed there is no public health hazard. We feel this particular assumption is faulty and needs to be addressed in considerably more detail.

A recent article in the New York Times discusses some of the concerns that are emerging around the particulate question which the DEIS currently doesn't address. Gaseous byproducts that were thought to

dissipate quickly are now found to evaporate more slowly and persist longer than anyone had thought.

<u>Response</u>:

Emissions of fugitive particulate matter and landfill gas constituents are presented in the Attachment G of the DEIS. Based on calculated emission levels, downwind dispersion modeling of particulate matter is not required. Additional information regarding human health impacts are referenced in the responses to comments A.1.1, A.1.7, and A.2.5 above.

A.2.9 Submitted by C. Hsu (W – 2/21/12)

The public health section does not address known public health issues associated with landfills. Even if the regulations are followed, potential public health issues can arise. The most common public health issues should be identified and specific mitigation strategies described. These would include food safety associated with increased risk of local crops being exposed to bird feces and human wastes; increases in hazardous air pollutants; potentials for explosions; etc.

<u>Response</u>:

Refer to response to A.2.2 and A.2.5, above.

A.2.10 Submitted by W. Lamboy (W - 2/19/12)

The Dump is a Health Hazard because it is releasing unknown airborne substances of unknown toxicity. Anyone with scientific training in human biology knows that the reasons things smell bad is BECAUSE THEY ARE BAD FOR US! We don't need million dollar studies to prove that, it can be deduced from the principles of human evolution. Casella has claimed decreased generation of methane (which is odorless and colorless) but even if true, it has no necessary connection to creation of the odoriferous substances, which are most likely organic sulfur-containing compounds.

<u>Response</u>:

Refer to response to A.2.2 and A.2.5, above.

A.2.11 Submitted by J. and J. Gerling (W - 2/20/12)

Health Concerns: There is so much that we cannot know or understand about the long term impacts of particles in the air, unusual weather events and storm water runoff. What safeguards are being built in to ensure that those who live in the surrounding area will be protected from harmful pollutants and chemicals?

<u>Response</u>:

Refer to response to A.2.2 and A.2.5, above.

A.2.12 Submitted by D. Dressner (W - 2/20/12)

The odors from the toxic emissions are not only detected in Geneva, Seneca Castle and Flint but are smelled in Clifton Springs and Phelps, and all the way to Shortsville. It is not just a bad odor it is toxic gasses that can kill a human in just one or 2 breaths in high concentrations. But if one has a compromised respiratory system and unwittingly goes through a plume of this toxic stench it could kill. I did not see anything about the health issues in the DEIS!!

My family and I have been frequently subjected to burning eyes, nausea, headaches, lack of sleep, My home has been invaded by the stench of the toxic gas Hydrogen Sulfide, the odorless Methane, and what ever other gasses that are being emitted into my dryer vent pocketing inside my dryer! The gasses seep through any crack and devours our air!!!

The gasses collect on the low land of my property and travel along the Flint Creek troth. They stay there until a breeze moves it.

How do we know for sure that there is no radiation in the landfill? Just because Casella says it isn't there? If this company cannot be responsible to construct a landfill that will contain the gasses they created by over burdening the landfill with refuse from other counties, other states, and other countries how can they be trusted not to bring in unforbidden refuse??

<u>Response</u>:

Refer to response to A.2.2 and A.2.5, above.

A.2.13 Submitted by D. Dressner (W - 2/20/12)

Let's talk about something I didn't see in this DEIS report. I didn't see any real information regarding the public Health issues of the landfill gas emissions. What happens when these gasses that are heavier than air and are water soluble drop onto our crops? Or are absorbed into the mucous membranes of our milk producing cattle. What happens when there is a disease outbreak of astronomical proportions and it is linked to the landfill in the Finger Lakes Region? What happens when there is a cluster of increased incidents of severe respiratory diseases, like pulmonary edema, asthma, cancer, sudden death when exerting energy while doing yard work, or miscarriages?

<u>Response</u>:

Refer to responses to A.1.7 and A.1.13, above.

A.2.14 Submitted by S. Foster (W - 2/21/12)

Section 3.2.4 Public Health (pp 92-93) -- This section is woefully inadequate. It does not raise a single potential public health issue. The County should establish a baseline set of health data for multiple locations in the vicinity of the landfill and then be required to monitor changes in public health indicators over time. The draft EIS should provide a mitigation strategy for any health problems that increase above this baseline set of data during the proposed expansion.

<u>Response</u>:

Refer to responses to A.2.2 and A.2.5, above.

A.2.15 Submitted by L. Henry (W - 2/20/12)

The public need and benefits should be paramount in any discussion of the landfill and its expansion, and the public health, safety and general welfare are first in line of concern. The issue of funds generated from importing trash/garbage is last in line. The current discussion of this issue in the DEIS is inadequate and incomplete.

The public needs and benefits as they relate to the landfill expansion were discussed in Section 1.6 of the DEIS. Responses A.2.1 and A.2.2, above, discuss public health and safety in more detail.

A.2.16 Submitted by F. Sonnenfeld (W - 2/17/12)

While the relief from the Casella lease payments to the taxpayers of Ontario County will be about 1%, based on the 2012 Budget of over \$200,000,000, or about \$200,000, such saving ignores the costs to the health of these taxpayers and their families (about 100,000 persons reside in Ontario County) arising from defects due to pre mature births, asthma, emphysema, cancer, and myriad of other ills associated with air, water and soil pollution. Conceding that not all of these maladies will be due to the pollution, but even if 10% of the per person annual public health care cost in the Finger Lakes Region were attributed to the various pollutions, the cost in public health care per year would exceed any savings from the revenues of the landfill. The per person average annual health care cost for the United States is about \$2,000 according to recent estimates by the National Institute of Health. The per person annual cost in the Finger Lakes region is about \$5,000.

<u>Response</u>:

Statements noted. Also, please refer to responses to A.1.7, A.1.13, A.2.2, and A.2.5.

A.2.17 Submitted by F. Sonnenfeld (W - 2/17/12)

The DEIS Fails to Discuss in a Meaningful Way the Adverse Effects of the Expanded Landfill On the Health of Ontario County Residents. §3.2 at Pages 92 and 93 of the DEIS does not indicate what investigations were made as to the effect on the public health of Ontario County between 2003 when the present operation of the landfill commenced and the present time. New York State Department of Health "(DOH") and the local hospitals serving Ontario County such as Geneva General and Rochester General maintain statistics as to many diseases, among them, asthma, lung cancer, kidney and liver failure, some of which diseases may have shown an increase in the eight years of the Casella operation of the Landfill. More importantly, I am informed that pre mature births and resultant birth defects are the "canary in the coal mine" warning of the disastrous effects of pollution. The statistics on such births are a critical test in determining adverse environmental impact. These statistics are maintained by the local hospitals, and should have been reported upon in the DEIS.

<u>Response</u>:

Refer to responses to A.1.7, A.1.13, A.2.2, and A.2.5, above.

A.2.18 Submitted by F. Sonnenfeld (W - 2/17/12)

An important aspect of care for the environment is the financial ability of the operator of the Landfill to execute its obligations. According to the Operation, Maintenance and Lease Agreement ("OML") between the County and Casella, Casella did post financial security in the amount of the last two years of lease payments which is the amount of \$4,000,000 and that Casella is also obligated to maintain insurance premiums on such risks, among others, as injuries to employees and other persons and damage to non landfill property. I question the adequacy of the \$4,000,000 financial security when one considers the damage which can be done to the 30,000 or more people living within three or four miles radius of the Landfill. If only 1% of the 30,000 were affected (or 300 persons), there would only be available \$14,200 per person. This is a small sum to compensate for health care costs when according to the New York State Department of Health Asthma Surveillance Summary Report, October 2009, at page 14, for the year 2007 the average hospitalization cost per person in New York State was about \$14,100. Based upon my understanding of current hospitalization costs, costs of pre mature births and birth defects can far exceed this stun of \$14,100. Diseases such as liver and kidney disease caused by toxic substances polluting the air, water and soil can have far higher hospitalization and physician costs.

<u>Response</u>:

Statements noted. Also refer to responses to A.2.2 and A.2.5 regarding public health impacts.

A.2.19 Submitted by A. and B. Phillips (W - 2/21/12)

Section 3.1.5.2 of the draft EIS states "Emissions from leachate storage may increase slightly due to the potential for increased leachate generation and storage resulting from the landfill expansion." Attachment G predicts estimates of volatile organic compounds (VOCs) from leachate will increase from a baseline of 3,004 lbs to 4,006 lbs. This is 25% increase, not a slight increase. Attachment G also provides calculations that predict that fugitive emissions of landfill gas will increase from 7,445 tons of methane per year to 10,522 tons of methane per year. This is a 29% increase in emissions. Please provide a table illustrating how estimates of Hazardous Air Pollutants (HAPs) in leachate and fugitive gas emissions combined will change from current levels to final levels after the proposed expansion I complete. Please describe the potential public health risks associated with each HAP and describe mitigation strategies to minimize these risks.

<u>Response</u>:

Refer to response to A.2.7 and A.1.29, above.

A.2.20 Submitted by E. Lavin (W - 2/21/12)

I believe the DEIS to be deficient and lacking in addressing concerns of Health, Safety and the negative impact of garbage importation in general into to the Finger Lake Region. Mega-landfilling is producing unknown amounts of trace components in fugitive gas emissions from the site. The health effects of these emissions are unknown and not "a non-issue" as stated in the DEIS.

Mega-landfilling is producing large amount of methane and h2S, gases not conducive to a health environment and with unknown consequences over long lifespans. The DEIS states they are safe levels, this is not a factual statement. Air quality impacts in general are poorly evaluated and mitigation plans not developed.

<u>Response</u>:

Refer to response to A.2.5, above.

A.2.21 Submitted by R. Kriss (W - 2/21/12)

Health impacts of the expansion have not been addressed in any meaningful way. It is no secret that the present landfill is giving off an intolerable stench downwind of the facility, despite repeated assurances in the past that this would not occur. Neither the operator nor county officials have been able to identify the chemical constituents, the toxicity of these emissions, or their impacts on health, to say nothing of those of future airborne and waterborne pollutants. I find it inconceivable that a DEIS could be accepted for a further expansion of this facility without a serious study of these health impacts.

<u>Response</u>:

Statements noted.

A discussion of the landfill gas constituents and their health impacts were previously discussed in the responses A.1.1, A.1.7, A.1.13, A.2.2, and A.2.5 above.

A.2.21 Submitted by T. Bulger (W - 2/21/12)

Health care in the US has been twice as expensive as for any other nation. Prior to our Affordable Health Care Act, we were heavily reactive to death and disease, not preventive. As in Delaware's Indian River Power Plant incident, cancer clusters are usually discovered because an individual reports suspicions to the Health Department. Whereas our landfill is releasing known carcinogens, and particulate matter shown to cause cardio-pulmonary disease (http://www.medscape.org/viewarticle/584109) would it be cost effective and responsible to now be monitoring the health of our downwind

population? Early detection reduces consequences. Not just human consequences, but financial consequences. If the county faces a barrage of law suits for wrongful death, how much money will the landfill have saved us?

<u>Response</u>:

Refer to responses to A.2.2 and A.2.5, above.

A.2.22 Submitted by G. Foster (W - 2/21/12)

Section 3.2.4 Public Health (pp 92-93) - This section is woefully inadequate. Raise any public health issues you think should have been addressed in this section because this section does not raise a single potential public health issue. At the most recent City of Canandaigua Council Meeting a suggestion was made that the County should establish a baseline set of health data for multiple locations in the vicinity of the landfill and then be required to monitor changes in public health indicators over time. The draft EIS should provide a mitigation strategy for any health problems that increase above this baseline set of data during the proposed expansion.

<u>Response</u>:

Refer to responses to A.2.2 and A.2.5, above.

A.2.23 Verbalized by S. Hey (T - 1/26/12)

A question I have is I know the landfill is regulated, but are quality tests done and how often are air quality tests done?

I'm worried about my kids. I have young kids. Are they going to get cancer? What is going on on an ongoing basis for air quality? Does anyone know? Are there any tests done?

<u>Response</u>:

As referenced in Section 3.2.4 of the DEIS, the proposed expansion will comply with all NYSDEC established regulations regarding air quality. Additionally, state and federal regulations (referenced in Section 2.9 of the DEIS) applicable to the Ontario County Landfill have been established to ensure that such projects do not have significant adverse impacts on the health of surrounding communities and populations.

- A.3 Out of County Contents of Landfill
 - A.3.1 Submitted by D. McGavern (W 1/26/12)

Opening up our land fill to trash from outside Ontario County pays for some services to Ontario County residents. I believe this action is short sighted.

<u>Response</u>:

Statements noted. The OML between the County and Casella prohibits the County from passing any laws or legislation prohibiting the disposal of any material as long as it is permitted by Part 360. This OML agreement underwent the State Environmental Quality Review process prior to being executed.

A.3.2 Submitted by G. Young (W - 1/21/12)

I will never understand how our elected officials can legitimately support the endeavors of a private, out-of-state business (Casella) over the objections of their citizens. If we ban the import of out-of-region, outof-state, out-of-country trash, the landfill will suit our (Ontario Co.) needs quite nicely for a good long time. ...Couldn't County employees be trained to run the landfill, with private, existing haulers collecting municipal trash? I can't believe we couldn't do it cheaper and smaller by keeping the trash, the collection and the landfill management LOCAL!

<u>Response</u>:

Prior to the lease agreement with Casella, the County operated the landfill utilizing County staff and resources for approximately 27 years. The County questioned the efficiency of operating the facility in this manner, and made the decision to issue an RFP for operation of the landfill to determine if a more economical alternative was available. From the proposals received through the RFP process, the County determined that operation by Casella was the most economically beneficial alternative for management of the landfill. As referenced in Section 2.3 of the DEIS, Casella operates the Ontario County Landfill under a 25 year lease agreement with Ontario County. This agreement underwent the State Environmental Quality Review process prior to being executed.

A.3.3 Submitted by J. Vaughn (W - 1/8/12)

It is time to call a halt to the dismal economic foolishness of accepting garbage and sludge from communities hundreds of miles away as a substitute for sustainable, local businesses. I remember when we did not have the money in the budget from this imported garbage and we managed to get by without it. Or the thousands of trucks wasting thousands of gallons of diesel fuel to bring garbage from far away to dump it in our county.

<u>Response</u>:

As referenced in Section 2.2.1 of the DEIS, there is a regional component to the flow of waste, which is not confined to a single county. The Part 360 regulations, combined with changes in the industry led to replacement of open dumps with larger, regional, highly engineered and controlled facilities. The OML between the County and Casella, which prohibits the County from passing any laws or legislation prohibiting the disposal of any material as long as it is permitted by Part 360, has been reviewed under SEQRA and has been found to be acceptable.

A.3.4 Submitted by K. Vaughn (W - 1/17/12)

I am sure that the recent increase in economic prosperity in Geneva is due to an increase in tourism due to the wine industry and our local natural beauties. Neither of these is enhanced by accepting tons of trash from New Jersey and New York city. In fact, I support a national law requiring municipalities and their surrounding areas to keep their trash and deal with it within 50 miles of its source. I would support an increase in recycling of local trash as opposed to imported trash.

<u>Response</u>:

Refer to response to A.3.3, above.

A.3.5 Submitted by K. Garcia (W - 2/13/12)

Slow down the growth of the landfill by increasing tipping fees, restricting the waste collection region and phasing-in the expansion.

Statements noted. The OML between Ontario County and Casella limits the increase of tipping fees for in County waste to the annual consumer price index, which would not make it financially viable to operate the facility through managing in County waste alone.

A.3.6 Submitted by K. Rayburn (W - 1/26/12)

I am opposed to any plans to expand the Ontario County landfill. Instead, I suggest that only residents of Ontario County be allowed to use it. Ontario County is not a dump for the rest of the state and Canada. Other counties and countries should be responsible for the disposal of their own trash on their own soil.

<u>Response</u>:

Refer to response to A.3.3, above.

A.3.7 Submitted by M. Francis (W - 1/18/12)

From what I've read, it seems that we are accepting refuse from all over New York State. ... I do not understand why we in the Finger Lakes should be a "dumping ground" for other parts of the state.

<u>Response</u>:

Refer to response to A.3.3, above.

A.3.8 Submitted by P. and S. Kellogg (W-1/24/12)

WE DO NOT NEED TO BE THE DUMPING GROUND FOR TRASH FROM OUTSIDE OUR AREA. THE MONEY WE RECEIVE FROM DUMPING WILL IN NO WAY COMPENSATE FOR THE DAMAGE IT CAUSES.

<u>Response</u>:

Refer to response to A.3.3, above.

A.3.9 Submitted by T. Allen (W -1/31/12)

As I see it, Casella is not able to control the volume of trash and sludge it is now accepting. How can we expect them to control any continuing increase in the future? ...He [Supervisor Evangelista] also said that the volume of garbage and sludge coming into the landfill is more than Casella can handle.

<u>Response</u>:

As referenced in Section 2.2.2 of the DEIS, wastes to be accepted by the Ontario County Landfill in the expanded landfill will be identical to the waste stream presently authorized by the NYSDEC for the existing operations.

The composition of the future waste stream is not anticipated to differ significantly from the current composition as reported to the NYSDEC in the Landfill Annual Reports, with the exception of a fairly uniform reduction municipal solid waste and construction and demolition debris as a result of increased diversion efforts.

A.3.10 Submitted by K. Bennett Roll (W - 2/21/12)

I am concerned that the DEIS does not contain justification for an expansion based on the capacity of the landfill space remaining, if only Ontario County waste were disposed there. I would request that all contributors to the waste be subject to additional controls imposed by the State and County for exporters of waste to wit: Strict controls on recycling, along with waste reductions of 20% per year, per waste unit, beginning with the first year of approved LSWM plans.

<u>Response</u>:

NYSDEC is in the process of updating the 6 NYCRR Part 360 regulations regarding waste reduction goals. The Ontario County Landfill will abide by the approved regulations once enacted.

A.3.11 Submitted by K. Whiteleather (W - 2/20/12)

I would like to see better numbers on capacity, expected contributions from Ontario County, expected contributions from other

sources on a state by state (or country) basis. ... I would like to know explicitly just how much of the capacity is being filled by those customers safe from any of the adverse effects.

<u>Response</u>:

This information is included in the Annual Reports completed each year for the facility and submitted to the NYSDEC, all of which are publicly available.

A.3.12 Submitted by J. O'Brien (W - 2/21/12)

The draft EIS frequently uses old data, even though more recent data is available. The old data is not a realistic predictor of future impacts. The landfill increased its allowable tonnage to 2,999 tons per day in 2008. Environmental impact predictions for the future should be based on data collected after the tonnage increase.

<u>Response</u>:

Refer to response A.1.27, above.

A.3.13 Submitted by D. Dressner (W - 2/20/12)

If the Land Fill was being run as it was intended it could have served Ontario County for many, many years and maintain acceptable levels. Ontario County would have been more careful and cognizant of the needs of the Finger lakes and Her residents. ...It is deplorable that Canada is allowed to bring it's sludge to our country. It is worse that Canada is allowed to pollute our air, jeopardize the citizens of the United States by traveling on our highways with their sludge and allowed to dump foreign sludge and anaerobic bacteria in The Finger Lakes Region!! It is also deplorable that NYC and states on the east coast are allowed to dump their refuse in our county. They can keep their own garbage and deal with it accordingly.

Response:

Refer to response to A.3.3, above. Also, refer to responses to A.2.2 and A.2.5 regarding public health impacts.

A.3.14 Submitted by S. Foster (W - 2/21/12)

Section 7.0 Alternatives Analysis (pp 118-126)

The Operations, Management and Lease Agreement (OML), (the contract between Ontario County and Casella Waste Systems, Inc., operators of the landfill) requires that Casella hold 100,000 tons per year of space as "Reserved Capacity" for waste originating in Ontario County. According to the 2010 Annual Report filed by Casella, Ontario County contributed approximately 78,000 tons of waste to the landfill in 2010.

A table should be provided illustrating the total waste contributed to the landfill from Ontario County for each year between 2003-2011 and how much of the reserve capacity is left for each year.

An Alternative in this section should be included that describes how much reserve capacity Ontario County has accumulated since 2003, and how much reserve capacity Ontario County would accumulate by 2028 if the County reduced its production of waste by 10, 20, 30 and 40%.

Describe how long this accumulated reserve capacity would last under each waste reduction scenario. Include another Alternative that estimates, if no expansion were allowed, how long the current accumulated reserve capacity would last under each waste reduction scenario in terms of providing future landfill space for Ontario County's waste.

An alternative should be provided that describes how long the existing permitted space (5,856,000 cubic yards) would last if only Ontario County waste were allowed in the landfill.

Detailed information on the economic pros and cons of this alternative should be provided.

Response:

The requested Alternative has already been evaluated and rejected by the County when it entered into the OML and elected to privatize the landfill. Per the OML, Casella is required to provide for the disposal of up to 100,000 tons of waste generated within Ontario County each year. This provision does not require that the material be disposed of within the Ontario County Landfill and does not outline a system in which unused annual disposal capacity accumulates on an annual basis. Therefore there is not a reserve capacity from which the information requested can be obtained.

See also response to A.3.11.

A.3.15 Submitted by E. Halling (W - 2/12/12)

There should be a goal to reduce the waste coming to the landfill. Energy conservation has finally become a top priority in public policy making. However, it does not exist in the DEIS. There should be limits on the distance that trash is trucked. Has anyone calculated the thousands of gallons of fuel that are wasted each day to transport trash to the Ontario County Landfill? Other counties, states and Canada need to develop their own landfill sites so as to reduce the fuel used to transport waste.

<u>Response</u>:

As referenced in Section 1.7 of the DEIS, Ontario County recently prepared a Draft Local Solid Waste Management Plan (SWMP) to provide the Ontario County constituency with a comprehensive, integrated program for managing solid waste, which is consistent with the New York State Hierarchy for Solid Waste Management, in an economically sound and environmentally safe manner. The plan will also establish countywide solid waste goals and objectives in accordance with state law requiring the development of a waste reduction plan. Significant goals include the continued use of the landfill as the primary disposal option for nonrecyclable/recoverable waste, consideration of mandated recycling programs for county owned facilities, and countywide programs for composting and recycling.

Refer to response to A.3.3, above.

A.3.16 Submitted by F. Sonnenfeld (W - 2/13/12)

If the landfill's acceptance of waste were limited to Ontario County alone, it would appear from rough calculations that there would be no need for expansion for over ten, if not twenty years, and nearly ten years if the neighboring counties of Monroe, Wayne and Tompkins were also included. (See also DEIS page 32 where statistics as to site capacity and
expected life are discussed and which statistics seems to me to be confusing and equivocal.)

<u>Response</u>:

Refer to responses to A.3.3 and A.3.14, above.

A.3.17 Submitted by R. Kiss (W - 2/19/12)

The Main Report: "Solutions for waste management for county residents and businesses will be necessary in four years."

If the contribution to the landfill were almost completely from Ontario County, since it is less than a tenth of the total we can assume the landfill would not reach capacity for perhaps another 40 years. Reducing the total amount of waste is a better long-term solution than filling it as fast as possible for short-term profits which may not balance against long-term costs. Future costs are something the main report does not expand upon so cost benefits for expansion are not easily determined.

Currently two counties put more in this landfill than Ontario County residents. Monroe and Rockland County. It is important to keep in mind that Rockland County accounted for 30% of all waste put in the land fill in 2010 but less than 12% in 2008. Clearly Ontario County is becoming Rockland's dumping ground at an increasing rate and it seems likely that that number was higher in 2011 given the current trends. While it is true that Rockland's Ramapo landfill is a superfund site due to past dumping of hazardous materials that doesn't mean that their problems should be handed off to Ontario County.

Equally interesting the report makes no attempt to describe how the four years was arrived at - nor is there any attempt to project the effects that might come from reducing current out of county disposal and how that might effect the timeline. As well, the date is not projected against the current projected increases nor does it attempt to take into account the effect, if any, on the requested expansion.

<u>Response</u>:

Refer to response to A.3.3, above.

A.3.18 Submitted by R. Kiss (W - 2/19/12)

If it is true that the current landfill only has four years before it is filled to capacity, the best plan the one not even hinted at in the report. The best plan is to dramatically reduce the contributions made by those that are far away from the landfill's effect. Which of course reduces shortterm profits derived from tossing the people near or or businesses relying on people passing through the Town of Seneca under the bus. While it it not likely that all external sources will be eliminated, it that were true the currently projected four years left until being full then the number would be closer to forty if only including Ontario County waste. That one change would represent a better long-term solution than making Ontario County the dumping ground for other counties. The so-called "no plan" would last a long time without the inclusion of outside waste.

<u>Response</u>:

While section 7.0 (Alternatives Analysis) of the DEIS does not give a detailed financial analysis of every option for waste disposal, it speaks to the financial risks and implications of each alternative based on knowledge of the solid waste market and market behavior in general. In addition to the financial impacts discussed in the Alternatives Analysis, market behavior implies that the elimination of the Ontario County Landfill in the landscape of waste disposal options within New York State would most likely result in a decline in supply and therefore an increase in tipping fees across the state and most sharply in the vicinity of Ontario County. This would likely result in higher disposal fees at area landfills in addition to the transportation fees associated with the export of waste to another landfill should the Ontario County facility close. Refer to response to A.3.3, above.

A.3.19 Submitted by A. and B. Phillips (W - 2/21/12)

The Operations, Management and Lease Agreement (OML), (the contract between Ontario County and Casella Waste Systems, Inc., operators of the landfill) requires that Casella hold 100,000 tons per year of space as "Reserved Capacity" for waste originating in Ontario County. According to the 2010 Annual Report filed by Casella, Ontario County contributed approximately 78,000 tons of waste to the landfill in 2010.

Please provide a table illustrating the total waste contributed to the landfill from Ontario County for each year between 2003-2011 and how much of the reserve capacity is left for each year. Include an Alternative in this section that describes how much reserve capacity Ontario County has accumulated since 2003, and how much reserve capacity Ontario County would accumulate by 2028 if the County reduced its production of waste by 10, 20, 30 and 40%. Describe how long this accumulated reserve capacity would last under each waste reduction scenario. Include another Alternative that estimates, if no expansion were allowed, how long the current accumulated reserve capacity would last under each waste reduction scenario in terms of providing future landfill space for Ontario County's waste.

Please provide an alternative that describes how long the existing permitted space (5,856,000 cubic yards) would last if only Ontario County waste were allowed in the landfill.(By my estimates, the remaining constructed site capacity is 3,106,000 cubic yards. Even without any reduction in waste produced within Ontario County, at 79,000 cubic yards per year, it would take 39 years for Ontario County to fill the existing constructed capacity. If you include the permitted and not yet constructed capacity, 2,750,00 cubic yards, it would take Ontario County 74 years to fill the permitted capacity.) Please provide detailed information on the economic pros and cons of this Alternative.

<u>Response</u>:

Refer to response to A.3.14, above.

A.3.20 Submitted by E. Bihn (W - 2/21/12)

It would be one thing if we were only taking care of our own garbage, but taking garbage from everywhere else that has decided they do not want the smell, environmental risks, and other negative impacts is just wrong.

Response:

Statements noted. Refer to responses to A.1.7, A.1.13, A.2.2, A.2.5, and A.3.3, above.

A.3.21 Submitted by D. Connelly (W - 2/6/12)

I would like to add my name to the list of people who are wondering why we need to accept 85% of the Trash in The Ontario County landfill from Municipalities outside of Ontario County. ... I would like the Board to reconsider the quantity of Garbage we receive from outside the County...

<u>Response</u>:

Statements noted.

A.3.22 Submitted by J. Halling (W - 2/12/12)

There should be a goal to reduce the waste coming to the landfill. Energy conservation has finally become a top priority in public policy making. However, it does not exist in the DEIS. There should be limits on the distance that trash is trucked. Has anyone calculated the thousands of gallons of fuel that are wasted each day to transport trash to the Ontario County Landfill? Other counties, states and Canada need to develop their own landfill sites so as to reduce the fuel used to transport waste.

Response:

Refer to response to A.3.15, above.

A.3.23 Submitted by J. and J. Jones (W -1/31/12)

The landfill should only be used by Ontario County residents. We should not allow the lure of money to bring in tons of garbage from other localities. We must think of the pollution involved, plus the fact that when it is filled to capacity, then what? We look for a place to take OUR garbage? If we don't think ahead and take care of what we have it will be too late to do anything about it.

Response:

Refer to response to A.3.3, above.

A.3.24 Submitted by S. McGavern (W -1/27/12)

I strongly object to the expansion of the landfill in Ontario County. There is not a day that I drive through the city and huge loads of trash are being hauled by mammoth trucks down Main Street, on their way to the Ontario County Landfill. I feel there are long term consequences to this practice that we are not even aware of. This can't be good for the long term health of our Finger Lakes environment. It also does nothing for our image as a destination, for our county to be one of the largest dumping grounds in the state, receiving everyone else's garbage.

Please consider the long term outlook when making decisions for the taxpayers of Ontario County and not just a short term "fix" for our budget problems. There must be another way - even additional taxes! <u>Response</u>:

Refer to responses to A.2.2, A.2.5, and A.3.3, above, as well as the response to A.5.1, below.

A.3.25 Submitted by V. Miser (W -1/24/12)

Virginia W. Miser wishes to express feelings on the landfill coming from areas outside of Ontario County.

We have allowed this for a period of time.....Let us discontinue filling our land with others trash and let some other area take on the responsibility for a time..... KEEP OUR AREA FOR JUST OUR DISPOSABLES.

<u>Response</u>:

Refer to response to A.3.3, above.

A.3.26 Submitted by W. Blake (W -1/24/12)

I am writing to request that the importation of trash or waste from outside Ontario County to the Ontario County Landfill be stopped. The landfill should be a landfill and not a money generating venture. The energy use and wear and tear on roads, etc is counterproductive to conservation. The people [sic] generating this trash and waste should take care of it themselves. The Ontario County landfill should be used only by Ontario County residents. It is completely wrong to accelerate the growth of this landfill. Possible future pollution will affect not only us but future generations.

<u>Response</u>:

Refer to response to A.3.3, above.

A.3.27 Submitted by J. Freedman (W -2/20/12)

With regard to the proposed expansion of the Ontario County landfill, I believe such an expansion poses threats to our environment, public health and safety. It may also harm tourism! Since the majority of the trash would be accepted from municipalities outside Ontario County, we need to instead focus on our own county. Please stop accepting trash from outside the county, which would eliminate the need for the landfill's expansion.

<u>Response</u>:

Refer to responses to A.2.2, A.2.5, and A.3.3, above. For information regarding impacts to tourism, refer to response to A.4.1.

A.3.28 Verbalized by J. Thomas (T - 1/26/12)

I believe the biggest worry we have in this county is our landfill. The county landfill was started for the people of Ontario County and now it's for New York City, all of New York State, Canada, Pennsylvania, where else?

I hope -- you know, this landfill is about like cancer. The longer you leave it the bigger it gets and the more it grows and the worse it gets. Stop it now.

This is too beautiful an area to pollute and have such an eye sore as that spot is. It smells. It looks terrible and it's getting worse.

<u>Response</u>:

Refer to response to A.3.3, above.

A.3.29 Verbalized by S. Kent (T - 1/26/12)

Our concern is the mounds of garbage from other places with all due respect to the gentleman who says we need the landfills. We don't need them to bring in Canada's garbage. They could find another way to make money.

<u>Response</u>:

Refer to response to A.3.3, above.

A.4 Detriment to Tourism/Economy Concerns

A.4.1 Submitted by J. Tornow (W - 2/11/12)

Public health, the effect of constant odor on tourism and quality of life are not addressed adequately, if at all, in the DEIS.

<u>Response</u>:

Refer to response to A.2.2, above.

Tourism data for the area does not indicate that the landfill has a negative effect on Ontario County's prominent tourism industry. Among other accolades, in 2010 USA Today featured Ontario County and the Finger Lakes as a great place to own a second home; in 2011, the Finger Lakes was also featured on ShermansTravel.com as the "No. 1 Top Lakeside Retreat" in the country, as well as one of the "10 value destinations". The area was also named the "Most Beautiful Wine Region in the World" by Budget Travel.

According to an analysis of Finger Lakes tourism by Tourism Economics (an Oxford Economics Company), from 2009 to 2010 income associated with tourism increased 9.6% in Ontario County, compared to 4.4% growth averaged across the entire Finger Lakes region over the same time period. Local and state tax income also increased by 2.5% and 4.5%, respectively, in Ontario County from 2009 to 2010, compared to 1.6% and -0.5%, respectively, averaged across the entire Finger Lakes region. This data indicates no significant adverse impacts on tourism to Ontario County compared to the surrounding areas. Between 2008 and 2011, Ontario County's tourism accommodation data, provided by the Finger Lakes Visitors Connection, remained stable within Ontario County (annual average between 51.2%-58.4%). Based upon these designations and economic data, there is little evidence of a decline in tourism in Ontario County.

A.4.2 Submitted by K. Mitchell-DePorter (W - 1/25/12)

How will tourism be affected as the landscape of one of our most traveled routes in the Finger Lakes is marred and while the air quality is so bad that you need to hold your breath as you drive by?

<u>Response</u>:

Refer to response to A.4.1, above.

A.4.3 Submitted by P. LeBrun (W -1/16/12)

The Finger Lakes area is a huge tourism spot and a major part of our economy, it will be lost forever, if the landfill is expanded.

<u>Response</u>:

Refer to response to A.4.1, above.

A.4.4 Submitted by P. LeBrun (W -2/16/12)

The noxious odors assault the nose and airways of citizens of this fine county. Not mention the eyesore, of the place. Please do not risk the terrific tourism industry in our beautiful Finger Lakes area, as well as the health of our citizens and our clean air/water.

<u>Response</u>:

Statements noted.

A.4.5 Submitted by V. Aliperti (W -1/17/12)

I urge the Board of Supervisors and DEC to stop this expansion which is contaminating the citizenry and hurting local tourism which many of us rely on for our income.

Refer to responses to A.1.7, A.1.13, A.2.2, A.2.5, and A.4.1, above.

A.4.6 Submitted by R. Camera (W - 2/20/12)

... the County should begin to implement a plan for reducing the financial impact of ending large-scale operations on the County budget. This plan should at minimum incorporate the following elements:

- a. Create a landfill financial relief fund that would hold in escrow a portion of landfill revenues and accumulate at an accelerating rate over the next 17 years.
- Implement a hiring freeze in the County to contain the size of County government and then implement a review of County operations and plan for staged attrition of the workforce so that over the next 17 years to a level where we end up with a smaller/leaner County government not a larger one for which we have no landfill revenue to help fund.
- c. Develop a plan for a local County landfill operation upon closure of regional landfill operations in 2028.
- d. Develop a methodology and plan for using the landfill fund over a period of years after the loss of landfill revenues from Casella Waste to moderate tax increases on the taxpayers.
- e. Assure that there is a modest amount of landfill capacity remaining for local operations after 2028, by implementing a flow control policy now that curtails deposits over the 600,000 level so the County is not put in the position of paying export costs thereafter.

<u>Response</u>:

Statements noted.

A.4.7 Submitted by C. Hsu (W - 2/21/12)

The existing draft EIS is inadequate and incomplete. There is no description or data provided to justify the conclusion that no negative economic impacts will occur as a result of the proposed expansion. Please provide historical economic data to substantiate this conclusion.

<u>Response</u>:

The comment does not provide specific areas in which additional economic data is requested. Refer to response to A.4.1, above regarding

the impact of the landfill on tourism and to response to A.10.1 regarding the impacts of the landfill on property values.

A.4.8 Submitted by W. Lamboy (W - 2/19/12)

Odor tends to prevent businesses from locating in the region of the stench or causes them to move out <u>Response</u>:

Refer to comment A.1.1, above, regarding odors. For information regarding the tourism industry and population fluctuation, see responses to A.4.1 and A.4.11, respectively.

A.4.9 Submitted by J. O'Brien (W - 2/21/12)

The DEIS lacks an estimate of the negative fiscal impacts on property values and property tax base, tourism, hotels, the wine industry, and organic farms resulting from high impact truck traffic, landfill odor and emissions, and negative visual impacts of a larger landfill.

<u>Response</u>:

Refer to response to A.4.1, above for information regarding the landfill's impacts on tourism. Refer to response to A.10.1, below, for information regarding property values.

A.4.10 Submitted by M. Davis (W - 2/19/12)

There is inadequate discussion of negative economic impacts due to reduction in quality of life for impacted residents, reduction in property values, and overall transformation of balance of economy from a diverse and rich agricultural, manufacturing, business, health care and education based economy to one that is so dominated by the landfill and all it's adverse impacts.

<u>Response</u>:

The commenter does not provide any basis for the assertion that the landfill will "result in an overall transformation of balance of economy".

As outlined in Section 1.2.1 of the DEIS, there has been a landfill operating at the site since 1974, and therefore the current economy in the area has developed in the midst of landfill operations. There is no indication that the continued operation of a landfill at this location will lead to a change in the balance of economy in the area.

A.4.11 Submitted by S. Foster (W - 2/21/12)

Section 3.2.11 Fiscal Analysis (pp 105-107) -This section is incomplete because it only provides the predicted positive economic benefits of the proposed expansion. An economic analysis of the predicted negative economic consequences should be included that could result including, but not limited to: 1) decreases to the property tax base if the population decreases in the vicinity of the landfill; 2) decreases to the sales tax revenue if the populations between and including the Town of Seneca and the City of Geneva decrease due to people leaving the area; 3) estimated negative fiscal impacts on hotels, tourism and the wine industry resulting from high impact truck traffic, odor, and negative visual impacts of a larger landfill;

<u>Response</u>:

There has been a municipal solid waste landfill operating at the Ontario County Landfill site since 1974 and therefore the potential impacts on population density and tourism can be gauged based on an assessment of any such impacts already seen in the community surrounding the landfill. According to the 2000 and 2010 Census population data included in Table 7 of the DEIS, the Town of Seneca, within which the landfill is located has seen a decrease in population of ten people, or 0.37% over the ten year study period. This is far from being the municipality with the largest decrease in population with the Towns of Bristol, Canadice, Richmond, South Bristol and West Bloomfield and the Cities of Canandaigua and Geneva seeing an average decrease in population of 4.64% over the same study period. Conversely, the towns of Geneva, Gorham, Hopewell and Phelps, which are the Towns in closest proximity to the Town of Seneca have all seen an increase in population with an average of 6.32%. This data indicates that fluctuations in population within the County over the study period do not have a direct correlation to proximity to the landfill. Refer to response to A.4.1, above for information regarding the landfill's impacts on tourism.

A.4.12 Submitted by D. Lustig (W - 2/16/12)

As a resident and taxpayer of Ontario county I strongly oppose the expansion of the Ontario County Landfill. I believe this proposed action will negatively impact the economic viability of the county in the long-term. The short-term gain of landfill expansion will be greatly outweighed by the impact of this action on the community. As it is, the landfill at its current size jeopardizes Ontario's county ability to promote itself as a community that values the environment, develops tourism, and is a prime location to live and work. The number of garbage trucks that encroach our roads and neighborhoods cannot be overlooked. As a taxpayer I find it hard to realize the economic benefits to the community that this landfill generates.

<u>Response</u>:

Refer to response to A.4.1, above.

A.4.13 Submitted by K. Steadman (W - 2/15/12)

I wish to comment to the Board of Supervisors about the need for financial details for closing of the Flint Landfill to trash other than Ontario County's debris with the resulting tax consequences for the 100,000 residents of the county. We see in the press the described expressed need for the landfill to assuage our tax responsibility by having the landfill support our county. We do not have, however, the details to make a rational judgment as to the exact tax support per individual household this closing would entail. How are we the tax payer to define our need to put up with the many still undefined health consequences to our members and being the trash capital of the northeast rivaling only Seneca Meadows?

<u>Response</u>:

Refer to responses to A.2.2, A.2.5, A.3.3, A.3.14, and A.4.1, above.

A.4.14 Submitted by F. Sonnenfeld (W - 2/17/12)

The expanded Landfill will also adversely affect the wine and tourist industries, of which there is no statement or statistics.

Refer to response to A.4.1, above for information regarding the landfill's impacts on tourism.

A.4.15 Submitted by R. Kiss (W - 2/19/12)

It would be nice to think that long-term concerns would matter more. Not merely the obvious environmental issues but the long-term economic viability of businesses situated near these things. The only recent new business in the area that actually required tourists was Amberg Winery. Amberg is probably most notable as one of the only wineries anywhere near the Finger Lakes to fail in such a short period of time. Mountains of waste and distinctively bad odors are not ways to attract tourists and that will have an effect long after nothing else can been put into this landfill.

<u>Response</u>:

Refer to response to A.4.1, above.

A.4.16 Submitted by A. and B. Phillips (W - 2/21/12)

Fiscal Analysis - This section is incomplete because it only provides the predicted positive economic benefits of the proposed expansion. An economic analysis of the predicted negative economic consequences should be included that could result including, but not limited to: 1) decreases to the property tax base if the population decreases in the vicinity of the landfill; 2) decreases to the sales tax revenue if the populations between and including the Town of Seneca and the City of Geneva decrease due to people leaving the area; 3) estimated negative fiscal impacts on hotels, tourism and the wine industry resulting from high impact truck traffic, odor, and negative visual impacts of a larger landfill.

<u>Response</u>:

Refer to response to A.4.11, above.

A.4.17 Submitted by E. Lavin (W - 2/21/12)

Possible Impact on the wine industry and local economy by smells from fugitive landfill gases is totally absent.

Refer to response to A.4.1, above. Also refer to responses to A.1.1, A.1.7, and A.1.13 regarding odors.

A.4.18 Submitted by R. Kriss (W - 2/21/12)

Although this facility has been promoted as an economic asset to the county, there has been no meaningful analysis of its negative impacts to the local economy, let alone that of the expansion program. The Finger Lakes area has in recent years become associated with tourism, wine production, and various forms of advanced agricultural technologies, as well as a reputation for beauty and quality of life. It seems evident that the stench, traffic, visual blight, and concerns about health and safety associated with the landfill are antithetical to this progress. It seems unconscionable that these obviously negative impacts can be ignored in the zeal of certain parties to promote the interests of on out-of-state entity, whose stated business plan involves leaving a vast, unsightly, and possibly toxic dump of refuse behind for all eternity and leaving the area to the "locals" once it has met its economic objectives.

<u>Response</u>:

Refer to response to comment A.4.1, above.

A.4.19 Submitted by G. Foster (W - 2/21/12)

Section 3.2.11 Fiscal Analysis (pp 105-107) - This section is incomplete because it only provides the predicted positive economic benefits of the proposed expansion. Please include an economic analysis of the predicted negative economic consequences that could result including, but not limited to: 1) decreases to the property tax base if the population decreases in the vicinity of the landfill; 2) decreases to the sales tax revenue if the populations between and including the Town of Seneca and the City of Geneva decrease due to people leaving the area; 3) estimated negative fiscal impacts on hotels, tourism and the wine industry resulting from high impact truck traffic, odor, and negative visual impacts of a larger landfill.

Refer to response to A.4.11, above.

A.4.20 Submitted by E.M. Buckley (W - 2/21/12)

To raise the height of the current landfill can only impact on our property values. Seneca Meadows can be seen from all corners of our County. Why do we want the same? Tourism will be destroyed. Again careful assessment of the economics of this decision needs to be looked at again. HWS is now within 8 miles of 2 landfills, FLCC even closer. I cannot think that info will be put in the recruitment literature, but it will eventually be realized. Would a parent pay for a child's education in such a setting?

<u>Response</u>:

Refer to response to A.4.1, above for information regarding the landfill's impacts on tourism and A.10.1 for responses to inquiries regarding property values.

A.4.21 Submitted by S. Brown (W - 2/21/12)

I feel the landfill and all the trucks bringing garbage to our area is ruining the quality of life and will affect real estate values and tourist.

<u>Response</u>:

Refer to response to A.4.1, above for information regarding the landfill's impacts on tourism. Refer to section A.10 for responses to inquiries regarding property values.

A.4.22 Verbalized by D. Knipple representing Finger Lakes Zero Waste Coalition (T - 1/26/12)

Finally I want to point out that the plan -- the Draft Environmental Impact Statement provides little or no consideration of the negative economic impact that this dump operation has on our region.

Refer to response to A.4.1, above.

A.4.23 Verbalized by V. Aliperti (T - 1/26/12)

My name is Vinny Aliperti. I'm the owner with my wife of Billsboro Winery. I'm downwind of Geneva on Route 14.

I speak for many wineries in the Finger Lakes by urging the board to oppose this proposed expansion. The wine industry has toiled and struggled for decades to become a world class internationally renowned region for wine lovers.

The fumes, the leaching, the monster trucks running down the wine trails are simply not compatible and not tolerable in our communities in a tourist economy. I would like to think that this board has more imagination than to rely on imported trash as its sacred cash cap.

I challenge this board to end its contract with Casella and start to think about life without the landfill and how you can supplant its revenue with other forms of development that are more sustainable and respectful of the symmetry of the county and its tourist trade.

<u>Response</u>:

Refer to response to A.4.1, above.

A.5 Truck Traffic

A.5.1 Submitted by B. Blaker (W - 1/24/12)

Continuous trash hauling truck traffic, it does not stop!!!! The dangers of this truck traffic is always present. How reliable are these drivers when it comes to safety on the road?

<u>Response</u>:

As detailed in Section 3.2.7 of the DEIS, since the annual tonnage limit of the landfill will not be increased due to the proposed expansion, there is no anticipated increase in truck traffic. The same local truck routes that have been used during the operating life of the landfill will continue to be used by truck traffic to and from the landfill facility.

All drivers for hauling companies transporting waste to the landfill are required to be licensed in their state of residence for the operation of the vehicle type that they are operating. In addition, the vehicles and drivers must comply with the New York State Department of Transportation regulations and are subject to inspection.

A.5.2 Submitted by J. and T. Bonacc (W - 1/18/12)i

Our concerns include... Increase in truck traffic—more tractor trailers on our roads

<u>Response</u>:

Refer to response to A.5.1, above.

A.5.3 Submitted by K. Vaughn (W - 1/17/12)

In addition, the truck traffic through the city is intolerable - our roads are a mess and the air is smelly and the trucks are really ugly.

<u>Response</u>:

The municipalities and government agencies responsible for the management of these roadways have factored the typical levels of all truck traffic along these routes, including traffic associated with the landfill, into their maintenance schedules. As detailed in Section 3.2.11.1 of the DEIS, both Ontario County and the Town of Seneca receive financial benefits from the OML and the Host Community Agreement, which can be used to finance the maintenance of the roadways.

A.5.4 Submitted by K. Niles (W - 2/8/12)

Another direct impact on anyone driving on Routes 5 and 20 is the constant track-out of mud and human feces on the tires of the trucks delivering this toxic stew to our back yard. On wet days it is a sloppy mess, that is sprayed on our vehicles, and on dry days you get to breath the dust as it is brought airborne by the traffic passing on the road. We do

not want an increase traffic of trucks on our roads and that will happen with the expansion, we know.

<u>Response</u>:

As detailed in Section 3.2.7 of the DEIS, since the annual tonnage limit of the landfill will not be increased due to the proposed expansion, there is no anticipated increase in truck traffic. Additionally, as referenced in Section 3.1.5.3, a water truck is available at all times to water down haul roads during dry periods to minimize dust generated by vehicles moving over exposed soils. Casella hires outside contractor to sweep Route 5 & 20 three times per week. On-site roads are watered daily if needed. Temporary workers are on site to clean tires to prevent tracking.

A.5.5 Submitted by S. Kenyon (W -2/8/12)

Expansion of the dump will only make things worse, increase truck traffic and set a precedent which will ultimately result in the establishment of more super-dumps in Ontario Co.

<u>Response</u>:

Refer to responses to A.5.1, A.5.3, and A.5.4, above.

A.5.6 Submitted by J. and J. Gerling (W - 2/20/12)

Truck Traffic: This causes more rapid deterioration of roads, adds additional heavy use traffic which impacts potential safety of pedestrians and motorists, kicks up dust, stones and other objects that are damaging to eyes, lungs, car windshields, etc.

<u>Response</u>:

Refer to response to A.5.1, above.

A.5.7 Submitted by M. Davis (W - 2/19/12)

Also inadequate mitigation of negative impacts of garbage truck traffic in and around the city of Geneva.

Refer to responses to A.5.1, A.5.3, and A.5.4, above.

A.5.8 Submitted by D. Dressner (W - 2/20/12)

The once considered scenic route 5& 20 has been taken over by Casella waste management trucks and is being used as their own driveway into this international dump. Who is going to foot the bill for the reconstruction of our roads due to the increased travel by these garbage carrying trucks?

<u>Response</u>:

Refer to response to A.5.3, above.

A.5.9 Submitted by S. Bonney (W - 2/16/12)

It seems obvious that the proposed Ontario County landfill expansion would cause increases in traffic, odor, leachate production (which has to go somewhere), poisonous emissions and other health risks, both present and future, noise, visual pollution, decreases in property values in Geneva and general environmental degradation.

<u>Response</u>:

As detailed in Section 3.2.7 of the DEIS, since the annual tonnage limit of the landfill will not be increased due to the proposed expansion, there is no anticipated increase in daily truck traffic. While the quantity of leachate generated is projected to increase, the amount of leachate storage capacity at the site is proposed to be expanded to that the peak number of daily trips for leachate hauling will remain within the number utilized in previous traffic analyses.

Also refer to responses to A.1.1, A.1.7, A.1.13, A.2.2, and A.2.5.

A.5.10 Submitted by F. Sonnenfeld (W - 2/17/12)

The damage to the highways and roads of the County by increased truck traffic will probably account for a substantial portion of the Ontario County's highway maintenance and construction costs which were in the year 2010 over \$4,400,000.

As detailed in Section 3.2.7 of the DEIS, since the annual tonnage limit of the landfill will not be increased due to the proposed expansion, there is no anticipated increase in truck traffic.

A.5.11 Submitted by E. Lavin (W - 2/21/12)

Truck traffic is extensive and not accounted for sufficiently in terms of road wear, traffic implications etc.

<u>Response</u>:

Refer to responses to A.5.1 and A.5.3, above.

A.5.12 Verbalized by D. Knipple representing Finger Lakes Zero Waste Coalition (T - 1/26/12)

The most conspicuous aside from the aesthetic effects of the stench that those of us who live downwind experience is the continual rolling of trucks through our neighborhoods, hundreds of trucks. We haven't -- up here in this area of trucks, but the city of Ithaca has done such a study and they found overwhelmingly that the truck traffic has a negative impact. Some people have even moved away.

<u>Response</u>:

Refer to response to A.5.1, above.

A.6 Water Resources

A.6.1 Submitted by D. McGavern (W - 1/26/12)

I believe the thousands of gallons of lechate [leachate] that currently leak annually into our ground water from our land fill in Flint threaten our water supply, water table, watershed, our very lives, as well as the beauty and attractiveness of our finger lakes area.

Refer to responses to A.2.1, above, F.13.1, and F.13.2, below for information regarding water quality.

A.6.2 Submitted by J. and T. Bonacci (W - 1/18/12)

Our concerns include... Potential water contamination: nine creeks and streams flow through the landfill's one mile radius boundary and Seneca Lake—the largest of the Finger Lakes—is five miles east and 400 feet downhill from the Ontario County Landfill. The lake is fed by underground springs at the rate of 328,000 gallons per minute and provides drinking water to 70,000 residents.

<u>Response</u>:

Refer to responses to A.2.1, F.13.1 and F.13.2 for water quality.

A.6.3 Submitted by N. Galleher (W - 1/18/12)

Also, the water in the lakes is a valuable commodity in itself. It should not be compromised by either landfill leachate or hydrofracking of the Marcellus shale which is separate and equally threatening issue.

<u>Response</u>:

The proposed expansion does not include hydraulic fracturing. Refer to response to A.6.1, above.

A.6.4 Submitted by K. Garcia (W - 2/13/12)

Increase current air and water monitoring parameters. DEC parameters for monitoring are minimum requirements. Ontario County could lead the way in increasing environmental standards. Seneca Lake Pure Waters Association last year discussed the possibility of a citizenbased monitoring program similar to the Community Science Institute on Cayuga Lake. Citizen-involvement in monitoring will provide more environmental information and protection and could promote trust and understanding.

Refer to response to A.6.1, above.

A.6.5 Submitted by M. Henry (W - 1/16/12)

What are we drinking now in our water when they send over flow directly into our lake when there is too much to process? It is an unknown and I think one of the reasons our cancer rates are so high in this area.

Response:

Discussions with the operators of both the City of Canandaigua and the City of Geneva wastewater treatment facilities have not revealed any instances of untreated overflow of leachate being discharged directly to the receiving waters. In addition, in the event that either treatment facility does not have the capacity to accept and treat the leachate to the standards in their SPDES discharge permit, they notify the landfill and the hauling of leachate is ceased, or the leachate is taken to an alternate treatment facility, until such a time that it can be accepted again.

A.6.6 Submitted by K. Bennett Roll (W - 2/21/12)

The Water Supply Source Survey in Attachment L does not contain an accurate listing of owners of properties reportedly surveyed.

My question deals with the reason for this survey. If the liner system, monitoring wells etc. are so fail-safe, why would an inventory of potable wells be necessary? Since my well is a potable source, what precautions should be taken by my family with regard to its use? I would request to see the raw data from the 67 surveys which were reported to be returned. I would ask that home ownership records be updated to reflect current ownership, and that all owners and inhabitants be contacted in order to carry out the intent of this survey.

<u>Response</u>:

As referenced in Section 2.3 of Attachment L to the DEIS, the information obtained from the residential well survey was used to assist in determining the hydrogeologic relationship of the site to public water supply sources. In addition, NYCRR Part 360-2.11(a)(5) explicitly requires

that a residential water well survey be conducted as part of the Hydrogeologic Investigation Report.

The residential well survey was conducted by B&L personnel by interviewing the residents at the properties identified within a distance of 0.25 miles upgradient of the landfill and 1.0 miles downgradient of the landfill, as described in DEIS Appendix L. The interview consisted of general questions regarding the nature and construction of the well, and water usage and quality (if applicable).

Because a door-to-door residential well survey was completed, owner/residence information could be updated as needed based on the interview. Any such instances are documented in the residential well survey field forms, which are provided in Appendix BB as Attachment L.

A.6.7 Submitted by F. Sonnenfeld (W - 2/17/12)

...the DEIS does not compare water and air quality statistics in these eight years other than to say that the operation is and will in the future comply with the laws and regulations applicable. Should not there have been a study made of these conditions and reported in the DEIS?

<u>Response</u>:

The pre-construction water quality data from the proposed expansion area were submitted with the DEIS as part of the Hydrogeologic Report appendix. Post-construction water quality data will be collected during the expansion area monitoring activities and will be submitted to NYSDEC in the form of monitoring reports, similar to the monitoring program for the existing permitted facility. All available monitoring reports, including water quality data, are a matter of public record.

A.6.8 Submitted by R. Kiss (W - 2/19/12)

These hills of waste will be with the localities forever and they will contaminate the surrounding areas via leaching - it might be 50 years from now but it will happen. Even were the eventual contamination not a given, the view will be a constant monument to short-term greed attempting to ignore long-term effects. ... The catchment shields, even if they were made of concrete and steel would still fail over time. At that time the

various contaminants within these mountains of garbage must leach into the soil. The technology currently employed to catch runoff might last another 20 years but that will be a blink-of-an-eye in the lifespan of these things.

<u>Response</u>:

Refer to response to A.7.2 regarding post closure care and monitoring of the landfill facility.

A.6.9 Submitted by Mr. Ruppey (Telephone -2/21/12)

He believes that the landfill is leaching into Flint Creek and stated that the landfill smells.

<u>Response</u>:

The quarterly and annual monitoring reports, which include surface water and sediment sampling results, are submitted to NYSDEC and are therefore a matter of public record. Indication of a landfill influence on Flint Creek is assessed by comparing leachate indicator parameters from water and sediment taken from upstream of the landfill and comparing them to the same parameters from water and sediment taken from downstream of the landfill. These are reviewed by both Casella's consultant and the NYSDEC Region 8 staff and the sampling results do not indicate an influence on Flint Creek from the landfill.

A.7 Leachate Management

A.7.1 Submitted by R. Camera (W - 2/20/12)

111-72

Municipal WWTPs are not equipped or designed to fully treat leachate concentrates from landfills. In fact, as our own plant operator will freely admit, Geneva's WWTP partially relies on the dilution of leachate to meet its discharge requirements. Conventional WWTPs are designed to process and remove organic materials not the array of pharmaceuticals and industrial substances present in landfill leachate.

The current DEIS (Section 1.2.1.5) does not present or address the issue of pre-treatment of leachate using state-of-the-art technology which

should be done before any leachate is presented to any WWTP in Ontario County for treatment and/or disposal into any Finger Lakes watershed.

<u>Response</u>:

Leachate generated from the current landfill is currently disposed of at permitted wastewater treatment facilities that are equipped to handle the loading and constituents of landfill leachate. The treatment facilities have discharge limits stipulated by the NYSDEC and are responsible for meeting those discharge limits through their treatment facility that may or may not require a pre-treatment process. These discharge limits are established to be protective of the environment and human health. All leachate generated at the facility is disposed of in accordance with all applicable NYSDEC regulations both at the landfill and at the treatment facility.

A.7.2 Submitted by K. Whiteleather (W - 2/20/12)

Where is the plan to effectively deal with the leachate treatment in the short term? The leachate is industrial waste and cannot be properly dealt with at a municipal waste treatment plant. Either the leachate needs to be moved to an industrial treatment plant, or the municipal plants need to be upgraded. Who foots the bill for the latter? Who monitors the efficacy of the treatment?

Where is the plan to effectively deal with the leachate in the long term? Who foots the bill for treating this material after the landfill is deemed "closed". Who monitors environmental and public health effects after this stage?

<u>Response</u>:

Refer to response to A.7.1, above.

As referenced in Section 2.4.2 of the DEIS and Part 360-2.19, NYSDEC Part 360 regulations require the landfill owner or operator to provide financial assurance to address closure, corrective measures, and to maintain and monitor the integrity of the landfill for a minimum of thirtyyears post closure. Per the approved OML agreement, Casella is responsible for post closure and monitoring costs associated with the landfill for areas closed during the term of the OML. If the County chooses to operate the landfill beyond the OML agreement or offer a separate lease agreement to operate the landfill beyond the term of the current OML, then the County or future operator would be responsible for post closure and leachate disposal costs.

A.7.3 Submitted by J. O'Brien (W – 2/21/12)

Since the leachate from the landfill is treated by the Geneva or Canandaigua waste water treatment plants, I am concerned about barium and other contaminates entering our rivers and streams. There is no discussion in the DEIS of pre-treatment of leachate to remove chemicals that are not removed by the Geneva or Canandaigua waste water treatment plants.

Also lacking are details on the current plan for post-closure leachate management and who will be responsible for leachate management. Please provide anticipated costs and estimated financial impacts on the County tax levy to cover post-closure management of leachate if the expansion were not approved (approximately 16 million gallons per year) and if the expansion were approved (approximately 21 million gallons per year).

Response:

Refer to response to A.7.1 and A.7.2, above.

A.7.4 Submitted by C. and N. Santy (W - 2/20/12)

The final step in the lechate [sic] schematic is the "Receiving Water". If the lechate is treated at the Canandaigua waste water treatement [sic] facility, this means the "treated" leachate will end up in the Canandaigua outlet. The oulet [sic] runs through many communities and back yards, and is used for recreation. When the treated leachate was being released into Seneca Lake, it created a large dead zone in the lake. The outlet is a much smaller body of water. What impact will the treated leachate have on the outlet?

Refer to response to A.7.1, above. In addition, discussions with the City of Geneva wastewater treatment facility operator revealed that there are no known instances of the treatment facility creating a "dead zone" in Seneca Lake, a condition that would have been reported to the NYSDEC and for which the City of Geneva would have been held accountable for.

A.7.5 Submitted by S. Foster (W - 2/21/12)

There is no discussion on how leachate will be managed after the 30 year post-closure period. Details should be provided on the current plan for post-closure leachate management and who will be responsible for leachate management.

Anticipated costs and estimated financial impacts should be provided on the County tax levy to cover post-closure management of leachate if the expansion were not approved (approximately 16 million gallons per year) and if the expansion were approved (approximately 21 million gallons per year).

There is no discussion of pre-treatment of leachate to remove chemicals that are not removed by the Geneva or Canandaigua wastewater treatment plants. Chemicals in leachate should be identified that are not removed or modified to a non-biologically active state during waste-water treatment, and there should be a description about how these chemicals or chemical classes will be rendered harmless before leachate enters the Geneva or Canandaigua waste-water treatment plants.

If no pre-treatment is recommended, all potential health hazards associated with these chemicals and proposed mitigation strategies to minimize those hazards should be described.

The EPA currently acknowledges that hormone mimics, pharmaceuticals and personal care products are not regulated but cause public health problems. The public health impacts of these and other nonregulated chemicals that are found in leachate should be described and are listed as well as how the US EPA's Contaminant Candidate List 3 will be minimized.

Refer to response to A.7.1, above and F.18.2 below.

A.7.6 Submitted by A. and B. Phillips (W - 2/21/12)

DEIS main file, figure ten: Leachate Generation Estimate. After reaching a peak of app. 23 million gallons in the mid 2020's, leachate generation takes a sudden and unexplained decrease of millions of gallons a year before reducing to zero by the late 2050's. How is this reduction explained? Given that many of the toxic elements in leachate do not lose their toxicity (cadmium, lead, arsenic, etc.) what will be done to collect and mitigate these compounds? Also given that many of the compounds being currently added to the landfill have not yet been studied, what contingency plan is in effect if future regulations require more stringent management?

<u>Response</u>:

As outlined in Section 2.4.3 of the DEIS, the 23 million gallon leachate generation rate is a preliminary conservative estimate of peak leachate generation assuming that none of the proposed landfill expansion area has been capped. As sections of the landfill are capped with an approved capping system, precipitation will no longer be able to enter the waste mass. Once liquid is no longer being introduced to the system, the liquid exiting the landfill in the form of leachate will decrease dramatically, until a point where there is no longer liquid present in the waste mass. Although the model shows the leachate generation quantity reducing to zero within approximately 30 years of the closure date, per NYSDEC regulations, any liquid generated by the landfill would need to be collected and treated indefinitely until such time that extensive laboratory testing shows that it no longer poses a threat to the environment, as approved by the NYSDEC.

A.7.7 Submitted by E. Lavin (W - 2/21/12)

Leachate disposal and treatment is not definitively defined and evaluated in terms of long term entry into municipal treatment streams.

Refer to response to A.7.1, above.

A.7.8 Submitted by G. Foster (W - 2/21/12)

Regarding leachate in the draft Environmental Impact Statement (dEIS): There is no discussion on how leachate will be managed after the 30 year post-closure period.

Please provide details on the current plan for post-closure leachate management and who will be responsible for leachate management.

Please provide anticipated costs and estimated financial impacts on the County tax levy to cover post-closure management of leachate if the expansion were not approved (approximately 16 million gallons per year) and if the expansion were approved (approximately 21 million gallons per year).

Also, there is no discussion of pre-treatment of leachate to remove chemicals that are not removed by the Geneva or Canandaigua wastewater treatment plants.

Please identify chemicals in leachate that are not removed or modified to a non-biologically active state during waste-water treatment, and describe how these chemicals or chemical classes will be rendered harmless before leachate enters the Geneva or Canandaigua waste-water treatment plants.

If no pre-treatment is recommended, please describe all potential health hazards associated with these chemicals and proposed mitigation strategies to minimize those hazards. The EPA currently acknowledges that hormone mimics, pharmaceuticals and personal care products are not regulated but cause public health problems.

Describe how the public health impacts of these and other nonregulated chemicals that are found in leachate and are listed on the US EPA's Contaminant Candidate List 3 will be minimized.

Refer to responses to A.7.1 and A.7.6, above.

A.7.9 Submitted by E.M. Buckley (W - 2/21/12)

What about the leachate? If filters are not yet invented to remove such things as pharmaceuticals from our waste could it not get into our well water for instance as it travels through the farms and villages of Ontario County along the Outlet to Ontario Lake? Has the water been tested all along the route of the Outlet?

<u>Response</u>:

As referenced in Section 3.2.4 of the DEIS, the proposed expansion will comply with all NYSDEC established regulations regarding water quality and air quality. Additionally, state and federal regulations (referenced in Section 2.9 of the DEIS) applicable to the Ontario County Landfill have been established to ensure that such projects do not have significant adverse impacts on the health of surrounding communities and populations.

- A.8 Lack of Recycling/Composting
 - A.8.1 Submitted by B. Tornow (W 2/11/12)

I am against the expansion of the landfill based on the terrible odor, the truck traffic, the ruination of a beautiful tourist area and the issue of public health. ...Please think about reuse, recycle and composting. I did not see any mention of increased efforts of those strategies in the DEIS.

<u>Response</u>:

As referenced in Section 3.3.3 of the DEIS, Ontario County recently prepared a Draft Local Solid Waste Management Plan (SWMP) to provide the Ontario County constituency with a comprehensive, integrated program for managing solid waste. The Ontario County Landfill is dedicated to educating residents about reuse and waste diversion; and believes that this is best accomplished, and provides the greatest benefit, when practiced in partnership with the community, since impacts and benefits of management decisions reach across property boundaries. However, many educational outreach activities take time to achieve results; therefore, the development of the proposed landfill expansion area will continue to ensure the availability of environmentally and economically sound long-term waste disposal capacity within Ontario County.

A.8.2 Submitted by J. McLellan (W - 2/9/12)

I have read the solid waste guidelines for the state of New York which stipulates we must reduce, reuse, recycle, recover energy and then safely dispose of what is left. The DEIS does not promote recycling, composting or other measures to reduce the waste stream. By the figures I have seen, Ontario County is only contributing about 8% of the municipal solid waste going into the landfill, and that appears to be a good reason to conserving the space for our needs rather than taking trash from faraway. If we did that, no expansion would be needed.

<u>Response</u>:

Refer to responses to A.3.3, A.3.11, and A.8.1, above.

A.8.3 Submitted by K. Garcia (W - 2/13/12)

Form a solid waste commission made up of citizens, government officials, Finger Lakes Institute researchers, business leaders, non-profit organizations and Casella representatives to work on solutions to the regions solid waste issues. Make "ZERO WASTE" the ultimate goal.

Empower residents to reduce their own waste by providing a municipal or regional composting program and enforce mandatory recycling.

Increase research on solid waste management methods. Cornell Waste Management in Ithaca has been working on some interesting projects. Why can't Ontario County partner with Finger Lakes Institute and Hobart William Smith college researchers and students to conduct similar research projects?

Provide permanent pharmaceutical and hazardous waste disposal programs.

Refer to response to A.8.1, above.

A.8.4 Submitted by K. Reisch on behalf of Geneva League of Women Voters (W – 1/20/12)

Without a commitment to "three R's" of Reduce, Reuse and Recycle prior to expansion of the landfill, the county is not meeting its obligations and is not collaborating with its citizens to curtail the growth of our landfill. The Geneva LWV would like to strongly encourage the following conditions be met before consideration of landfill expansion:

1. Adoption of the required Ontario County Solid Waste Plan.

<u>Response</u>:

To be addressed as part of the completion of Ontario County's Draft Local Solid Waste Management Plan (SWMP).

2. Put in place a county-wide mandatory recycling program with an active enforcement component.

<u>Response</u>:

To be addressed as part of the completion of Ontario County's Draft Local Solid Waste Management Plan (SWMP).

3. Reduce waste by our citizens by providing incentives for residents to use smaller totes at reduced rates.

<u>Response</u>:

To be addressed as part of the completion of Ontario County's Draft Local Solid Waste Management Plan (SWMP).

4. Require other municipalities and counties that transport waste to Ontario County landfill have mandatory recycling programs and waste reduction programs.

To be addressed as part of the completion of Ontario County's Draft Local Solid Waste Management Plan (SWMP). NYSDEC is in the process of updating the 6 NYCRR Part 360 regulations regarding waste reduction goals. The Ontario County Landfill will abide by the approved regulations once enacted.

5. Increase tipping fees for out of county waste disposal preserving landfill space for Ontario County businesses and residents.

<u>Response</u>:

To be addressed as part of the completion of Ontario County's Draft Local Solid Waste Management Plan (SWMP).

A.8.5 Submitted by C. Hsu (W - 2/21/12)

The draft EIS relies on documents that do not yet exist in final form to justify the expansion. References to the County's 10 Year Solid Waste Plan should be omitted until that plan is finalized and accepted by the state.

<u>Response</u>:

The DEIS and the Draft SWMP are related to solid waste management within Ontario County and therefore should reference each other to adequately address the actions within the County. Both documents are referenced as drafts.

A.8.6 Submitted by A. van der Meulen (W - 2/14/12)

This DEIS contradicts The (NYSDEC) Plan (from Beyond Waste, which) sets out a twenty year goal of reducing the average amount of MSW that New Yorkers dispose of from 4.1 to 0.6 pounds per person, per day." This DEIS also disregards "that every permitted facility maximizes recycling and reuse and otherwise affords opportunities to manage waste at the highest possible point in the hierarchy within the facility's service area."

I encourage our Board of Supervisors to use this opportunity to require actions in this DEIS from Casella that would benefit Ontario County toward a more sustainable future, including ..., higher tipping fees for places that send waste from afar, and actively partnering with county efforts to increase recycling, reuse, and waste reduction and diversion so that landfilling is a very last resort.

<u>Response</u>:

Ontario County Landfill acknowledges that there will be a fairly uniform reduction of municipal solid waste and construction and demolition debris as a result of increased diversion efforts following the implementation of the draft SWMP; however, the intent of the DEIS is to analyze the full range of potential significant adverse environmental impacts of the proposed action and how those impacts can be avoided or minimized to the maximum extent practicable.

A.8.7 Submitted by B. Lewis (W - 2/21/12)

I oppose the managing of solid wastes as it is allowed today. Ontario residents should be required to recycle. A campaign of "the three "R's", Reduce, Reuse, and Recycle should be emphasized and the public educated as mandatory recycling is implemented. Mandatory recycling and waste reduction programs on other municipalities and counties that transport waste should also be required. Increase tipping fees for out-ofcounty waste disposal preserving landfill space for the citizens of Ontario county.

<u>Response</u>:

NYSDEC is in the process of updating the 6 NYCRR Part 360 regulations regarding waste reduction goals. The Ontario County Landfill will abide by the approved regulations once enacted. Ontario County adopted a Solid Waste Management and Recycling Local Law in 1992, which includes mandatory recycling.

Refer to response to A.8.1, above.

A.8.8 Submitted by M. Davis (W - 2/19/12)

My most over-riding concern however is that New York State requires that land-filling solid waste is a last resort, that reducing, reusing, and recycling waste should be adequately planned for, encouraged, and enforced. Neither Ontario County or any of the communities that send their waste to our landfill have developed comprehensive plans to reduce waste to the essential minimum to be land filled. Other communities have done a much better job of this and are successful in diverting up to 75% of waste from their landfills. Our solid waste planning needs to be based in sustainable best practices.

<u>Response</u>:

Refer to responses to A.8.1 and A.8.7, above.

A.8.9 Submitted by F. Sonnenfeld (W - 2/13/12)

...the Preparers of the DEIS did consider other alternatives, but made no recommendation in regard thereto. The League of Women Voters at the Public Meeting did argue for a program of recycling of waste and composting of organic non toxic waste in lieu of expansion. I agree that such a program should be implemented. In implementing such a program, consideration should be given to requiring the local rubbish collectors to distribute to their customers four or five different bins or containers for the collection of wastes. These bins or containers will cost money which can be paid from the revenues of composting and recycling. I would leave it to the collectors of the waste to delineate the sort of waste to go into these bins. I would suggest that these bins or containers be in the following categories, but they do not have to be of the same size: (1) non toxic organic materials including grass clippings a, leaves and small branches, (2) paper and cardboard, (3) plastic materials, glass and other ceramics, (4) metal products of limited dimensions and weight, and (5) toxic substances and products such as pharmaceuticals, petroleum products in plastic or metal containers no larger than one half gallon, flash light size batteries, light bulbs including those containing mercury, and pesticides and other poisons and hazardous materials properly labeled and contained, but in small quantities.

Automobiles and any large metal products, tires, large volume of toxic waste, medical waste, electronic products such as televisions, computers, car size batteries, large size branches and tree trunks, debris from demolition and construction sites would have to be transported to waste sites as they are now.

Casella should make these bins and containers a requirement of all their Ontario and non Ontario County customers who bring waste to the Ontario County landfill.

Between the composting and recycling, there should be considerably less waste going into the landfill. Indeed, I expect that the money derived from composting into fertilizer and recycling could redound to the profit of the county and Casella.

<u>Response</u>:

Refer to response to A.8.1, above.

A.8.10 Submitted by E. Bihn (W - 2/21/12)

The first and primary thing to be considered is how to decrease the flow of garbage into the landfill, not how to increase the flow. Instituting mandatory recycling and other suggestions included in the League of Women's comment are very important AND make sense.

<u>Response</u>:

Refer to response to A.8.1, above.

A.8.11 Submitted by P. DeBolt (W - 2/21/12)

What is being done to further reduce what is being dumped in the land fill to extend the life of existing space? Though they have increased somewhat the recycling of materials, diverting them from the landfill to reuse, in my opinion it is not enough.

<u>Response</u>:

Refer to responses to A.3.3 and A.8.1, above.
A.8.12 Submitted by R. Kriss (W - 2/21/12)

No attempt has been made to incorporate New York State's stated solid waste objectives of "Reduce, Reuse and Recycle". It is clear that only short-term economic factors have been weighed. The facility has been evaluated only as a short-term revenue source, and little attempt has been made to address long-term solution to solid waste disposal issues.

<u>Response</u>:

Refer to response to A.8.1, above.

A.8.13 Verbalized by K. Reisch on behalf of League of Women Voters of Geneva (T – 1/26/12)

We have submitted a response to the draft Ontario County Solid Waste Management plan on November 30 of 2011.

We were critical of that plan because it's in direct opposition to the current New York State plan and -- for New York State which requires landfill expansion be considered only once other strategies are in place, namely the three R's - reduce, reuse and recycle.

We also take issue with the timing of the current plans for the major expansion of the Ontario County landfill. The failure to have a solid waste management plan in place should preclude a major action such as expansion.

It prejudges the outcome of the planning process unless of course the solid waste management plan is merely a -- to state requirements, not a thoughtful good faith effort to effectively -- without a commitment to the three R's - reduce, reuse and recycle - prior to the expansion of the landfill the county does not need any complications and is not collaborating with its citizens to curtail the growth of our landfill.

As our landfill approaches capacity we citizens will be the ones faced with the long term consequences. Our business partners will move on to the next landfill leaving us with a mountain of trash and resulting environmental economic consequences. The Geneva -- would like to strongly encourage that the following conditions be met before consideration of expansion:

- 1. Adoption of a state required Ontario County solid waste management plan.
- 2. Put in a place a countywide mandatory -- program with an active enforcement component.
- 3. Reduce waste by our citizens by providing incentives for residents to use smaller totes at reduced rates.

Require other municipalities and counties that transport waste into Ontario County to our landfill have mandatory -- and waste reduction programs and increase the fees for out of county waste disposal preserving landfill space for Ontario County businesses and residents.

We urge our officials to make Ontario County a leader in innovative strategies in -- putting in place a plan to protect the environment, preserve landfill space for local needs far into the future and as a method of last resort.

Expanding the landfill continues the path of business as usual when this juncture is an opportunity to realign waste management strategies with methods that support sustainable economic development and environmental health.

<u>Response</u>:

Refer to responses to A.8.1 and A.8.4, above.

A.8.14 Verbalized by S. Maslanik (T - 1/26/12)

I just wanted to say that I do agree that the garbage has to go somewhere, but I think it's important that we look into composting. Those are the -- for various reasons and wanted to promote doing it in your backyard. It's easier and people would do it more if it was required of them.

So I think it's important to think of what we are going to do in the future, what we are going to do ten years down the road. How big is the landfill going to get before we start looking for other options for our waste?

Refer to responses to A.3.3 and A.8.1, above.

A.8.15 Verbalized by C. Hsu (T - 1/26/12)

The last point I would like to make is of the money that -- fifteen million dollars, I have not yet seen any of that money go into a long term plan for waste management in this county. The pharmaceutical collection plan right now is run by volunteers and the sheriff's department is awesome at helping out, but -- that fifteen million dollars by now could have developed programs that would reduce the amount of waste generated by the residents in this county already, but it has already been spent.

<u>Response</u>:

Statements noted.

A.8.16 Verbalized by Van der Meulen (T - 1/26/12)

To speak directly to the environmental impact statement, to me there is a disturbing misinterpretation in the statement as there was in the draft Ontario County solid waste plan regarding the New York State DEC goals recommended.

In fact both of these draft documents turned the preferred hierarchy for solid waste management upside down minimizing the first priorities of waste reduction. As most of you know there was significant criticism of the draft – and it failed considerably -- the New York State hierarchy.

Using this -- draft swamp [SWMP] which has not yet been approved or finalized in this environmental impact statement to support landfill expansion is both premature and -- it's also disturbing that this environmental impact statement -- that were long term to describe the expansion of -- to Ontario County.

Long term this document amounts to about fifteen, seventeen years. Seventeen years to blatantly disregard -- based management resulting in another mountain filled mostly of waste coming from outside the county leaving us with truly long term environmental consequences and -- to reduce, reuse, repurpose and recycle that waste.

For your information I just happened to find a study last month called best practices for local governments solid waste -- diversion from landfill and waste reduction. This report identifies program elements from various governments across the country that offer successful diversion of solid waste from landfills and -- a better alternative than the ones contained in this environmental impact statement.

<u>Response</u>:

Refer to responses to A.3.3, A.8.1, and A.8.6, above.

A.9 Visual Aesthetics/Height Concerns

A.9.1 Submitted by R. and L. Pedersen (W - 1/20/12)

Expansion by purchasing additional acres or by an increase in height would cause additional area land value decreases and view shed deterioration beyond what has already occurred. The landfill is visible from miles away and an increase in height will make this even worse.

The DEIS has not adequately addressed the concerns of citizens about views.

<u>Response</u>:

The intent of the SEQR process and the DEIS is to address the impacts of the proposed project when compared to the conditions currently approved for development at the site. As stated in Attachment F of the DEIS, when compared to the currently permitted landfill configuration the additional horizontal and vertical expansion provides minimal noticeable change to the surrounding viewscape.

A.9.2 Submitted by D. Galleher (W - 1/18/12)

The EIS deals with the "testable" environment. We haven't even touched on the visual environment, which has already been negatively and irreversibly impacted.

Refer to the response to A.9.1, above.

A.9.3 Submitted by J. and T. Bonacci (W - 1/18/12)

Our concerns include... Height of the garbage mound will be 1, 025 feet, well above the grade of Routes 5 & 20.

<u>Response</u>:

The Visual Impact Analysis regarding this impact can be found in Section 3.2.9 of the DEIS. Refer to the response to A.9.1, above.

A.9.4 Verbalized by J. Martin (T - 1/26/12)

My name is Joy Martin. I'm a resident at 3407 County Road 20 in Stanley. I moved there thirteen years ago. ...In 1999 we decided to build a home.

It is a lovely place. We knew there was a landfill when we bought it. At that point in time however for those of you don't know County Road 20 -- I have a lovely view of the landfill now. I did not have it when we built.

We had no trucks going up and down County Road 20. They had to reinforce County Road 20 for all the trucks. As a few of these residents spoke we are hugely upwind, but we were downwind today.

<u>Response:</u>

Refer to the response to A.9.1 and A.9.3, above.

A.10 Property Values

A.10.1 Submitted by R. and L. Pedersen (W - 1/20/12)

The DEIS has not adequately addressed the concerns of citizens about property values.

As outlined in Section 3.2.5.1 of the DEIS, property values within the Town of Seneca have increased over the past four years. Utilizing data on property values within the County provided by the Ontario County Real Property Tax Office for the years 2000 through 2011, an assessment of property values in the vicinity of the landfill was able to completed for the four years prior to the privatization of the landfill (2000-2003) and for the four years subsequent to the privatization (2004-2007). The percent change in property values for each of these time periods was calculated for each municipality in the County, as well as for the County as a whole. These values for the municipalities in the closest vicinity to the landfill, the Towns of Seneca, Geneva, Phelps, and Hopewell and the City of Geneva were compared to the County-wide values. From 2000 to 2003, the percent change in property values for all of Ontario County was 11.37%. In comparison, the percent change in property values for the municipalities listed above was an average of 13.96%, or slightly above average. From 2004 to 2007, the percent change in property values for all of Ontario County was 19.5%. In comparison, the percent change in property values for the municipalities listed above was an average of 21.99%, or slightly above average. Although many factors can impact property values, there is no evidence that the proximity to the landfill has had a negative impact on the property values in the study area over the study period.

A.10.2 Submitted by J. Tornow (W - 2/11/12)

I cannot believe that there will be no negative impact on assessments.

<u>Response</u>:

Section 3.2.5 of the DEIS discusses the potential impacts to property values and the proposed mitigation measures. Refer to response to A.10.1, above.

A.10.3 Submitted by J. Vaughn (W - 1/8/12)

Do you really think it will help property values recover in Geneva when professionals considering locating in Geneva, such as doctors at the hospital, teachers and administrators at Geneva School District, professors at Hobart and William Smith Colleges, and scientists at the NYS Agricultural Experiment Station realize they are subjecting their families to daily doses of toxic methane gas, which will only increase as every landfill expansion happens?

<u>Response</u>:

Refer to response to A.10.1, above.

A.10.4 Submitted by T. Allen (W -1/31/12)

Besides the quality of life issue, I am concerned about what the landfill and the odor issue is doing to the value of our property. Will we be able to sell our home for what it is worth?

I recently found out that homeowners who live within three-quarters of a mile of the landfill are protected by a ruling that basically ensures the value of their homes. After having their home appraised, these homeowners have the option of selling their homes to Casella or if they put them on the market and are unable sell for the full appraised value, Casella will pay them the difference between what the buyer will pay and the appraised price. What makes the plight of residents living closer to the landfill more dire than ours? We actually get more of the odor more often than some of the residents that I have spoken with who live within that three-quarter mile radius. One resident who falls within this radius and ruling told me that the only problem they generally have is an occasional shopping bag flying into their lawn. He told me that the residents of Seneca Castle actually have a worse odor issue than he does. If we had the option to sell our home with the guarantee of getting its full appraised value, we would have it on the market right now. My point is, as the landfill expands, so should the three-quarter mile boundary.

<u>Response</u>:

The Property Protection Plan was established as part of the OML between Ontario County and Casella. Since the proposed expansion was contemplated as part of the OML, the Property Protection Plan, by inclusion, was established to serve the existing landfill as well as the proposed expansion. The OML was subject to SEQRA and approved. Refer to response to A.10.1, above regarding property values. A.10.5 Submitted by T. Allen (W -2/19/12)

There is nothing about expanding the 3/4 mile property protection plan to include areas outside of that which are affected by the landfill such as Seneca Castle.

<u>Response</u>:

Refer to response to A.10.4, above.

A.10.6 Submitted by R. Eaton (W -1/18/12)

This land fill does not belong in a farming/residential area. It is a health hazard; it is detrimental to property values, and definitely detrimental to our enjoyment of our homes. <u>Response</u>:

Statements noted. Refer to response to A.10.1, above.

A.10.7 Submitted by W. Lamboy (W - 2/19/12)

Odor decreases property values and salability of property

<u>Response</u>:

Refer to response to A.10.1, above.

A.10.8 Submitted by R. Kiss (W - 2/19/12)

The idea presented more generally in the report that the property values of the Town of Seneca have not been negatively effected could not possibly pass "the smell test". The general price of land and housing has dropped across most of the nation over the last four years due to the national economy. There is no possible way that anyone profiting from the current increased solid-waste can show that they or any of their associates have shown any interest in buying property near the landfill. Property prices that are reflected in tax revenue valuations are not in anyway the same as prices gotten from a sale. Most of the people in the Town of Seneca and even to the east on the edge of Geneva have not had a change in assessment because they cannot sell their properties without taking a loss. The assessed values are stagnant because transactions around land sales are not taking place.

<u>Response</u>:

Refer to response to A.10.1, above. Also refer to responses to A.1.1, A.1.7, A.1.13, and A.10.1.

A.10.9 Submitted by E.M. Buckley (W - 2/21/12)

If one can smell the landfill several times a week there is no way it will not effect property values. The ripple effect of that will be tremendous.

<u>Response</u>:

Statement noted. Refer to response to A.10.1, above.

A.10.10 Verbalized by J. Hogan (T - 1/26/12)

It smells terrible. If you don't live there, believe us. It's going to get worse. Our home value is going to go down.

My wife has actually talked to me about moving. What is that going to do for property values? This is terrible.

Response:

Refer to response to A.10.1, above. Also refer to responses to A.1.1, A.1.7, A.1.13, and A.10.1.

A.11 Monitoring Requirements (Closure/Post-Closure Concerns)/Financial Surety

A.11.1 Submitted by D. Galleher (W - 1/18/12)

Environmental impact statements deal with current known conditions and variables. This study is no different. We can look at the soil and water quality, flora and fauna populations and promise... to monitor and track into the future. How far into the future??? When Casella can no longer expand it's holdings..., how far into the future does this monitoring occur and at who's expense?

As referenced in Section 2.4.2 of the DEIS and Part 360-2.19, NYSDEC Part 360 regulations require the landfill owner or operator to provide financial assurance to address closure, corrective measures, and to maintain and monitor the integrity of the landfill for a minimum of thirtyyears post closure.

Per the approved OML agreement, Casella is responsible for post closure and monitoring costs associated with the landfill for areas closed during the term of the OML. If the County chooses to operate the landfill beyond the OML agreement or offer a separate lease agreement to operate the landfill beyond the term of the current OML, then the County or future operator would be responsible for post closure and leachate disposal costs.

A.11.2 Submitted by T. Allen (W -1/31/12)

So what is going to happen when the landfill closes down and Casella goes away?

Response:

Refer to response to A.11.1, above.

A.11.2 Submitted by J. and J. Gerling (W - 2/20/12)

Concern for Ontario County's long term solid waste needs: How are decisions being made about what is enough? What ensures that there are limits to the trash being accepted? How are the long term needs of Ontario County being addressed? What happens after the 30 years is up and serious issues emerge as a direct result of the landfill?

<u>Response</u>:

Refer to response to A.11.1, above.

A.11.3 Submitted by E. Halling (W -2/12/12)

...there needs to be a fund established to protect people against personal or property damages resulting from the landfill. What if a large

number of people living near the landfill are diagnosed with cancer? What if a person living near the landfill can't sell their house? What if property values in the City of Geneva drop 25% because potential buyers object to the odor? To my knowledge, no such fund exist.

<u>Response</u>:

As referenced in Section 2.8, working order maintenance of the landfill capping system and landfill support systems including leachate collection and storage, landfill gas collection and control, and surface water collection and control, will continue after closure of the landfill for the duration of the post-closure period. This duration is set at a minimum of thirty years after construction on the last cell is complete, unless otherwise approved by the NYSDEC. Surface water, groundwater, and explosive gas monitoring will occur during the post-closure period as required by the NYSDEC's Part 360 regulations.

As referenced in Section 3.2.5 of the DEIS, a Property Protection Plan is in place to protect the surrounding residences from perceived declining property values as a result of the landfill.

Refer to responses to A.2.2, A.2.5 and A.10.1, above.

A.11.4 Submitted by F. Sonnenfeld (W - 2/17/12)

On the assumptions that the Ontario County's Board of Supervisors, apart from the financial bond or security of \$4,000,000, is not only relying on Casella's thirty years of experience and technological expertise in waste management, but is also relying on its financial assets to be more than adequate to answer to any demand that might be made upon it from its operation of the Landfill pursuant to the OML. In order to verify these assumptions, I sought the financial statements of the assets and liabilities of the operator of the Landfill, Casella Waste Services, LLC, ("LLC") through the joint web sites of LLC and its parent company, Casella Waste Systems, Inc. ("INC"), a Delaware corporation, and through the Securities Exchange Commission's ("SEC") internet report on the consolidated financial reports of INC which consolidated financial report includes LLC and a multitude of other subsidiaries inclusive of LLC. I could not find a separate financial report on LLC. LLC and INC have been and are combined as the entities referred to herein as "Casella", but remember that the consolidated financial statements of INC also include the

operating revenues and expenses and assets and liabilities statements of many other subsidiaries and affiliates of INC.

The latest Quarter Annual Report of INC filed with the SEC on Form 10 Q for the period ended October 31, 201 1 creates doubt as to Casella's ability to answer to its commitments in the OML. INC jointly with LLC and separately guarantees in the OML the following: (i) the lease rents, (ii) the financial security or bond of \$4,000,000 to cover closing costs of the Landfill in 2028, and (iii) the "final assurances" as to the removal of liable for most of the monetary damages which the County would suffer if LLC should for any reason fail.

In conclusion, even if INC's financials are on the SEC's internet program of EDGAR, the residents must not be required to wade through the complex and difficult financial reports filed with the SEC, rather the DEIS should include a report on the finances of Casella (i.e., TNC and LLC) in simple terms reflecting Casella's economic ability to respond to its present obligations as to the operation and maintenance of the Landfill, much less the expansion it is requesting.

<u>Response</u>:

Refer to response to A.11.1, above.

A.11.5 Submitted by R. Kiss (W – 2/19/12)

While income today is useful the question of future costs when this mountain of waste has reached it's limit does not appear in the document. Since the cost cannot be zero the question is how to serve the needs of Ontario County beyond the quick profits around accepting other people's garbage today. As well the question of why no mitigation funds have been set aside has not been properly addressed. Saying that nothing has gone wrong so far ignores the fact that if something does it must be paid for somehow. The report also does not describe the increased monies that Casella will pay, over and above the currently agreed to payments, if the County will go along with the expansion.

<u>Response</u>:

Refer to response to A.11.1, above.

A.11.6 Submitted by P. DeBolt (W - 2/21/12)

There is an ever growing list of hazards/suspected cancer causing materials present in today's world and a good number of them are not being monitored at this land fill or any others. Check EPA lists. How many, how much of these substances are being dumped today? To me a serious health concern. What happens when these substances are mixed with any number of other products to make a cocktail of unknown byproducts?

We once used products such as lead paints, asbestos, DDT and PCB's not knowing the harm they were doing to our world. So, what products/substances are we using today which are not restricted or tested for that are being put freely in the landfill and what are the consequences for our future?

The landfill is surrounded by prime farming land. Can it be guaranteed the crops will be safe to eat? Do we know if water and air contaminates seep into the soil or are washed out of the air onto crops? Is there, will there be a monitoring in place for this? Since those crops are sold locally and shipped elsewhere more than County residents should be concerned.

<u>Response</u>:

As referenced in Section 3.2.4 of the DEIS, the proposed expansion will comply with all NYSDEC established regulations regarding water quality and air quality. Additionally, state and federal regulations (referenced in Section 2.9 of the DEIS) applicable to the Ontario County Landfill have been established to ensure that such projects do not have significant adverse impacts on the health of surrounding communities and populations.

Refer also to responses to A.2.2 and A.2.5, above.

A.11.7 Submitted by P. DeBolt (W - 2/21/12)

What controls are there on the disposal and dumping in this landfill? Trash/garbage comes from all over. Even rules saying you cannot dump a particular product may not be enforced. Come take a walk with me and see some of the things I see on trash day when I stroll the City streets. Wonder what is coming from the other places miles and miles away, where it will have little impact? The fact remains obvious you cannot guarantee the safety of this facility to me or others, our health is going to be impacted by it and that is of grave concern. Maybe it won't be today because things are not always obvious immediately, but years down the road problems will surface as with the asbestos, lead, DDT, PCB's, etc. It will be too late for those who are sick and there will be no way to determine the responsible parties.

<u>Response</u>:

As referenced in Section 2.2.2 of the DEIS, wastes to be accepted by the Ontario County Landfill in the expanded landfill will be identical to the waste stream presently authorized by the NYSDEC for the existing operations.

As referenced in Section 2.6.2 of the DEIS, waste inspection procedures currently used at the existing Ontario County Landfill will apply to the expansion. Facility personnel are trained in waste screening for prohibited wastes. If facility personnel suspect any unauthorized wastes as hazardous, they will immediately notify the NYSDEC. In addition to the constant waste screening during typical operations, random waste inspections at the landfill will be conducted once per week or more frequently at the discretion of the landfill supervisor.

A.11.8 Submitted by J. Halling (W -2/12/12)

...there needs to be a fund established to protect people against personal or property damages resulting from the landfill. What if a large number of people living near the landfill are diagnosed with cancer? What if a person living near the landfill can't sell their house? What if property values in the City of Geneva drop 25% because potential buyers object to the odor? To my knowledge, no such fund exist.

Response:

Refer to response to A.11.3, above.

A.11.9 Verbalized by B. Finger (T - 1/12/12)

When Casella leaves folks, we own that trash. We own it. Whatever goes in there every day from other places, we own that trash no matter how much money comes in for it. I hope you are saving some to do something with it in the future because you are going to need it. Think about that.

<u>Response</u>:

Refer to response to A.11.1, above.

A.12 Agricultural Land Use

A.12.1 Submitted by R. and L. Pedersen (W - 1/20/12)

Soil borrow can occur from neighboring land without its purchase by Ontario Co. The soil can be purchased without the land being purchased. This has already happened in other areas, with the result being a pond on the property which can then be used for irrigation or any other use, thereby insuring the land continues to be agricultural and not industrial landfill. The current Town of Seneca Comprehensive Plan clearly states that the town wishes to remain primarily agricultural and wants no expansion of the landfill beyond its current borders. If this Comprehensive Plan is not considered, what is the point of having one? An expansion of the landfill could hurt agriculture in the surrounding area due to perceptions by buyers of product contamination. Any expansion is a potential detriment to the best and highest use of the land in the Town of Seneca. Agriculture is also the use most preferred by citizens of the Town of Seneca.

The DEIS has not adequately addressed the concerns of citizens about reduction of agricultural land use.

Response:

As referenced in Section 4.5 of the DEIS, development of the proposed soil borrow area will unavoidably alter portions of the agricultural land south of the landfill. The existing agricultural land does not, however, house the main farm establishment and is currently utilized to grow crops to support dairy cattle. Furthermore, the proposed soil borrow area sits on a 40 acre parcel located within Ontario County Agricultural District Number 6, with only approximately 25 acres (15.5 acres of actual borrow area) of the agricultural land south of the landfill proposed to be transitioned to soil borrow area activities over the course of the project. It is proposed that the remainder of the property will continue to be available for use for agricultural purposes. The County and the operator of the landfill facility have shown their recognition of the importance of agriculture to the residents of Town of Seneca by leasing 40 acres of industrial zoned land, owned by Ontario County, within the landfill property to local farmers for agricultural use. The borrow area is not intended to be used for future waste disposal. After the necessary soil has been removed, the area will be maintained as a stormwater retention area.

A.12.2 Submitted by C. and N. Santy (W - 2/20/12)

The loss of 40 acres of farm land is also a concern. While it may seem that there is no shortage of farmland in our county, it is a finite resource. Once soil is removed from it, it is gone forever. And then there will be a new hole to fill.

<u>Response</u>:

Refer to response to A.12.1 above.

A.12.3 Submitted by W. and D. Minns (W - 2/10/12)

We are opposed to the acquisition of AG land — We believe strongly that Casella Waste Management should not be allowed to acquire additional acres for soil borrow and future expansion. These acres should remain zoned agriculture. It is integral to the Town of Seneca that our agricultural land remain intact, as it has for decades.

Response:

Refer to response to A.12.1, above.

A.12.4 Submitted by F. Sonnenfeld (W - 2/17/12)

While there is some discussion in the DEIS about the effect on agriculture, it is minimal. No economic figures are given such as

comparison with agricultural revenues prior to the Landfill commencing in 2003 with current revenues.

<u>Response</u>:

In addition to the presence of the landfill, additional factors associated with agricultural revenues exist, such as weather, economy, and supply and demand of crops, such that a straight comparison of agricultural revenues in 2003 cannot be accurately compared to the revenues today and correlated to influence from the landfill.

A.12.5 Submitted by Mr. Ruppey (Telephone -2/21/12)

He wished to note that he is against expansion of the landfill, particularly the proposed acquisition of additional acreage.

<u>Response</u>:

Statements noted. Refer to response to A.12.1.

A.12.6 Verbalized by R. Eaton (T - 1/26/12)

Let's talk about the forty acre addition. Casella wants to dig a big hole and use the soil to cover the present landfill. I believe John Sheppard has it right on the nose which says when they get the hole dug, they'll fill it with trash.

<u>Response</u>:

Ontario County Landfill does not intend to utilize this property for anything except for soil borrow.

A.12.7 Verbalized by Supervisor J. Sheppard (T - 1/26/12)

The Draft Environmental Impact Study mentions that there is no town ordinance issue with an annexation of forty acres of agricultural land. The current landfill boundary is county owned and it's zoned M1 which is zoned for industrial use. The town has been complacent in allowing the current operations to occur in that three hundred eighty acres. An annexation of forty additional acres currently zoned ag would be a discretion of the Town of Seneca. We all have procedures in place to determine that -- namely the town board can amend an existing law, town law, ordinance law or it could go through the procedure of the planning board and make a recommendation for site planning to the ZBA [sic] which would make the variance for the use in this case mining an ag district for the -- the Town of Seneca's mitigation efforts at the onset what I have written in the comments is we retain or get title of that land. We maintain -- we make an -- on our own municipality to turn our own fate.

It is inappropriate to say that the county is going to annex forty acres and thereby by that annexation they are exempt from land use authority. I will cite the precedent of City of Rochester versus Monroe County which is fairly -- using the nine point test that the local jurisdiction retains that land use authority.

How then can you deny the Town of Seneca to make their own determination for land use?

<u>Response</u>:

Comment acknowledged. The property will be acquired for use as a soil borrow area for the Ontario County Landfill. It will therefore be immune from local regulation pursuant to the 10 factor balancing test established in Matter of County of Monroe (City of Rochester), 72 N.Y.2d 338 (1988).

- A.13 Environmental Review Process
 - A.13.1 Submitted by K. Reisch on behalf of Geneva League of Women Voters (W – 1/20/12)

The League also takes issue with the timing of the current plans to approve a major expansion of the Ontario County landfill. The failure to have an approved solid waste management plan in place should preclude a major action, such as approving a large landfill expansion. It prejudges the outcome of the planning process.

<u>Response</u>:

The issuance and approval process associated with draft SWMP and the draft EIS are distinctly separate; and therefore, can proceed through environmental review process separately. In addition, it is not expected that the Part 360 permit will be issued before the SWMP is finalized.

A.13.4 Submitted by T. Allen (W -2/19/12)

I believe that it is a conflict of interest for Ontario County to be in control of the content of the DEIS and at the same time the recipient of the millions of dollars from Casella.

<u>Response</u>:

Based on the conclusion made in a June 17, 2011 letter by Underberg & Kessler, LLP, the Ontario County Board of Supervisors was the logical and appropriate entity to fulfill the role of lead agency under SEQRA and the County's contractual obligations do not create a conflict of interest which disqualify the Board of Supervisors from discharging the duties of lead agency. Specific reasons are provided in this letter, which is included as an attachment to the FEIS.

A.13.5 Submitted by C. Hsu (W - 2/21/12)

There are significant sections that rely on out-of-date data when more recent data is available.

<u>Response</u>:

Statements noted. Recent data, where available, has been included in the FEIS.

A.13.6 Submitted by J. and J. Gerling (W - 2/20/12)

Is it best practice and in the best interest of all of the children and families who live in Ontario County to have the study being conducted by the same group that is benefitting from the revenue? Who is looking at the possibility of reducing the amount of trash received and reducing the income coming in, in return for a better quality of life and long term health benefits?

Refer to response to A.13.4, above.

A.13.7 Submitted by C. Kremer (W - 2/21/12)

I am concerned that there is a rush to expand the county landfill without exhausting all other avenues of conservation. The tourist business will not survive if we keep trashing our own environment. Once that is done it will be almost impossible to revive it. Please slow down and do not pass any additional expansions at this time.

<u>Response</u>:

Statements noted. Refer to response to A.4.1 regarding tourism.

A.13.8 Submitted by S. and G. Foster (W - 1/18/12)

We strongly support the Finger Lakes Zero Waste request that asks for a sixty day extension of the deadline for public comments that will be included in the public record.

The deadline of January 20th for written comments and February 6th for comments that may or may not be included in the public hearing record are unreasonable since the volume of the DEIS (Draft Environmental Impact Statement) is very large and includes a substantial amount of technical data.

We would very much appreciate it if you would make several, even weekly, public announcements to let the public know about the proposal and allow enough time to make comments.

Response:

The public comment period was extended by the Board of Supervisors to February 21, 2012.

A.13.9 Submitted by L. Henry (W - 2/20/12)

Most important is the decision process. It is impossible for this board to make a decision on this issue while having a beneficial monetary

interest in its outcome. You will raise the ire of the community in any approval as a "rubber stamping" of a fore-gone conclusion in search money, to the detriment of the quality of life and risk of health to the populous you were elected to protect, and as defined in your oath of office.

<u>Response</u>:

Refer to response to A.13.4, above.

A.13.10 Submitted by E. Halling (W - 2/12/12)

Ontario County should not be the lead agency because of a conflict of interest. There are really only about six county supervisors who really understand the problems of odor, truck traffic, noise, dust, litter, water pollution, to mention a few, that are produced as a result of the landfill. ...The DEC should be the lead agency, as is usually the case.

<u>Response</u>:

Refer to response to A.13.4, above.

A.13.11 Submitted by F. Sonnenfeld (W - 2/13/12)

Ontario County Should Not Be the Lead Agency. From my reading of the Environmental Conservation Law, this law favors, if not directs, that the governmental authority having jurisdiction over the community where the project is located be designated the Lead Agency. There is a valid rationale for such designation, namely, it is the governmental authority closest to the community it services. After reading the Operation, Maintenance and Lease Agreement between Ontario County and Casella, which Ontario County sent me via email pursuant to the Freedom of Information Act, it is apparent that contractually the County cannot deviate from anything that Casella requested. The contract gives no room for the County to oppose any expansion or any other significant increase in the method of operation of the landfill. I can surmise how the County became involved in engaging Casella. In 2003, the County did not have the skill, equipment or the money to operate the small landfill it was then operating on the present site, and be in accordance with the federal conservation and environmental laws, as well as the Environmental Conservation Law of New York. Notwithstanding the good faith reasons for entering into this

contract of adhesion, the Environmental Conservation Law of New York requires that the Lead Agency observe its objective of quality environment for the residents of the community it governs. By reason of the contractual commitments undertaken by it [OML], Ontario County cannot observe its objective.

The work of the Preparers of the firm of Barton & Loguidice, P.C. does not absolve the County of its disability even though the DEIS appears to comply with all requirements which the laws require. A lead agency is a trustee and fiduciary for its residents and must be able to exercise its own unfettered discretion. This Ontario County cannot do.

As an aside, I, and I believe the public, would like to know if Barton & Loguidice, P.C. was the same firm which prepared earlier DEISs and how many others did the firm prepare for Casella for other communities. If the answer to my query is in the affirmative, there is the appearance of conflict of interest on the firm's part. This is another reason to require Ontario County to resign as lead agency.

<u>Response</u>:

Refer to response to A.13.4, above.

A.13.12 Submitted by P. DeBolt (W - 2/21/12)

I also question the decision to allow Ontario County to act as the Lead Agency in this process. I see potential major conflicts of interest. The former Chairman of the Board and current Supervisor, Donald Ninestine's son is the Comptroller for Casella, (not sure if his son held this position before or after (Chairman) Ninestine signed the original contract with Casella.) Supervisor Ninestine recently took credit for securing a substantial monetary donation to DeSales High School, one of his favorite charities, from Casella. Supervisor Sam Casella was at the time the President (or immediate past president) of the Board of DeSales High School at the time of the donation. I am not sure if Supervisor Casella is in anyway related to Casella waste. Also, former Supervisor Jensen has sold land to the Casella company and is, I am told the owner of record of the land to be purchased for the expansion. I am not accusing anyone of anything just asking, "Do you see any possible conflicts of interest?"

Refer to response to A.13.4, above.

A.13.13 Submitted by R. Kriss (W – 2/21/12)

It is troubling that the Ontario County BOS has arrogated to itself Lead Agency status. Because of the nature of its contractual relationship with the operator of the facility, the county has a strong bias in favor of adopting the profit-driven priorities of the operator rather than the larger interests of Ontario County residents. The public interest should count for more than the institutional desire to validate past decisions which now look questionable. In addition, there are certain conflicts of interest on the part of individual board members which are troubling. Under these circumstances, the BOS is under a heavy burden to look to the future as stewards of the public interest, and not to be bound by the errors and misjudgments of the past.

<u>Response</u>:

Refer to response to A.13.4, above.

A.13.14 Submitted by J. Halling (W - 2/12/12)

Ontario County should not be the lead agency because of a conflict of interest. There are really only about six county supervisors who really understand the problems of odor, truck traffic, noise, dust, litter, water pollution, to mention a few, that are produced as a result of the landfill. ...The DEC should be the lead agency, as is usually the case.

<u>Response</u>:

Refer to response to A.13.4, above.

A.13.15 Submitted by J. Hicks (W – 1/13/12)

So what needs to happen is a so called "summit" meeting that maps out the solutions and corrections in order for the landfill to operate, and the neighbors and towns to have protection against harmful and threatening violations to the environment and human health. The County and the DEC needs to know the landfill's plans for dealing with the gases and the sulfides. A timetable needs to be established that has to be tied to expansion approval and continuation of an active permit without sanctions and penalties.

It's hard to believe that a negative environmental impact statement can be issued. There is no doubt property values will be affected. Individuals who are sensitive to obnoxious odors are affected both physically and mentally. The quality of life in the Town is in jeopardy.

Response:

Refer to responses to A.2.2, A.2.5, and A.10.1, above.

A.13.16 Verbalized by D. Knipple representing Finger Lakes Zero Waste Coalition (T - 1/26/12)

The first point we made before which is the county is contractually bound to fulfill the expansion requests of Casella Waste Systems as a consequence of their operations management and lease agreement which was signed in 2003.

I don't think that the county is in any position to objectively review this project under SEQR. Now, I understand that DEC nevertheless permits that, but I don't think the public views this as an objective process or if you find environmental fault in any way that it's going to rise to the surface. The priority is to fulfill the obligations under the contract.

The second point, there is no countywide tenure solid waste plan and it's our view that granting this expansion at this time prejudges that plan. The countywide solid waste plan is in the works, but my view and the view of many of these citizens is that expansion is inconsistent with what we know about the statewide plan which says incineration and landfill should be the last resort for solid waste management.

The other municipalities that we take garbage from in all sort of other ways including sewage, sludge, incinerator ash, etc should have a solid waste plan before we take their garbage. There are solid waste plans like ours that include provisions for effectively dealing with household hazardous waste, pharmaceuticals and electronics which we don't currently -- which currently is not well regulated. The state plan also calls for diverting of organic waste as a major provision of the waste plan and it's clear that we are not doing that here. Ask anyone who lives downwind. We have concerns about air emissions and concerns about leaching management which we will expand upon in technical comments during the remainder of the public comment period.

<u>Response</u>:

Refer to response to A.13.4, above.

NYSDEC is in the process of updating the 6 NYCRR Part 360 regulations regarding waste reduction goals. The Ontario County Landfill will abide by the approved regulations once enacted. Ontario County adopted a Solid Waste Management and Recycling Local Law in 1992, which includes mandatory recycling.

A.13.17 Verbalized by C. Hsu (T – 1/26/12)

The last point is that over time Casella has made a number of financial -- for those of you in this room Casella gives the county two million dollars a year for that landfill. In addition they got fifteen million dollars for the first two expansions, fifteen million dollars.

One of the issues that came up is that this county is responsible as a lead agency for doing an objective assessment of the environmental impacts in order to put a permit through for this expansion.

If they put through that permit, this county will benefit at the rate of a dollar per cubic foot -- and at the rate of two dollars per cubic foot for the other expansion.

Because of that contract, you have a financial gain in insuring that that permit goes through regardless of the outcome of -- this is an issue that I have raised with people at the DEC and there is no real solution for it.

You have a contractual obligation to go through with things on that lease, but at the same time you have an obligation to do an objective assessment -- for the expansion and I don't have a solution for you on how to meet these goals because they are in conflict.

Refer to response to A.13.4, above.

A.14 Height Increase

A.14.1 Submitted by W. and D. Minns (W - 2/10/12)

We are opposed to increasing the ultimate height of the landfill -This increased height will have a detrimental impact on the visual character of our community. The existing berm does little to provide a barrier, and despite repeated attempts to landscape current trees and vegetation are dead or dying.

<u>Response</u>:

Statements noted. The Visual Impact Analysis regarding this impact can be found in Section 3.2.9 of the DEIS

A.14.2 Verbalized by Supervisor J. Sheppard (T - 1/26/12)

The Town of Seneca has been approached in the past for an extension of height -- an increase in height for the landfill. Of course anyone near operations would realize it's relatively inexpensive air space to go up. The expensive part of the landfill is to -- it's expensive to go lateral. It's relatively inexpensive to go up.

The Town of Seneca has obviously -- it is proved to be an impediment to that increase in height and we continue to have it sent to me. The Draft Environmental Impact Study, we feel mitigation efforts to impede any prospective height increase over what the obligation is in the OML-125 is inadequate.

We would seek to increase at least in terms of the DEC permitting a restriction or some kind of impediment to prohibit an ascension in height and further degradation -- the third of which has not been mentioned today from the floor and which is I think significant to my fellow supervisors is land use authority.

As stated in Section 1.5 of the DEIS, the purpose of the project is to extend the life of the Ontario County Landfill to provide economic and environmental security to the surrounding area in the form of preserving existing jobs, affordable waste disposal, maintenance of a local economy income, and built in environmental safeguards. The expansion of the landfill vertically as well as horizontally allows for the most efficient use of the existing liner system by placing more waste in a smaller area and by minimizing additional area currently utilized in the landfill. This helps to provide the disposal capacity needed while minimizing the disturbance of non-landfill areas and maintain compliance with the OML and the Host Community Agreement with the Town of Seneca.

A.15 Noise

A.15.1 Submitted by J. and T. Bonacci (W – 1/18/12)

Our concerns include... Increase in noise

<u>Response</u>:

Noise from expansion operations was evaluated, with the results presented in Section 3.2.10 of the DEIS. The results indicate that the expansion project will not increase noise levels above NYSDEC Noise Guidance acceptable levels. Noise mitigation measures will be implemented during the construction and operation of the expansion landfill. In addition, a supporting document "Operating Noise Impact Assessment" has been prepared as part of the FEIS, which includes cumulative impacts of the landfill and landfill gas to energy (LFGTE) facility.

A.15.2 Submitted by R. Eaton (W -1/18/12)

Section P, Noise levels: Noise levels resulting from equipment or operations at the facility must be controlled to prevent transmission of sound levels beyond the property line. I do not have sophisticated monitoring and measuring equipment but many a day I have gotten up in the morning to a symphony of bulldozer engines and tracks, gun fire, slamming of tail gates and all manner of noise from the landfill.

The existing landfill facility is operated to minimize offsite noise through proper maintenance of equipment, implementation of berms to reduce noise attenuation, and notifications to waste hauling trucks to reduce tail gate noise. The expansion project will not increase noise levels above NYSDEC Noise Guidance acceptable levels. The expansion landfill will also include noise mitigation measures to further minimize noise from the facility. In addition, a supporting document "Operating Noise Impact Assessment" has been prepared as part of the FEIS, which includes cumulative impacts of the landfill and landfill gas to energy (LFGTE) facility.

A.15.3Submitted by S. Best (W - 2/20/12)

The noise pollution alone from the trash-hauling trucks on South Main Street, is well above acceptable limits, yet even a law forbidding the use of Jake brakes seems to be impossible. Also, there are no two ways about it, they smell.

<u>Response</u>:

Refer to response to A.5.1.

A.15.4 Verbalized by R. Eaton (T - 1/26/12)

We also get noise, lots of noise - diesel engines, tailgates slamming and until this year we had gun fire going on over there all day long. I thought I was back in the Army running platoon exercises.

<u>Response</u>:

As discussed in Section 3.2.10.3 of the DEIS, the landfill expansion will be designed and operated to minimize potential noise impacts to offsite receptors. Mitigative measures proposed are discussed in Section 3.2.10.3 of the DEIS. Also, refer to response to A.15.1 above.

A.16 Liner Adequacy/Engineering Concerns

A.16.1 Submitted by D. Galleher (W - 1/18/12)

Plastic/vinyl or some other form of composite 'liners' will eventually degrade. We haven't yet designed something that is immune to

degradation over time and/or under the onslaught of a soup of unknowable chemicals. Once those liners degrade and those allegedly harmless chemicals leach into the soil and thence to the water table who takes care of that mess??

<u>Response</u>:

Landfill liner systems within New York State are constructed in accordance with applicable 6 NYCRR Part 360 regulations which exceed current federal regulations for landfill liner systems. NYSDEC regulations currently require the construction of a redundant double composite liner system. A composite liner system consists of a manufactured geomembrane which is directly underlain by a natural low permeability soil component. The manufactured geomembrane to be used on this project consists of a 60 mil high density polyethylene geomembrane which has superior chemical resistance and lifespan. This material is easily installed and can be tested for potential installation defects very easily. Based on research performed by the Geosynthetic Research Institute, HDPE geomembranes are expected to have a service life of approximately 100-450 years based on conditions typically encountered within landfills (Koerner, Hsuan and Koerner, 2011). These numbers apply to both layers and do not consider the natural soil components of the individual composite liner systems that are not subject to chemical degradation. When compounded together the likely service life of the geosynthetic portion of the landfill alone ranges from 200 -900 years based on landfill conditions. Furthermore, the NYSDEC compiled statistical data for a 2001 evaluation performed by Becker and Phaneuf of lined landfills within New York State and found that none of the lined landfill facilities in compliance with the current regulations had groundwater impacts that were attributed to a leaking double composite liner system. There are currently 27 double composite lined landfill within New York State some of which have been in existence for over 20 years.

A.16.2 Submitted by N. Galleher (W – 1/18/12)

It is incomprehensible to me how these things are even allowed to exist in such close proximity to the lakes and watershed. I don't care how many liners exist. In time, those liners will degrade and all sorts of contaminants and toxins will leach into the soil and water table after Casella is long gone with no culpability for the impact and remediation of the problem his company created in the first place.

Refer to response to A.16.1, above.

A.16.3 Submitted by E. Halling (W -2/12/12)

...there needs to be more specific safeguards in place to protect the residents against the long list of "What ifs?" There also needs to be an outside agency policing the operation.

Response:

Refer to response to A.16.1, above.

A.16.4 Submitted by P. DeBolt (W - 2/21/12)

Liner failures can have many causes, such as chemical breakdown of the membrane, improper installation, lightening strikes, animals burrowing into the soil to name a few. I have concerns as to the whether there are enough monitoring wells. It seems even the EPA has concerns about the safety and risk of failure of landfill liners. See Federal Register 33345 (8/30/1988)

<u>Response</u>:

Refer to response to A.16.1, above.

A.16.5 Submitted by J. Halling (W -2/12/12)

...there needs to be more specific safeguards in place to protect the residents against the long list of "What ifs?" There also needs to be an outside agency policing the operation.

<u>Response</u>:

The safeguards outlined in Section 2.0 of the DEIS, including the landfill liner, leachate management, gas collection, and groundwater monitoring systems meet all requirements of NYCRR Part 360 and are specifically designed to protect groundwater, soils, and air in the vicinity of the landfill. The NYSDEC is responsible, as an outside agency, for ensuring that the landfill facility complies with NYCRR Part 360 in its operations and reporting requirements.

A.16.6 Submitted by M. Venuti (W -1/17/12)

Regarding the current expansion plan, I see it is stated groundwater contamination is not a threat because the new areas will have a double composite liner on the bottom. That sounds good, but what does it mean? The federal Environmental Protection Agency has stated that all landfill liners will ultimately fail. Will the double liner proposed for our landfill fail or not? Is it guaranteed forever, for 50 years, for 100 years, or is there no guaranty? What are the variables? Please ask the engineers probing questions about this until you are satisfied you understand what can be expected.

<u>Response</u>:

Refer to response to A.16.1, above.

A.17 Dust Control

A.17.1 Submitted by R. Eaton (W -1/18/12)

Section K, Dust control: Dust must be effectively controlled so it does not constitute a nuisance or hazard to health safety or property. During dry weather a coating of fine dust is found on vehicles, boats, lawn furniture sitting outside my house. I have no idea what this contains, asbestos or other chemicals. I do know it is a nuisance. <u>Response</u>:

As discussed in Section 3.1.5.3 of the DEIS, dust generation will be minimized by using best management practices. Mitigative measures were discussed in this section of the DEIS.

A.17.2 Verbalized by R. Eaton (T - 1/26/12)

I live three quarters of a mile east of the landfill. I don't consider Casella a very good neighbor. We're bombarded by their noise, their odors, insects their airborne pollutants and plastic bags that get blown to us by the prevailing west wind. In fact had I known what an abomination that the facility was to become I never would have purchased a piece of property there. When we get the west wind, we find airborne material from the dump on the vehicles, lawn furniture and about everything else. This is a violation of section K DEC 360 which says dust will be effectively controlled.

<u>Response</u>:

Refer to response to A.17.1, above.

A.17.3 Verbalized by D. Niles (T - 1/26/12)

I live on County Road 23 in Phelps just outside of Oaks Corners and it stinks there too. In the summertime with the south breeze you can't have your windows open.

Another thing, all the trucks drag all the crap out in the road. They ought to have a tire wash because every time cars go up and down that road -- dust, it's probably polluted with crap. There are rocks in the road as well as the stink.

<u>Response</u>:

As referenced in Section 3.1.5.3, a water truck is available at all times to water down haul roads during dry periods to minimize dust generated by vehicles moving over exposed soils. Casella hires outside contractor to sweep Route 5 & 20 three times per week. On-site roads are watered daily if needed. Temporary workers are on site to clean tires to prevent tracking.

A.18 Ecology/Wetlands

A.18.1 Submitted by C. Hsu (W - 2/21/12)

No current wildlife survey is presented.

Response:

Refer to response to comment F.15.1, below.

A.19 Fires

A.19.1 Submitted by P. DeBolt (W - 2/21/12)

Landfill fires can be very tricky, almost impossible to bring under control. Has the County fire service been contacted to determine if they will have sufficient man power or might need additional equipment for fighting fires at the County's landfill? What about equipment for monitoring hazards to the men and women being placed in harms way to extinguish a fire? What might be the resulting hazards from run off? Is there a plan in place to control run off? What would happen to air quality risks in the case of a fire? Are there controls in place for determining impact on crops and soils as a result of a fire and to assure the crops are not distributed for consumption until a determination has been made for an incident? Can application of excessive water cause a major membrane failure?

<u>Response</u>:

As outlined in Section 2.6.5.7, a majority of the fire related events at the landfill can be handled by landfill personnel. In the event that a larger subsurface fire occurs that cannot be handled by landfill personnel, a specialized contractor may be retained by the landfill operator to assist with fire suppression. The operator would be financially responsible for this service.

As further outlined in this section, local fire fighting services would be required for any fires involving structures on the site. Section 3.2.11.1 outlines the payments that are made to the Town of Seneca in support of their fire protection services which may be called upon in the event of a structure fire at the facility.

A.20 Blowing Litter

A.20.1 Submitted by R. Eaton (W -1/18/12)

Confinement of Solid waste: Blowing litter must be confined to solid waste holding and operating areas. Every time there is strong wind plastic bags, Styrofoam *cups*, papers and other light objects are blown out of the land fill. I have found numerous items caught in the trees behind my house and in my apple trees. The fact that Casella sends out crews to pick up this litter from the sides of the dump and the roadsides is in itself proof that they are not in abeyance of this rule. Also the trucks leaving the landfill leave litter behind them from items stuck to the truck bodies that fall off along the road side.

<u>Response</u>:

The landfill has a comprehensive plan in-place for managing and preventing windblown litter at the site. The plan includes limiting operation of the landfill at certain wind conditions, use of daily cover soils, installation of permanent litter fences at the landfill periphery, use of mobile litter fences at the working face and the use of staff to pick up litter on-site and off-site that may have got by the on-site containment mechanisms. The current practices are expected to be continued for all future operations.

B. Town of Seneca Comments

B.1 Town of Seneca, January 20, 2012

B.1.1 Increasing the ultimate height of the landfill;

...The ultimate height of the proposed expansion is 1025 MSL, which is approximately 28 feet higher than the existing permit maximum elevation as contemplated in the OML.

...The project's overall impact on the visual character of the area is considered to be very low to moderate, depending on the distance of the view to the proposed landfill site.

...Although there are intrusions to the vertical and overhead planes in the landscape within the expansion boundary, these intrusions will be minimal and mitigative measures to decrease the levels of intrusions will be employed as needed.

...The visual setting and visibility viewshed analysis discusses the character of the surrounding landscape and assesses such topographic changes to the site with regard to local landscape aesthetics. No additional mitigation measures are required.

...Closure of the site will be progressive as the landfill operation proceeds to completion...

- a. Page References; S 1, S 5, S 6, 13, 19, 43, 46, 47
- b. The Town of Seneca acknowledges the 28' height increase as indicated in the expansion engineering diagrams submitted with the OML.
- c. The Town considers the impact on the visual character of the area to be moderate to high. The level of impact is relative to the length of residency and degradation of the viewshed from pre landfill to ultimate expansion height. The 'delta' to be considered should be from pre landfill viewshed to expansion completion not merely current viewshed to expansion completion. "Transplanted" residents who knowingly moved into the degraded viewshed will experience less impact than members of long standing families of several generations. The constituency is heavily weighted toward long standing families.

The intent of the SEQR process and the DEIS is to address the impacts of the proposed project when compared to the conditions currently approved for development at the site. The visual impacts from the currently permitted landfill have previously been evaluated under SEQRA as part of the permitting process for the facility. When compared to the currently permitted landfill configuration the additional horizontal and vertical expansion provides minimal noticeable change to the surrounding viewscape.

d. Computer modeling estimates the additional height will result in a 5%, increased exposure during periods of little to no vegetation screening.
The modeling does not realistically accommodate the pile's enhanced prominence and increased impact to existing viewshed exposures.

<u>Response</u>:

As described in Attachment F, Section 4.1.1 of the DEIS, the purpose of the viewshed computer modeling was to simply establish the areas within a 5 mile radius from which any portion of the proposed expansion would be visible. The viewshed computer modeling was not intended to provide a gauge of the prominence and impact of this visibility. As outlined in Section 4.2, the photo visual simulations were completed as both a verification of the accuracy of the computer model's viewable areas as well as to evaluate the aesthetic impacts of the proposed project on nearby areas.

- e. The Town requests three additional mitigating techniques;
- i. Remove and replace the existing dying or dead screening berm components along the north property line. Conifer replacements will be of similar growth; planted with the intent to provide a year round visual barrier.

Response:

Statement noted. Language will be added to the Operations and Maintenance Manual submitted with the 6 NYCRR Part 360 Permit application documents to indicate the size and condition requirements for current and future trees planted for the purpose of visual screening. Provisions for the maintenance of such vegetation will also be included.

ii. The statement, ". . .mitigated measures to reduce the levels of these intrusions will be employed as needed (p 101).. ." does not offer an acceptable level of commitment toward mitigation. Additional screening berms to mitigate the visual impact of successive cell construction will be designed and included in the DEIS.

<u>Response</u>:

As outlined in Attachment F, Section 6.0, due to the height of the landfill, screening berms and vegetation would have limited effectiveness in screening views of the landfill except in areas within close proximity to the footprint. Screening berms already exist along much of County Road 5 and State Routes 5 & 20, and a screening berm is included in the grading plan for the proposed soil borrow area (Figure 13 of the DEIS). The visual renderings included in Attachment F did not indicate any additional locations where screening berms would be a successful mitigative measure and therefore none are proposed within the DEIS.

iii. The multi layer cover system will be installed as soon as practical after attaining the designed height of 1025' MSL and prior to succeeding cell construction. The finality of the top liner will inhibit the pursuit of future permitted height increases.
As stated in section 2.7 of the DEIS and as required in applicable NYSDEC Solid Waste Facility regulations, landfill areas that have reached their final grade will be covered with an approved final cover system. Due to the operational constraints of a landfill and duration of liner system construction projects, new cell construction must take place prior to the existing landfill areas reaching final grades and installation of a final cover system. This sequencing will ensure continuous and uninterrupted operations at the site.

B.1.2 Leachate Treatment

...site leachate generation would peak at over 21 million gallons of leachate per year. The estimates were performed assuming a worst case condition of no final cover system installation on the Phase III landfill and therefore the peak year for generation would occur in 2028.

- a. Page References; 30, 43, 78
- b. The Town requests this additional mitigating technique;
- i. The multi layer cover system will be installed as soon as practical after attaining the designed height of 1025' MSL and prior to succeeding cell construction. The higher the proportion of final coverage, the further divergence from the worst case condition and therefore less leachate to collect, transport and process.

<u>Response</u>:

As stated in Section 2.7 of the DEIS, portions of the landfill will be closed as filling activities at the site progress. In order to ensure that adequate and uninterrupted disposal capacity is available at the site at all times, a new cell must be constructed at the landfill prior to the closure of the preceding fill area. Additionally, Section 2.4.3 of the DEIS discusses the capacity for storage, treatment, and disposal of leachate based on the worst case scenario for leachate generation, without any portions of the Section III Landfill closed, in order to assess the greatest possible impact.

B.1.3 Landfill Gas Collection and Odor Remediation

Methane mitigation through collection and control is generally affected by two main factors: GCCS collection efficiency and methane oxidation in cover materials...For example; the collection efficiency default for active gas collection areas under daily cover is 60 percent. For areas under intermediate cover, the collection efficiency is estimated at 75 percent. For areas under a final soil and geomembrane cover system, the collection efficiency is estimated at 95 percent.

...Closure of the site will be progressive as the landfill operation proceeds to completion.

...Table 5; Fugitive CH4 emissions existing— estimated 7,446 tons/yr, Fugitive CH4 emissions proposed expansion — estimated 10,522 tons/yr an increase of 30%.

...Landfill gas collection and control will be the primary methane control method utilized at the site throughout the landfill expansion....

- a. Page References; 76
- b. The Town requests this additional mitigating technique; The multi layer cover system will be installed as soon as practical after attaining the designed height of 1025' MSL and prior to succeeding cell construction. A higher proportion of final coverage leads to a higher efficiency of gas collection minimizing fugitive emissions and odor.

<u>Response</u>:

Statements Noted.

Additionally, please note that areas will be capped as waste placement reaches design capacity. Temporary caps like that currently in place on the east slope of the landfill may be utilized as conditions allow.

B.1.4 Acquiring AG land for soil borrowing

...To provide adequate soils for construction and operations of the landfill expansion, a soil borrow area is proposed to the south of the Phase III landfill adjacent to the existing County landfill property.

...The property proposed for development of the borrow area is currently private property. Acquisition and use of the proposed soil borrow

area will only occur should the facility receive the permit modification for the landfill expansion.

...The proposed borrow area encompasses approximately 15.5 acres and is expected to yield approximately 922,850 CY of soil.

...This agricultural land would likely not be reclaimed as agricultural land in the future due to final contours of the borrow area following completion of the proposed soil mining area.

According to the Town of Seneca 's Comprehensive Plan the town has an abundance of prime agricultural land that has allowed the area to establish itself as an agrarian community. The open space and rural character of the town adds to a high quality of life for town residents. The Plan takes a proactive approach to controlling development and ensuring that the rural character of the town is preserved.

...The existing Landfill and the proposed expansion (including the proposed borrow area) would not be subject to local zoning... Because the project will have no significant adverse impacts on land use and zoning, agricultural resources and open space and recreation, there is no need to propose mitigation.

...A purchase agreement has been signed with the willing landowner for the property and the property will be transferred to the County prior to operation.

- a. Page References; S 5, 13, 23, 34, 85, 88, 89, 102
- b. The Town established the priority of preserving our rural cultural and agricultural land decades ago. This priority is well defined in our Comprehensive Plan, Zoning Ordinance and the conduct of the Town Board, Planning Board and Zoning Board of Appeals.
- c. The Town will not surrender its land use responsibility or authority and intends to follow established zoning decision precedent; likely the City of Rochester vs. Monroe County.
- d. The Town requests these mitigating techniques;
 - i. The Town of Seneca acquires any agriculturally zoned land destined for landfill operations.
 - ii. The town follows the City of Rochester vs. Monroe County precedent of a municipality incursion on itself and implements a permissive zoning action to accommodate the excavation of

borrowing soils for the landfill expansion. This is an obvious deviation from established agriculture preservation but;

- 1. provides the environmental advantages of near site soil borrowing.
- 2. the town retains land use authority for any landfill expansion into the borrowing acreage.
- 3. the town keeps "a seat at the table" to participate in future landfill expansion and host town compensation discussions.
- 4. a sustained revenue stream accompanying future landfill expansions could be used to preserve the town's rural culture and remaining agricultural land.
- 5. the town's ownership of abutting land is an appropriate evolution of our successful private public relationship.

<u>Response</u>:

Refer to Section 3.2.1 of the DEIS regarding discussions of the soil borrow area. The property to be acquired is expected to be transferred to either the County or Town prior to operation. Under either scenario, Casella will retain operational control of the property during the term of the OML subject to the limitation that the property may not be used for waste disposal activities. Because the property will be acquired for use as a soil borrow area for the Ontario County Landfill, it will be immune from local regulation pursuant to the 10 factor balancing test established in Matter of County of Monroe (City of Rochester), 72 N.Y.2d 338 (1988).

B.2 Town of Seneca, February 16, 2012

B.2.1 Traffic

What would be the consequences to the existing traffic pattern, and for what duration, if required soils were delivered from off-site locations in lieu of the proposed borrowing area?

<u>Response</u>:

A major portion of the soils taken from the soil borrow area would be used for daily cover in landfill operations and for use in the final closure of the facility. This would require the removal and transfer of soils from the borrow area or an off-site location on a near daily basis during operations once the soils available within the proposed landfill footprint have been exhausted. Based on the maximum daily waste acceptance rate, estimated soil weight and hauling truck capacity, a peak hauling rate of 8 trucks per hour, or 64 trucks per day may be required. The number during periods of construction may exceed this level depending on the soil needed. Utilizing the average daily waste acceptance rate and the soil assumptions, the average hauling rate would be approximately 5 trucks per hour or 43 trucks per day. The exact duration of hauling from the soil borrow area is governed by the waste acceptance rate, fill progression and BUD acceptance rate, however it is expected to be necessary throughout most of the operational life of the proposed landfill expansion.

B.3 CHA

Opinions and Recommendations

In general, the Draft EIS accurately identifies anticipated impacts and identifies appropriate mitigation measures that will be employed to minimize adverse environmental impacts. However, certain elements of the DEIS lack supporting documentation, do not provide an adequate analysis or factual demonstration to support a conclusion, or have other specific deficiencies that are noted below.

Moreover, because the Part 360 Permit application and Title V Permit application have not yet been prepared or submitted, certain details about the proposed project are not presented or discussed in the DEIS. This leads to the following questions which should be directed to the County:

When will the Part 360 Permit application documents and the Title V Permit application Documents be submitted to the NYSDEC? Will the details of the Part 360 permit Application and the Title V Permit Application be subject to Supplemental SEQR review?

<u>Response</u>:

The Part 360 Permit application documents and the Title V Permit application documents will be submitted to NYSDEC after completion of the SEQR process for the project. This will ensure that the permit application documents conform to the County's ultimate SEQR findings as well as all statements included in the DEIS and FEIS. Additional SEQR review is not expected to be necessary.

B.3.1 Off-site Soil Borrow Area

B.3.1.1

Regarding the proposed southern borrow area (Page S-3) it is noted that there are no significant impacts anticipated because the ablation and lodgement till units to be excavated are not significant sources of groundwater and because the depth of the borrow excavation will not intersect the water bearing zone on top of the weathered bedrock or adversely impact groundwater recharge of the phase III landfill footprint. The DEIS should be revised to provide site specific data or analysis on the soil borrow site which would support the conclusions that were made. The conceptual soil balance presented in the DEIS does not justify the need for the new soil borrow area. Section 2.5.3 of the DEIS presents an estimated soil balance which shows a deficit of 339,600 CY required from the soil borrow area. Why is the soil borrow area graded to yield 922,850 CY of soil, if the soil balance deficit is only 339,600 CY?

<u>Response</u>:

Boring S-5 was conducted within the proposed borrow area to determine the depth to bedrock for preliminary design of the borrow area. According to the boring log for S-5, which is included in Attachment L of the DEIS, depth to bedrock is approximately 150 feet below existing grade within the proposed soil borrow area. As stated on Page S-3 of the DEIS, since excavation will be limited to a depth of approximately 90 feet below existing grade within the borrow area, it is not anticipated that the water bearing zone directly above bedrock that is typical of the site will be encountered. Figure 2A, which illustrates the location of S-5 has been generated and included in Attachment L of the FEIS.

The soil borrow area grading plan provided in the DEIS represents the maximum quantity of soil that the borrow area could yield based on the proposed horizontal limits and subsurface conditions. The assumptions provided in the estimated soil balance are based on the best available data and are subject to change based on a number of factors that could lead to the need for additional operational and construction soils at the facility beyond those estimated in the soil balance. These could include larger than anticipated quantities of unsuitable materials within the borrow area such as large boulders or excessively organic material, the utilization of thicker than required temporary cover soils for odor and/or vector control, or the lower than expected rate of BUD materials available for cover. In addition, Section 2.5.3 of the DEIS has been updated in the FEIS to reflect more accurate soil needs for the proposed facility. While it is a possibility that lesser quantities of soils will be needed from the borrow area, the DEIS was undertaken to explore the maximum potential impacts from development of the soil borrow area.

B.3.1.2

The soil balance deficit would be reduced or even eliminated if it were not assumed that the BUD materials used for cover was only 10% instead of 25%. According to the 2010 annual report filed with the NYSDEC, when measured by weight, BUD materials represented between 16% and 42% of the waste material accepted for disposal at the facility from 2006 through 2010. As a weighted average over this five year period BUD materials represented 29% of the waste materials accepted. The soil balance presented in the DEIS should be revised to re-calculate the off-site soil deficit under the assumption of 25% BUD material by volume.

<u>Response</u>:

The intent of the DEIS is to explore the maximum potential impacts of the proposed landfill expansion project. While it is possible that BUD material could be used in lieu of soil for all of the daily cover needs at the facility, it is not guaranteed that this alternate material will be available at those quantities for the life of the proposed expansion. Typically, landfill daily cover requirements are equal to approximately 20%, by volume, of the waste placed within the landfill. In order to balance the two extreme scenarios of the availability of BUD materials to completely meet these needs and the complete lack of BUD material availability, the average of these two scenarios was utilized for the purpose of the DEIS. In addition, it is anticipated that the revised NYCRR Part 360 regulations, which will likely be issued by the NYSDEC in 2013 will limit the allowable quantities of BUD material used at the site.

B.3.1.3

Section 7.5 is titled Alternative Soil Borrow Area, but contains no substantive discussions of alternative soil borrow areas either on-site or off-site. Discussion in this section notes that "The design of the proposed soil borrow area is based on the quantity of soils required and the proximity of the area to the proposed landfill expansion". This is not supported by the preliminary soil balance presented in Section 2.5.3, as noted in the previous comment. This section of the DEIS requires revision to provide a more detailed analysis of alternative soil borrow areas, both on-site and off-site.

<u>Response</u>:

Section 7.5 of the DEIS addresses the alternative soil borrow options. In doing so, it serves the purpose of eliminating any and all off-site soil borrow areas as an alternative based on increased costs and increased impacts associated with road maintenance, traffic impacts, air quality and noise. It is for this reason that analyses of specific alternative sites were not included.

As detailed in the response to the comment above, while the quantity of soils needed under the assumed usage rates is exceeded by those available in the proposed borrow area, there are a number of scenarios under which a larger quantity of soils could be needed. Developing an area within the site that only provides the "bare minimum" of required soils would leave the potential need for permitting of an additional soil area prior to the completion of the proposed expansion. Therefore, it was appropriate to evaluate a larger quantity of soils to ensure that the full impacts of the project were evaluated in this EIS.

B.3.1.4

No wetland delineation report or threatened and endangered species assessment has been prepared for this property.

The proposed off-site soil borrow area is located in a field that was previously used for agricultural purposes. This location has contained corn and alfalfa in the past, with normal agricultural activities taking place such as disking and plowing. The proposed borrow area was inspected for potential wetlands by staff of B&L, resulting in no wetlands being observed. A NYSDEC mapped, class C with C standards, sub-tributary flows along the western edge of the agricultural field. This stream has a NYSDEC Water Index Number of Ont. 66-12-52-40-4-1. B&L and Casella have submitted a request to modify the issued USACE Approved Jurisdictional Determination (JD) in order to include this subtributary of Flint Creek as a jurisdictional water of the United States. Information regarding the sub-tributary has been sent to the USACE and a modified Approved JD has been received.

B.3.1.5

Will the Part 360 facility boundary be amended to include the proposed soil borrow area?

<u>Response</u>:

This will be addressed after conclusion of the SEQR process and during the submittal of the Part 360 Permit Application.

B.3.1.6

Will the applicant Casella seek to amend its Host Community Agreement with the Town of Seneca in recognition of this change in the Solid Waste Facility boundary?

<u>Response</u>:

The Host Community Agreement is a standalone agreement between Casella and the Town of Seneca. If it becomes necessary for the Host Community Agreement to be changed, Casella will discuss that issue with the Town.

B.3.1.7

The proposed soil borrow area will reportedly be acquired by Ontario County, which Casella is already under contract to purchase. Such an action would remove ratable private property from the tax rolls of the Town of Seneca. How will the Town be compensated for this lost ratable? Would the County be willing to convey the portion of the landfill site that is located to the north and west of the Phase 1 landfill area to the Town?

<u>Response</u>:

This is correct. Regardless of whether the County or the Town acquires the property, it will be removed from the tax rolls At this time, there are no plans to additionally compensate the Town for this loss or for the County to convey the portion of the landfill site that is located to the north and west of the Phase 1 landfill area to the Town.

B.3.1.8

Will the local school district lose tax revenue as a result of the County's acquisition of the proposed soil borrow property?

<u>Response</u>:

Ontario County or the Town of Seneca may retain ownership of the soil borrow property. Whether the Town or County retains ownership of the proposed borrow area property, the property will be removed from the school district tax rolls.

B.3.1.9

The proposed soil borrow area is located in an agricultural zoning district. The SEQR Positive declaration adopted by the Board of Supervisors for the proposed project amended the answer to question 25 on part B to the attachment to the EAF part 1 to note that "If an off-site soil borrow area is used, a Special Use Permit may need to be issued by the Town of Seneca Zoning Board of Appeals, a Site Plan approval may be needed from the Town of Seneca Planning Board, and/or a determination would have to be made that the use was exempt from Zoning involving the Seneca Town Board." Section 3.2.1.2 of the DEIS notes that "The existing Landfill and the proposed expansion (including the proposed borrow area) would not be subject to local zoning." A discussion should be provided in the DEIS to explain why local zoning would not be applicable if an off-site borrow area is used.

<u>Response</u>:

Refer to responses to A.12.7 and B.1.4, above.

B.3.2 Proposed Site Capacity and Duration

B.3.2.1

In section 1.3 (Project Description) it is noted that "..The proposed expansion will increase the available airspace by approximately 11,504,800 cubic yards which is anticipated to provide adequate airspace through 2028 depending on waste acceptance rates and effective airspace utilization." This statement of landfill expansion capacity is repeated throughout the document.

This is an overly optimistic site life considering that the facility is approved to accept over 920,000 tons of waste per year (not including BUD materials). During the year 2010, the facility accepted 911,389 tons of waste and 306,590 tons of BUD materials, and consumed almost 1.3 million cubic yards of airspace. Assuming that the facility continues to operate at the 2010 levels, the expansion will provide about 8.8 years of additional capacity. Based on the existing permitted landfill exhausting its site life by November 2015, the proposed landfill expansion would last until only September 2024. An updated more conservative exhaustion date of February 2015 for the existing permitted landfill expansion will reach its full capacity.

This is important because the existing OML between the County and Casella extends until the year 2028, and so it is likely that an additional landfill expansion will be proposed in order for Casella to continue operations until the expiration of the OML. Given the proximity of the soil borrow area to the south face of the currently permitted landfill, the property proposed to be acquired for soil borrow area would be a very likely location for the next expansion proposal. Another alternative would be a subsequent height increase on the proposed expansion area. If either of these is being contemplated, a more thorough analysis of potential impacts related to the development of another landfill cell in this borrow area or another height increase should be conducted.

<u>Response:</u>

As stated in Section 1.3 and as referenced in your comment above, the estimated site life depends on future waste acceptance and effective air space utilization. Per the OML, disposal capacity will be provided for the residents of Ontario County through 2028. Currently, there are no planned expansions and the soil borrow area will include a deed restriction prohibiting its use for waste disposal. To the extent that additional expansions become necessary and are contemplated, whether they be vertical or lateral, they are currently speculative, at best, and beyond those proposed in this EIS and those required by the OML. And, to the extent that they are developed and are proposed, they will undergo appropriate review under SEQR.

B.3.3 Air Quality Impacts

B.3.3.1

No estimate of dust emissions (PM-10 and PM 2.5) associated with new cell construction or the proposed soil borrow area have been included either in the DEIS document or the detailed air quality review presented in Attachment G. These emissions should be quantified pursuant to NYSDEC policy CP-33 "Assessing and Mitigating Impacts of Fine Particulate Matter Emissions".

<u>Response</u>:

Dust emissions are not expected to change as daily waste acceptance rates and annual construction is not anticipated to increase. The expansion only extends the amount of time that these activities will take place. Fugitive dust control measures are currently in place, and will continue to be in place during the proposed project construction and operation. Estimates of fugitive particulate dust (PM-10 and PM-2.5) generated from on-site vehicle and heavy equipment operations have been provided in a supplemental Air Quality Attachment in Appendix BB as Attachment G.

B.3.3.2

The landfill gas generation estimates developed for the DEIS assume that leachate recirculation may occur during operation of the landfill expansion. This is a conservative assumption that results in an estimate of more rapid waste degradation with more landfill gas generation occurring during the operational life of the facility. However, the DEIS does not identify any additional mitigation measures that would need to be employed with the leachate recirculation program to ensure that these increasing quantities of landfill gas are efficiently collected and do not increase fugitive landfill gas emissions.

<u>Response</u>:

Statements Noted. The DEIS and associated air emission calculations assume worst case conditions, including gas generation while operating under leachate recirculation. The landfill expansion will operate under a landfill gas collection and control system design plan which will be designed to implement sufficient gas collection and control measures at the facility should leachate recirculation be introduced.

B.3.3.3

Although not presented in the body of the DEIS, Attachment G estimates that up to 4,000 lb of fugitive VOC emissions could be emitted from the leachate storage lagoons that will be re-located to the northern boundary of the site. These fugitive emissions could cause odor problems off-site and should be mitigated. At a minimum, the mitigating measures to be considered should include covering of the lagoons with collection and treatment of the exhaust gases and the establishment of a nuisance complaint hot-line that

has been established to accept calls from citizens reporting odor problems or other nuisance conditions they believe are being caused by the landfill. The DEIS should also consider an alternative leachate management option which includes conveyance to the local wastewater treatment plant in Canandaigua through a sewer interceptor that could be constructed.

<u>Response</u>:

Statements noted. Fugitive VOC emissions presented in Attachment G present a worst case potential to emit from leachate storage, assuming 100 percent volatilization of VOCs in the leachate. Actual VOC emissions from leachate storage are expected to be closer to 20% of the total VOCs. Leachate will be pumped daily from storage lagoons and transferred offsite for treatment.

In conjunction with the existing landfill activity website provided for the site, an Odor Management Plan will be prepared as part of the Part 360 Solid Waste permitting for the proposed landfill expansion project. The Odor Management Plan will include the specific procedures for documenting complaints, conducting follow up, and documentation resolution of the complaint.

B.3.3.4

The discussion of air impact modeling results for the peak year does not present the cumulative landfill gas emissions. In section 3.1.6.2 it is noted that "Based on site specific gas generation modeling and collection efficiency estimates, a maximum PTE landfill gas generation rate for the landfill expansion of 9,618 scfm is projected to occur following the permitted landfill closure year..". This section of the DEIS should be amended to explain that this will occur during the year 2029, during which time the waste in the currently permitted landfill will also be generating an additional 2,895 sfcm of landfill gas. This section of the DEIS should also be amended to explain that the cumulative landfill gas generation rate during 2029 will be 12,513 scfm.

Statements Noted. The intent of this DEIS is to describe conditions associated with the expansion of the landfill only. However, air emissions presented in this document do evaluate total gas collection from both the existing landfill and proposed expansion. Attachment G – Air Quality Review, provides the information requested. This section of the FEIS has been amended to include this information.

B.3.3.5

Similarly, Table 5, which presents Peak Methane Generation and Emission estimates, does not present the cumulative landfill gas emissions from both the currently permitted landfill and the proposed landfill expansion. The Table should be modified to note that the existing permitted landfill will generate 16,870 tons on methane in 2029, and that cumulative methane generation during that year will be 69,482 tons.

<u>Response</u>:

The purpose of this DEIS is to focus on expansion of the landfill only. However, Table 5 has been modified to reflect total LFG production during the peak year.

B.3.3.6

The Landfill Expansion should be required to install sufficient flare capacity to be capable of combusting all of the landfill gas that will be generated. This flare capacity should be independent of and in addition to any gas combustion capacity that is provided by third-party landfill gas to energy facilities.

<u>Response</u>:

The Landfill Expansion gas collection and control system will be designed and installed in accordance with an engineered gas collection and control system design plan to capture landfill gas generated from the landfill. The facility will maintain flare combustion capacity to handle landfill gas collected in the event that the third-party gas to energy facility is not operational.

B.3.4 Site Ecology

B.3.4.1

The Comprehensive Wetlands Delineation Report presented in Attachment H contained no information to indicate that a wetlands delineation had been performed on the proposed soil borrow property. A wetland delineation (and jurisdictional determination) needs to be performed on the soil borrow property before it can be concluded that the proposed project will have no impact on wetlands.

<u>Response</u>:

As stated in the Off-Site Borrow Area section, the proposed soil borrow area is located within an agricultural field that has been disturbed throughout history by agricultural practices. This location has contained corn and alfalfa in the past. The proposed borrow area was inspected for potential wetlands by staff of B&L, resulting in no wetlands. A NYSDEC mapped, sub-tributary to Flint Creek does flow along the western edge of the agricultural field. This stream has a NYSDEC Water Index Number of Ont. 66-12-52-40-4-1. B&L and Casella have submitted a request to modify the issued USACE Approved Jurisdictional Determination (JD) in order to include this sub-tributary of Flint Creek as a jurisdictional water of the United States. The USACE issued an approved JD which is accompanying this document in Appendix BB as Attachment J.

B.3.5.1

The viewshed maps presented in Figures 1 and 2 in Attachment F of the DEIS do not include the soil borrow area within the project boundaries.

The project boundaries on Figures 1 and 2 represent the permitted and proposed boundaries of the waste mass, which is the portion of the facility with the potential to have visual impacts within the 5-mile radius. The only portion of the soil borrow area that will be developed above ground, and will therefore be visible, is the proposed screening berm that would be constructed at the eastern edge of the excavation area. This will serve in some areas to screen views of the waste mass itself and was not included in the viewshed analysis. An additional rendering has been completed based on a photograph taken at the corner of Rilands Road and County Road 5 to illustrate the view of this screening berm. The additional rendering is provided in Appendix BB as Attachment F.

B.3.5.2

Visual Impact Assessment presented in Attachment F included visual impact simulations of proposed future conditions from 13 different vantage points around the project area. Visual impact simulations should be constructed from several additional residential vantage points immediately to the south of the proposed soil borrow area. These simulations should show the screening berms that are proposed for the soil borrow area.

<u>Response</u>:

An additional rendering has been completed based on a photograph taken at the corner of Rilands Road and County Road 5. The additional rendering is provided in Appendix BB as Attachment F.

B.3.5.3

If the soil borrow area is developed, the screening berms that will be built to mitigate noise impacts should be appropriately vegetated with trees and shrubs to mitigate visual impacts.

The engineering drawings included in the Part 360 permit application documents will include a planting plan for the screening berm along the eastern edge of the proposed soil borrow area.

B.3.6 Noise Impact Assessment

B.3.6.1

Figure 19 does not show nearby residential receptors to the south who could be impacted by the proposed expansion project. The noise impact assessment in section 3.2.10.2 of the DEIS notes that "the proposed borrow area will include the implementation of a soil berm around the area that will extend approximately 20 feet above the starting elevation of the virgin borrow area, which will break the "line of sight" between the nearby receptor locations and the operating equipment." Conclusions are then drawn that "For all locations assessed, the increase above the existing sound levels experienced from landfill operations was less than 6 dBA, with the majority of sensitive receptor locations experiencing an increase between 0 and 3 dBA. The sound levels from the proposed borrow area at nearby sensitive receptors are not anticipated to exceed those experienced due to current landfill operations when operating in the southern part of this landfill. It should be noted that in locations close to busy roads, traffic noise is the predominant noise source experienced by receptors and this will not change with the expansion." Data and analytical results need to be presented to support such a conclusion. None were presented in the DEIS or any of the attachments.

<u>Response</u>:

Statements noted. A supporting document titled "Operating Noise Impact Assessment" is included in Appendix BB as Attachment M.

B.3.7 Cumulative and Growth Inducing Impacts

B.3.7.1

In the discussion of cumulative impacts in Section 6.1 it is noted that: "Due to the unique nature of the landfill expansion, it is anticipated the cumulative impacts would result from other development of commercial developments or agricultural improvements in the vicinity of the landfill. However at this time, no other developments are proposed in the vicinity of the landfill. Given the lack of other planned developments, cumulative impacts to the surrounding community within the Project area will not occur." This is an inappropriate conclusion given the Master Plan for Future Site Development that is currently underway and mentioned in Section 1.2.2 of the DEIS. The proposed landfill expansion should be coordinated with and reviewed in the context of this Master Plan.

<u>Response</u>:

As discussed in section 1.2.2, while a conceptual Master Plan for future developments on and in the vicinity of the landfill property is in the preliminary stages, these developments would be considered to be independent of the proposed expansion project. Any developments ultimately recommended by the Master Plan would not be dependent on the construction of the proposed landfill expansion for their viability. In addition, any evaluations of cumulative impacts would be speculative and inappropriate given the preliminary nature of the Master Plan.

B.3.8 Town of Seneca Host Agreement

B.3.8.1

A proposed expansion of the Landfill which includes the acquisition of the soil borrow area to the south is beyond the scope of the Landfill contemplated in the Town of Seneca Host Agreement or the First Amendment. The First Amendment deleted Section 29 (re: Renegotiation of Host Benefits) and replaced it with a new provision, which says, in part "This agreement has been prepared based on a Landfill located on property currently owned by the County of Ontario...". Since the proposed project includes property which was not owned by Ontario County at the time the First Amendment was executed, the Town may not be required to support that part of the proposed project and may be in a position to renegotiate its Host Community Agreement with Casella.

<u>Response</u>:

Refer to Section 3.2.10.2 of the DEIS, as amended by the FEIS, regarding the acquisition of the parcel of land that is proposed to be used for soil borrow purposes. If it becomes necessary for the Host Community Agreement to be changed, Casella will discuss that issue with the Town at that time.

C. City of Geneva (W-2/15/12)

RESOLUTION COMMENTING ON Draft ENVIRONMENTAL IMPACT STATEMENT on PROPOSED ONTARIO COUNTY PHASE III STAGE VIII and IX LANDFILL EXPANSION AND SEEKING MITIGATION

Whereas, the City of Geneva has an existing contract with Casella Waste Systems for treatment of leachate from the Ontario County landfill, and;

Whereas, the current draft DEIS (Section 1.2.1.5) does not present or address the issue of pre-treatment of leachate introduced into any Ontario County wastewater treatment plant using state-of-the-art technology; and

Whereas, the main transport routes for imported waste destined for the Ontario County landfill are the designated truck routes of NY Rtes. 5 & 20 and NY Rte. 14, which pass through the city of Geneva, and;

Whereas, the load volume of trash hauling trucks have contributed to significant degradation of these roadways, and;

Whereas, the City of Geneva's transportation infrastructure expenditures require the generation of revenue in the form of property taxes that comprise approximately 15% of the City's property tax levy, and;

Whereas, the City of Geneva shares a jurisdictional boundary and corresponding geographic proximity to the Town of Seneca which serves as host community to the Ontario County landfill managed by Casella Waste Systems, and;

Whereas, the City of Geneva's residents have testified on the record that they have suffered negative impacts from the proximity of the Ontario County landfill, including but not limited to noxious odors that have persisted for almost one year and during which time Casella Waste Systems demonstrated an inability to mitigate, and;

Whereas, the current DEIS (Section 3.2.4.3) makes the assumption that if State and Federal guidelines are followed there is no public health hazard rather than provide supporting credible research and analysis to support this assumption, and;

Whereas, visitors to the City of Geneva have expressed concern and discontent regarding the size and impact of the Ontario County landfill through letters to the editor submitted during or immediately following their stay in the City, and;

Whereas, the City of Geneva's economic development strategy places a strong emphasis on tourism and neighborhood development, and; Whereas, the draft DEIS states the financial benefits to the County (Section 3.2.11) but incorrectly assumes that the only adverse impact on local business would be running out of local landfill space by 2015 (if the expansion does not go through) and ignores the current and potential future negative impacts of a larger facility on the wine and tourism industry, and;

Whereas, the City of Geneva has cause to assert that the proximity and operations of the Ontario County landfill by Casella Waste Systems fails to produce a positive impact on the economic, environmental, or quality of life conditions in the City of Geneva, and has several negative impacts on same;

Whereas, in its own words, the Draft DEIS (Section 3.2.5.) states "the average increase in total assessed [property] values during the time period of 2007 to 2011 in Ontario County was 12 percent (%)" and "by comparison, nearby Town of Hopewell and Town of Geneva saw an increase in value of only 8 percent (%) and 4 percent (%), respectively, during that same time period," while omitting to state the change in property values for the City of Geneva, and proposing no mitigation plan except for residences within ³/₄ of a mile from the landfill.

NOW, THEREFORE BE IT RESOLVED, that the City of Geneva hereby requests to be considered an interested and concerned party in this process

and asks Ontario County and the landfill lessee to present mitigation strategies to address the issues/impacts listed above so that we may better protect and reassure our residents and visitors.

BE IT FURTHER RESOLVED, that the City of Geneva opposes the application for expansion of the Ontario County Landfill pending further mitigation of our above-listed concerns.

<u>Response</u>:

6 NYCRR Part 360 regulations do not require onsite treatment of leachate. All leachate will be transferred to a permitted wastewater treatment facility required to meet the discharge limits set forth in their NYSDEC SPDES discharge permit. These limits are established by the NYSDEC to protect the environment and human health to the greatest extent practicable.

As detailed in Section 3.2.7 of the DEIS, since the annual tonnage limit of the landfill will not be increased due to the proposed expansion, there is no anticipated increase in truck traffic. Trucks will continue to use the designated truck routes.

The landfill gas collection system is continuously expanded to allow for the collection and control of landfill gas generated from the landfill. Excessive odors that were observed during 2011 were the result of abnormal atmospheric conditions and landfill operational conditions. Under normal atmospheric and landfill operating conditions, including operation of an active landfill gas collection system, placement of daily cover materials, and capping of closed landfill areas, as described in the DEIS, these odors would be mitigated and the odors experienced during 2011 would not happen.

Additionally, in January, February, and March, 2012, under approval from the NYSDEC, Casella was able to significantly expand the landfill gas collection system, install additional flare/combustion capacity, and cover exposed areas of the landfill, at a capital expenditure of approximately \$1,000,000. Initial quarterly surface monitoring has shown drastic reduction in surface methane concentrations, and additional monitoring for hydrogen sulfide during the surface monitoring event found no measureable levels. Further fence line monitoring for H2S has found that concentrations are well below ATSDR recommended levels. The NYSDEC and EPA have developed the landfill development and operation regulations to mitigate all public health hazards associated with landfills currently identified by each agency. By complying with these regulations, the landfill will be constructed and operated in such a way that the health risks associated with these health hazards will be mitigated.

Economic data for the area does not indicate that the landfill has a negative effect on tourism. The region has recently received a number of accolades regarding Ontario County's prominent tourism industry. According to an analysis of Finger Lakes tourism by Tourism Economics (an Oxford Economics Company), from 2009 to 2010 tourism-related income increased more than surrounding counties in the Finger Lakes region. Recent accommodation data indicates stable accommodation rates from 2008 to 2011. Based upon this information, there is little evidence of a decline in tourism in Ontario County. See response to A.4.1 for more detailed information regarding impacts on tourism.

As outlined in Section 3.2.5.1 of the DEIS, property values within the Town of Seneca have increased over the past four years. Utilizing data on property values within the County provided by the Ontario County Real Property Tax Office for the years 2000 through 2011, an assessment of property values in the vicinity of the landfill was able to completed for the four years prior to the privatization of the landfill (2000-2003) and for the four years subsequent to the privatization (2004-2007). The percent change in property values for each of these time periods was calculated for each municipality in the County, as well as for the County as a whole. These values for the municipalities in the closest vicinity to the landfill, the Towns of Seneca, Geneva, Phelps, and Hopewell and the City of Geneva were compared to the County-wide values. From 2000 to 2003, the percent change in property values for all of Ontario County was 11.37%. In comparison, the percent change in property values for the municipalities listed above was an average of 13.96%, or slightly above average. From 2004 to 2007, the percent change in property values for all of Ontario County was 19.5%. In comparison, the percent change in property values for the municipalities listed above was an average of 21.99%, or slightly above average. Although many factors can impact property values, there is no evidence that the proximity to the landfill has had a negative impact on the property values in the study area over the study period.

Section 3.0 of the DEIS outlines all proposed mitigation strategies for potential impacts of the proposed expansion.

D. Town of Geneva (T – 1/26/12 and W – 2/21/12)

D.1 The report states that the purpose of this expansion will provide long term environmentally sound disposal capacity for local residents. They feel this would prevent our residents having increased costs such as tipping fees. Yet this expansion will mean increased waste being delivered to the landfill from different areas of the state as well as out of state and Canada resulting in increased truck traffic. I question how this will help the environment.

<u>Response</u>:

As detailed in Section 3.2.7 of the DEIS, since the annual tonnage limit of the landfill will not be increased due to the proposed expansion, there is no anticipated increase in truck traffic.

D.2 The report states that approximately 25.0 acres of agricultural land in Ontario County Agricultural District Number 6 will be used in soil borrow areas during the project. Realistically this soil will, in all probability, be contaminated and not suitable for agriculture.

Response:

As referenced in Section 3.2.1.2 of the DEIS, it is anticipated that the 25 acres of agricultural land would likely not be reclaimed as agricultural land in the future due to the proposed final grades which would make it difficult to use for that purpose. After reclamation, the area will be graded such that it will hold water, which will not make it amenable for use in agriculture. The proposed use as a borrow area will not result in contamination of the soils.

D.3 The report states that decomposition of soil waste in the landfill produces landfill gas, methane, carbon dioxide and non methane organic compounds. The report describes how these gases are captured and used. The report does not address the present odor that we all experience or what is being done to control it. Our County Administrator is working with Casella on this problem at Mr. Garvey's initiative not Casella.

Excessive odors that were observed during 2011 were the result of abnormal atmospheric conditions and landfill operational conditions. Under normal atmospheric and landfill operating conditions, including operation of an active landfill gas collection system, placement of daily cover materials, and capping of closed landfill areas, as described in the DEIS, these odors would be mitigated and the odors experienced during 2011 would not happen.

Additionally, please note that due to seasonable construction schedule, some control measures were unable to be performed during poor weather conditions and/or were prevented until air permits could be applied for and approved by the NYSDEC. Since that time and under the approval of the NYSDEC, the facility has spent nearly \$1,000,000 in placement of cover materials, installation of new landfill gas extraction wells, installation of gas collection headers, and installation of new flares for combustion of landfill gas. This effort has allowed the facility to better collect and control landfill gas and has mitigated the odorous conditions.

D.4 The report states that the height of the landfill could increase by 28 feet. The visual impacts are similar to the present landfill and are primarily located adjacent to New York State Route 5 and 20. The report further states that the highway is primarily used for transportation and that it is not considered a scenic highway. Does this mean those using this highway should be subjected to unsightly mounds of waste?

<u>Response</u>:

As noted above and in Section 3.2.9.2 of the DEIS, New York State Route 5 and 20 is not considered a scenic highway and therefore the attention of those using the highway will likely be focused on the highway and other vehicles on the road. This, combined with the relatively short visual exposure to the landfill itself at the posted speed limit of 55 mph, indicates that the visual impact on those using the highway is minimal. Screening berms have been installed along Route 5 and 20 which help to minimize the visual impacts to vehicles traveling on this highway corridor. Since the DEIS and FEIS are meant to assess the change in visual impact due to the expansion of the landfill over the visual impacts of the currently permitted landfill, it is anticipated that the expansion would have a minimal additional visual impact on those using the highway. However, additional

screening vegetation and replacement of existing screening that has not grown is proposed as part of the future expansion to further minimize visual impacts along Route 5 and 20.

D.5 The report includes several modifications including the leachate storage area being enlarged to allow greater storage volume. This is a serious concern which many of us have since we question the final disposal of leachate, the method and location of such. These are just a few of the topics in the report that I find violates our health and welfare.

<u>Response</u>:

As referenced in Section 2.4.3 of the DEIS, as with current operations the primary disposal facility for the leachate will be the Canandaigua wastewater treatment facility, with a backup disposal option in the City of Geneva for smaller volumes of leachate. The leachate storage lagoons will temporarily store leachate prior to disposal via truck hauling or piping to a permitted wastewater treatment plant for final treatment and disposal.

As outlined in Section 2.8 of the DEIS, the preliminary Master Plan for the facility will assess future options for alternative leachate treatment methods, including onsite treatment of leachate. Any such future developments are entirely speculative, would be subject to an independent SEQR analysis and permitting and their implementation would depend greatly on a number of variables, including, but not limited to, future funding.

E. City of Canandaigua (W-2/20/12)

The City Council (Council) of the City of Canandaigua is responding to the Public Comment Period of the DEIS as it relates to the Proposed Ontario County Landfill Expansion. At its February 16, 2012 Committee of the Whole, Council discussed and heard public comments related to the potential environmental impacts associated with the expansion of the landfill. Issues of undesirable odor, visual impacts, leachate collection and removal, hazardous waste, potential impacts to public health due to risks of water quality degradation and impacts to public health due to releases of gases and chemical compounds in the air were all discussed.

After review, Council agreed as a whole to comment on the potential adverse impacts that may be linked to public health. Council requests that

the DEIS include language that public health and medical statistics related hereto be collected, reviewed and examined periodically for trends that may show patterns of statistical variance. This should be done for all those in Ontario County and potentially affected areas of the landfill. The desire is to determine if there is a public health correlation between the landfill and its impact on surrounding communities and affected areas.

<u>Response</u>:

Sections 3.2.4, 3.1.2, 3.1.5, 3.1.3, 3.1.4, and 3.2.11 of the DEIS discuss the potential impacts to public health, land, air, water and economics respectively, and, in almost all cases, identify the mitigating measures that will be taken to prevent these potential impacts altogether. Sections 4.2 and 4.3 of the DEIS outline the unavoidable impacts to groundwater and air quality and discuss how development and operation of the facility will be undertaken to ensure that these impacts are as small as possible and do not pose a significant threat to human health or the environment.

Ontario County Health Department together with S2AY Rural Health Network, complete Community Health Assessments (CHA) every three (3) years using the MAPP (Mobilizing for Action through Planning and Partnership) process. The assessment includes a look at Community Health Status Indicators (CHSI), which are determined both by looking at key statistics available regarding various health indicators and by conducting a comprehensive survey among a random sample of community residents to determine their opinions, health behaviors and health needs. Based on the findings of the report a Community Report Card is prepared which identifies areas that need a closer look or areas that indicate favorable results compared to State and/or National Data. Given that a CHA is completed county wide every three (3) years, a supplemental survey is not necessary.

According to the 2010-2013 CHA, respiratory disease rates in the County are better than NYS rates except for Chronic obstructive pulmonary disease (COPD) or Chronic Lower Respiratory Disease (CLRD) where the county has an age adjusted rate of 48.7 compared to the NYS rate of 31.3. According to CLRD death rates, Ontario County's rate of 52.1 is higher than the Western New York Region, Seneca County, Finger Lakes Region and NYS, but lower than the following counties: Schuyler, Steuben, Wayne and Yates. Asthma hospitalizations in the County are lower than the State wide rate. However, based on the COPD Adult Prevention Quality Indicators, hospitalizations in the 14561 zip code (Town of Seneca area) were less than other areas of the county. Similarly based on the Respiratory Adult Prevention Quality Indicators, which includes asthma, COPD and bacterial pneumonia cases, hospitalizations in the 14561 zip code were less than other areas of the county. Based upon this information, it does not appear that the higher rates of respiratory diseases in Ontario County are representative of the incidence in the 14651 zip code (areas surrounding the landfill).

Refer to responses to A.2.2 and A.2.5 for more information regarding public health.

- F. Finger Lakes Zero Waste Coalition Comments
 - F.1 General Comments

F.1.1

The document states that the proposed landfill expansion will be "approximately 28 feet higher than the existing maximum permitted elevation of the operational landfill." There is insufficient justification provided to allow a height increase above the already permitted height. Please provide more details explaining why a height increase is needed.

<u>Response</u>:

As stated in Section 1.5 of the DEIS, the purpose of the project is to extend the life of the Ontario County Landfill to provide economic and environmental security to the surrounding area in the form of preserving existing jobs, affordable waste disposal, maintenance of a local economy income, and built in environmental safeguards. The expansion of the landfill vertically as well as horizontally allows for the most efficient use of the existing liner system by placing more waste in a smaller area and by minimizing additional area currently utilized in the landfill. This helps to provide the disposal capacity needed while minimizing the disturbance of non-landfill areas and maintain compliance with the OML and the Host Community Agreement with the Town of Seneca.

F.1.2

Please include the Environmental Monitoring Plan for public review as part of the DEIS.

<u>Response</u>:

An Environmental Monitoring Plan for the proposed expansion will be developed as part of the 6 NYCRR Part 360 Permit application that will be submitted to the NYSDEC for approval following the conclusion of the SEQR process. All plans submitted to the NYSDEC for review are public documents that will be on file with the NYSDEC.

F.1.3

A section on "Economic Impacts" is needed. Please describe the negative economic impacts of the proposed action on home values, property tax revenue if there is a decrease in population density, sales tax revenue if the landfill negatively affects population density, potential negative impacts on tourism, specific costs associated with road maintenance, etc.

Response:

There has been a municipal solid waste landfill operating at the Ontario County Landfill site since 1974 and therefore the potential impacts on population density and tourism can be gauged based on an assessment of any such impacts already seen in the community surrounding the landfill. According to the 2000 and 2010 Census population data included in Table 7 of the DEIS, the Town of Seneca, within which the landfill is located has seen a decrease in population of ten people, or 0.37% over the ten year study period. This is far from being the municipality with the largest decrease in population with the Towns of Bristol, Canadice, Richmond, South Bristol and West Bloomfield and the Cities of Canandaigua and Geneva seeing an average decrease in population of 4.64% over the same study period. Conversely, the towns of Geneva, Gorham, Hopewell and Phelps, which are the Towns in closest proximity to the Town of Seneca have all seen an increase in population with an average of 6.32%. This data indicates that fluctuations in population within the County over the study period do not have a direct correlation to proximity to the landfill.

Refer to response to A.4.1 above for more detailed information on impacts to tourism.

F.2 Public Needs and Benefits

F.2.1

The section on "Economic viability" should be divided into two sections: 1) Economic Benefits and 2) Long-term Disposal Capacity. Please describe separately the economic benefits of the proposed expansion. The issue of long-term disposal capacity does not provide a factual basis to justify the proposed expansion. The proposed expansion is not required to ensure long-term disposal capacity. The remaining constructed site capacity is 3,106,000 cubic yards. Assuming no reductions in waste produced within Ontario County, at 79,000 cubic yards per year, it would take 39 years for Ontario County to fill the existing constructed capacity. If you include the permitted and not yet constructed capacity, 2,750,000 cubic yards, it would take Ontario County 74 years to fill the proposed expansion.

<u>Response</u>:

The economic benefits discussion requested here is included in Section 1.6 of the DEIS under the heading "Local Economic Benefits". Also, refer to responses to A.3.3 and A.3.14, above.

F.2.2

The section "Environmental Security" ignores the increased environmental risks associated with increasing the total amount of hazardous chemicals concentrated in one geographic location that would result from the proposed expansion. There is no increase in environmental security when you increase risk. Revise this section to explain the risks.

<u>Response</u>:

The discussion here is given in the context of how the project addresses the public's need for environmental security. The landfill meets this need by providing environmentally secure disposal for waste. The overall potential environmental impacts and mitigation measures are discussed at length in section 3.0 of the DEIS. As per Section 1.2.1.9 of the DEIS, the Ontario County Landfill will continue to accept wastes that are permitted to be disposed at the site and will not accept prohibited wastes, such as hazardous wastes or other unacceptable wastes. Given that the types of wastes accepted at the facility will not change as the expansion progresses, the environmental risk is not expected to increase. Section 2.6.2 of the DEIS discusses the regular inspection of waste and the procedure for the removal of unauthorized waste, which includes hazardous waste.

F.2.3

The section entitled, "Economic Security" should focus on how the proposed expansion will affect Ontario County's budget, not its waste management needs. As stated, there is already sufficient permitted and constructed landfill capacity to meet the County's waste needs for 36 years.

<u>Response</u>:

The effect of the landfill expansion on Ontario County's budget is discussed in Section 1.6 of the DEIS under "Local Economic Benefits". Also, refer to responses to A.3.3 and A.3.14, above.

F.2.4

Designation of the landfill as a "regional" solid waste destination does not provide justification for Ontario County to assume responsibility for the disposal of environmentally high-risk wastes from other states, countries or counties. Please explain how the negative impacts on the public health, land, air, water and economics of Ontario County residents are superseded by the disposal needs of other states, countries, and counties.

<u>Response</u>:

Sections 3.2.4, 3.1.2, 3.1.5, 3.1.3, 3.1.4, and 3.2.11 of the DEIS discuss the potential impacts to public health, land, air, water and economics respectively, and, where necessary and feasible, identify the mitigating measures that will be taken to prevent these potential impacts altogether. Sections 4.2 and 4.3 outline the unavoidable impacts to groundwater and air quality and discuss how development and operation of the facility will be undertaken to ensure that these impacts are mitigated to the maximum extent and will not pose a significant threat to human health or the environment.

Also, refer to responses to A.2.2, A.2.5, A.3.3, and A.3.14, above.

F.3 Types and Quantities of Waste

F.3.1

Please provide a breakdown of estimated tonnage for each anticipated waste stream (Municipal Solid Waste, Construction and Demolition Debris, Asbestos, Industrial Waste, Sewage Treatment Plant Sludge), including BUD (Incinerator Ash, Contaminated Soils, Construction and Demolition Debris), over time for each source through 2028.

<u>Response</u>:

The composition of the future waste stream is not anticipated to differ significantly from the current composition as reported to the NYSDEC in the Landfill Annual Reports, with the exception of a fairly uniform reduction municipal solid waste and construction and demolition debris as a result of increased diversion efforts implemented by Casella and the County.

F.3.2

Do not allow waste from any location that does not have an approved Solid Waste Management Plan that includes a household hazardous waste collection program, pharmaceutical collection program, and e-waste collection program. Ontario County has already established a legal precedent for not allowing specific wastes because of their potential environmental or public health concerns by agreeing that no wastes associated with high volume hydraulic fracturing can be deposited in the Ontario County landfill. Expand this restriction by not allowing wastes from areas that do not have approved waste plans and active programs that divert hazardous materials and materials with known public health concerns from their waste streams.

Per 6 NYCRR Part 360, the landfill cannot accept wastes from Planning Units within New York State that do not have a Comprehensive Recycling Analysis and approved Solid Waste Management Plan. The NYSDEC is currently working with Planning Units across the State (including Ontario County) to ensure that there are active Local Solid Waste Management Plans in place.

F.3.3

Establish a revenue structure that increases Ontario County's share of the revenue based on the environmental and public health risks associated with each waste stream.

<u>Response</u>:

A legally binding revenue structure has already been established in the OML agreement and the Host Community Agreement.

F.3.4

Discuss the specific methods that will be used to limit hazardous materials from entering the landfill on a load basis. Identify who is liable if such materials are discovered in monitoring systems.

<u>Response</u>:

Per the landfill's operating permit, random loads of waste brought to the landfill by haulers are selected for a load inspection. A very specific procedure is followed whereby the waste is unloaded in a designated area away from the active working face and inspected for the presence of prohibited items, including hazardous wastes. If such materials are found, the waste is reloaded into the vehicle in which it arrived and is rejected from the site. Similarly, the operating staff at the landfill is trained to identify prohibited items in waste loads during routine operations and will reject loads containing these items. If specific hauling companies routinely deliver loads found to contain prohibited items, corrective actions such as fines or even a ban from disposal at the site are instituted.

F.4 Liner System

F.4.1

Require use of an 'asphaultic concrete' liner rather than HDPE type plastic liners (melted seams). HDPE liners have a higher propensity to suffer installation defects such as punctures, rips and tears.

<u>Response</u>:

An asphaltic concrete liner system is not an approved landfill liner system per 6 NYCRR Part 360 regulations.

F.4.2

Make all liner and riser sump flow rates related to the detection of potential leaks available for public review.

<u>Response</u>:

As outlined in Section 2.6.5.2 of the DEIS, the leachate flow rates from the primary and secondary liner systems and the groundwater collection system are taken on a daily basis and recorded. The flow from the secondary liner system is considered to be part of the leak detection system as it measures flow that has potentially originated from a leak in the primary liner system. This flow data is included in the Annual Monitoring Report for the landfill and is on file with the NYSDEC that is available for public review. As also outlined in Section 2.6.5.2 any detection of flow exceeding the allowable secondary flow rate of 20 gallons per acre per day on a rolling 30-day acreage must be reported to the NYSDEC within seven days of such an occurrence. Additionally the secondary leachate collection system shall be sampled to evaluate the liquid being collected within seven days of the occurrence to evaluate for any problems with the liner system.

F.5 Leachate Storage, Treatment, and Disposal

F.5.1

Provide water quality treatment at the 'tertiary treatment' level on site for all leachate generated.

6 NYCRR Part 360 regulations do not require onsite treatment of leachate. All leachate will be transferred to a permitted wastewater treatment facility required to meet the discharge limits set forth in their NYSDEC SPDES discharge permit.

F.5.2

Describe how often water quality measurements will be taken and how the public will have access to such data.

<u>Response</u>:

Samples of the surface water, groundwater, and leachate at the site will be gathered and sampled in accordance with the site's NYSDEC approved Environmental Monitoring Plan (EMP). Results will be reported to the Region 8 NYSDEC office and kept on file there, where they will be publicly available.

F.5.3

Landfills accepting only MSW are not required to conduct a "leachate inventory" to detect landfill cover leaks. Since more than 40% of the current landfill capacity is composed of waste streams that are not MSW, a leachate inventory would provide additional safeguards in monitoring potential odor emissions. Given current problems with odor maintenance, a leachate inventory for all existing cells and planned cells should be required.

<u>Response</u>:

It is difficult to perform a complete inventory of all moisture entering the landfill as it can vary greatly based on rainfall on the open face of the landfill, evaporation, evapotranspiration, compaction of the intermediate and daily cover, and the moisture content of the waste as delivered to the site. As illustrated in the Leachate Management Schematic included as Figure 4 of the DEIS, full accounting for the leachate generated from the landfill is accomplished from the point of extraction to the disposal for treatment at the waste water treatment plant. The quantities of leachate generated as well as what is taken off site for treatment are recorded and reported to the NYSDEC in the Landfill Annual Report.

Although the presence of leachate outbreaks from the waste mass can lead to increased odor production, these can be attributed to a number of factors besides the quantity of leachate produced within the landfill including cover management and waste settlement issues. All past instances of leachate outbreaks have been identified and addressed in accordance with NYCRR Part 360 regulations and to the satisfaction of the NYSDEC and all future instances will be handled in the same manner.

While a general increase in moisture of the waste mass can also lead to increased gas generation and odor issues, steps will be taken during operation of the site to mitigate these issues to the maximum extent practicable. The landfill gas management system will be monitored and operated in a way so as to reduce fugitive gas emissions from the landfill. In addition, the prompt installation of well compacted intermediate cover soils will aid in allowing clean rainwater to be shed from the waste mass in the form of stormwater so that it does not contribute to the moisture content of the waste.

F.6 Landfill Construction

F.6.1

Please identify the 5 most common methods currently used to detect liner leaks during installation, a comparative ranking of the effectiveness of each method, the costs associated with each method, and which method will be used in this expansion. Provide a justification for the method chosen.

Response:

As outlined in Section 2.5.2 of the DEIS, a Construction Quality Assurance (QA)/Quality Control (QC) Manual will be submitted to the NYSDEC as part of the Part 360 permit application as well as independently for each phase of the construction of the proposed expansion. These will be reviewed by the NYSDEC to ensure that they comply with the QA/QC requirements set forth in the Part 360 Regulations, and must be approved prior to the granting of the Part 360 permit and each phase of construction. As further outlined in Section 2.5.2 of the DEIS, a
construction certification report will be developed after each phase of construction to verify that each protocol included in the QA/QC Manual was followed to ensure compliance with Part 360. This certification report must be approved by the NYSDEC prior to waste placement. Additionally, flow readings from the secondary leak detection layer must be taken for a minimum of 30 days after the completion of construction before any waste can be placed in the landfill. The flow readings must be below the rate of 20 gallons/acre/day as required by the regulations.

F.6.2

Describe in detail how dust suppression will be conducted. Perform preand post gravimetric sampling of all areas. Describe how often data samples will be taken and how the public will have access to such data. Require wind screens around the area to limit fugitive dusts pre- and postconstruction.

<u>Response</u>:

Dust control measures are described in Section 2.6.5.4 of the DEIS. Based on calculated dust emissions, sampling is not required. Dust suppression for all construction projects will be the responsibility of the contractor and the adequacy of the dust suppression will be assessed on a daily basis by an on-site Owner representative. The methods of dust suppression, however, will be at the discretion of the contractor so long as they achieve the dust suppression goals of the project. Therefore it is impossible to include specific dust suppression methods such as the use of wind screens within the FEIS.

F.6.3

During construction, describe how any groundwater that enters any pits will be handled.

<u>Response</u>:

As many of the recent landfill construction projects have required the excavation of soils below the seasonal groundwater table, the methods for handling the groundwater within the excavations at the site has been well established. Typically, a temporary pond will be constructed at the lower elevations within the excavation where groundwater will drain and collect

by gravity. This water is then typically pumped from the temporary pond as necessary into the stormwater management system to address quality and quantity prior to discharge.

As part of the construction documents for each stage of the proposed landfill expansion, a plan for both temporary and long term management of all stormwater and inflowing groundwater will be developed and approved by the NYSDEC.

F.6.4

Clearly describe how shallow bedrock (less than 10 feet below the surface) will be disturbed, if it is encountered (e.g. blasting etc.).

<u>Response</u>:

Wherever feasible, the preliminary design for the subgrade of the proposed landfill maintains a 10-foot separation from bedrock. However, in some areas, the removal of bedrock will be required to maximize the airspace within the footprint and to facilitate tie-in with the existing leachate collection system and maintain minimum required slopes. While extensive borings have been installed to characterize the bedrock elevations, it is also possible that anomalies in the bedrock may require additional excavation of bedrock when excavating to subgrade elevations. In either case, the removal of bedrock and its replacement with soil will be performed in the same manner.

No blasting will be permitted during the construction of the proposed landfill expansion. It is likely that most bedrock encountered for removal will be weathered in nature and easily removed with an excavator, bulldozer or hoe ram.

F.6.5

Install and sample pre- and post-construction groundwater monitoring wells. Please describe the rationale for determining the distance between wells, and state the capture zone of each well. Please describe the estimated confidence limits for the radius of detection for wells. Estimate risk levels and confidence intervals for their ability to detect small plumes of leakage originating from a discrete rupture in the liner, such as a puncture, rip or tear. Describe how effective well data will be for detecting widespread liner failure. Please use dispersion and potentiometric data to describe the monitoring well distance, which is capable of detecting leaks with a 95% confidence level. Please describe dispersion characteristics in more detail, both for slow-moving and rapidly moving non-homogenous aquifers such as those associated with this landfill.

<u>Response</u>:

NYS regulations (6 NYCRR Part 360 2-11) require a preliminary evaluation of water quality, consisting of the first two rounds of sampling and analyses for a representative number of monitoring points at both upgradient and downgradient locations, in each water-bearing zone within the Critical Stratigraphic Section (CSS), to be included with the permit application. In this instance, all of the monitoring wells installed as part of the expansion area investigation have been sampled on at least four occasions to establish existing water quality. The regulations further require that four rounds of quarterly sampling be completed prior to waste deposition for all environmental monitoring points not previously sampled. The first of these sampling rounds must be analyzed for expanded parameters and the other three rounds must be analyzed for baseline parameters. Environmental monitoring points that were previously sampled to establish existing water quality must also be sampled and analyzed for baseline parameters for two rounds of samples prior to waste deposition. Although the data provided with the DEIS meet the Part 360 requirements summarized above for the preliminary evaluation of water quality, the Applicant intends to complete the installation of additional monitoring wells during the Spring of 2012 to complete the environmental monitoring network for the expansion area and to allow water quality data from the additional wells to be included with the Part 360 Permit Application.

NYS regulations (6 NYCRR Part 360 2-11) also govern the requirements for monitoring well spacing in each water-bearing zone within the CSS, and specify that monitoring wells in the uppermost water-bearing zone be spaced at 500-foot intervals along the downgradient perimeter and at maximum 1,500-foot intervals in areas that are cross-gradient. The environmental monitoring network for the proposed expansion will meet or exceed these requirements and will be subject to the review and approval of the NYSDEC. The monitoring well network is just one component of the environmental monitoring approach for the facility, which includes monitoring of primary and secondary leachate collection system quality and flow rate in addition to monitoring groundwater, surface water, stream sediment, and landfill gas.

The proposed containment system for the facility includes the primary liner and leachate collection system, the secondary liner and leachate collection system, and a groundwater suppression system. NYS Part 360 b(9)(iv) specifies that the maximum allowable leakage rate (ALR) measured in the secondary leachate collection and removal system (SCS) shall not exceed 20 gallons per acre per day (based on a 30-day average) and requires that actions to be taken in the event that the ALR is exceeded be included in the Operations Contingency Plan for review and approval by NYSDEC prior to facility operations. In the event of a significant breach of the primary liner containment system, changes in the volume of flow and water quality in the SCS would be detected, triggering appropriate contingency responses. The secondary liner system provides further protection against vertical leakage in the event of a release of primary leachate to the SCS. Both the primary and secondary liner systems are designed to promote lateral flow of fluids to sump locations and to minimize the build-up of hydraulic head over the vast majority of both liner systems. In addition, a groundwater suppression system will be installed beneath the secondary liner system to relieve potential upward pressures upon the liner systems prior to the deposition of waste materials. Groundwater suppression systems, which are installed into the native materials underlying the landfill, typically serve as collection points for groundwater, inducing a natural inward hydraulic gradient towards the groundwater suppression system and thus limiting the potential for migration of a potential release within the native soils. The landfill liner system is separated from the bedrock by a minimum thickness of at least 10 feet of low permeability glacial till material (either in its native condition or recompacted to achieve a maximum vertical hydraulic conductivity of 1 $x 10^{-7}$ cm/sec). Groundwater flow in the glacial till underlying the landfill that is not captured by the groundwater suppression system will move primarily downward towards the bedrock, with relatively limited lateral migration within this unit.

F.6.6

There is no best management plan provided to deal with construction runoff. Please describe the best management plan that will be used.

<u>Response</u>:

The best management practices will be in accordance with recognized industry standard and in compliance with State SPDES regulations. These practices will be included in the Stormwater Pollution Prevention Plan (SWPPP) submitted as part of the landfill Part 360 permit application.

F.7 Dust Control

F.7.1

Please provide documentation listing all vehicles that will be used during construction and operation of the proposed expansion. Provide details on estimated emissions associated with each vehicle. Provide details on the particle size of the soils that will be disturbed during construction, operation, and associated with excavating soils from the proposed soil borrow area. Describe specific mitigation methods that will be used for each activity that would generate dust, and describe control efficiencies associated with each activity and the mitigation method proposed. Provide estimates of total PM 2.5 and PM 10 emissions associated with excavating soils from the proposed borrow area.

<u>Response</u>:

It is impossible to develop a comprehensive list of all vehicles to be used during construction as this is left to the discretion of the contractor procured to perform that specific phase of the construction activities. However, dust control provisions and standards are included in the contract documents for all contractors and must be adhered to. Owner representatives and NYSDEC employees will be on site during construction activities to ensure that dust is being controlled to an acceptable level.

F.8 Quality Assurance (QA)/Quality Control (QC)

F.8.1

In order to assess potential environmental impacts, QA/QC methods need to be described in detail in the DEIS for public review. The CQA/CQC Manual is an essential component describing how potential impacts will be avoided or mitigated and is not currently included in the DEIS. The draft EIS is incomplete without this section. Please include the CQA/CQC Manual.

<u>Response</u>:

As detailed in the response to Landfill Construction above, a CQA/CQC manual will be developed and submitted to the NYSDEC for review as part of the Part 360 permit application documents.

F.9 Fire Control

F.9.1

Please provide details on what financial safeguards are included in the landfill management plan to ensure that the operator, Casella Waste Systems, Inc., is responsible for any expenses related to landfill fire suppression costs even if they use city or county services, for fires that may be caused by the operator's negligence.

<u>Response</u>:

As outlined in Section 2.6.5.7, a majority of the fire related events at the landfill can be handled by landfill personnel. In the event that a larger subsurface fire occurs that cannot be handled by landfill personnel, a specialized contractor may be retained by the landfill operator to assist with fire suppression. The operator would be financially responsible for this service.

As further outlined in this section, local fire fighting services would be required for any fires involving structures on the site. Section 3.2.11.1 outlines the payments that are made to the Town of Seneca in support of their fire protection services which may be called upon in the event of a structure fire at the facility. F.10 Landfill Post-Closure Monitoring and Site Uses

F.10.1

Describe all management, financial, and legal obligations that will exist after the 30-year post-closure term has expired. Describe who is responsible for the management, costs, and liabilities.

<u>Response</u>:

If no one operates the landfill following the expiration of the OML, Casella is required to be responsible for post closure care indefinitely. If operated by the County, post-closure care becomes their responsibility. If operated by 3rd party, post-closure would likely become their responsibility under a new OML.

F.10.2

Require future environmental studies or remediation activities of the proposed expansion area be funded by the landfill operator.

Response:

Refer to response to F.10.1, above. Also, per the OML, Casella is "responsible for all environmental remediation at the Facilities no matter when caused including without limitation any required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 USC § 9601).

F.10.3

There is no discussion on how leachate will be managed after the 30 year post-closure period ends. Please provide details on the current plan for post-closure leachate management and who will be responsible for leachate management. Please provide anticipated costs and estimated financial impacts on the County tax levy to cover post-closure management of leachate if the expansion were not approved (approximately 16 million gallons per year) and if the expansion were approved (approximately 21 million gallons per year).

<u>Response</u>:

As outlined in Figure 10 of the DEIS – Leachate Generation Estimate, once the proposed expansion has reached capacity, which is estimated to occur in 2028, and all areas of the landfill have been capped with an approved capping system, the quantity of leachate generated will begin to decline rapidly. By the end of the 30-year post-closure period, it is estimated that the quantity of leachate generated within the landfill will approach zero. This is due to the fact that the waste will be deprived of additional liquid by the liner and capping systems.

If no one operates the landfill following the expiration of the OML, Casella is required to be responsible for post closure care indefinitely. If operated by the County, post-closure care becomes their responsibility, and if operated by 3rd party, post-closure would likely become their responsibility under a new OML.

F.10.4

There is no discussion on how emissions will be managed after the 30 year post-closure period ends. Please provide details on the current plan for post-closure emissions management and who will be responsible for emissions management. Please provide anticipated costs and estimated financial impacts on the County tax levy to cover post-closure management of emissions if the expansion were not approved and if the expansion were approved.

<u>Response</u>:

During Post Closure, the landfill gas collection and control system (GCCS) must remain in operation until gas generation drops below specific limits established in the USEPA New Source Performance Standard regulation, 40 CFR 60 Subpart WWW (Landfill NSPS). Funding for post closure operation and maintenance of the landfill GCCS is set aside now by Casella with a percentage of daily tipping fees being collected. Refer to the response to A.7.2 regarding post closure care responsibilities.

F.11 Regulatory Reviews and Approvals for Landfill Expansion

F.11.1

Make all BMP and SWPPP plans available for public review and comment.

<u>Response</u>:

As outlined in section 2.4 of the DEIS, the current Stormwater Pollution Prevention Plan (SWPPP) for the site will be updated to include the proposed landfill expansion and submitted to the NYSDEC for approval along with the Part 360 Permit Application package. Best management practices (BMPs) will also be included in the SWPPP and also in the updated Operations and Maintenance Manual, which will also be submitted to the NYSDEC for approval as part of the Part 360 Permit Application Package.

F.12 Surface Water

F.12.1

Describe the stormwater retention ponds in more detail. Will water enter the subsurface via percolation? If so, describe how monitoring wells will be used to monitor environmental impacts. Will liners be used in the retention ponds? Provide details on the liners construction, lifeexpectancy, etc. Require SPDES permits for retention ponds that include TSS, phenols, and p-cresol. Provide details on mitigation strategies if stormwater is found to contain chemicals of concern.

<u>Response</u>:

Since only clean stormwater that has not come into contact with waste will be directed to the stormwater retention ponds, the stormwater retention ponds will not be constructed with a liner system. Stormwater will be allowed to enter the subsurface via percolation as is common practice with stormwater retention ponds at landfill facilities. As outlined in Section 3.1.3 of the DEIS, as part of the State Pollutant Discharge Elimination System (SPDES) Multi-Sector General Permit for Stormwater Discharges for Industrial Activity (GP-0-06-002) held by the facility, the stormwater ponds will be sampled annually in accordance with the permit. The required sampling parameters include Total Suspended Solids (TSS), Phenols, and p-Cresol, among other parameters and pollutants of concern. The results of these annual sampling events are submitted to the NYSDEC for review.

F.12.2

Make all data from Ont 66-12-52-40-4 sampling events up and downstream of the landfill available to the public.

<u>Response</u>:

This data is submitted to the NYSDEC as part of the landfill's Annual Monitoring Report and is on file at the NYSDEC Region 8 office.

F.13 Groundwater Resources

F.13.1

Perform fate transport modeling of TSS, phenols and p-cresol using well data such as hydraulic conductivity and other soil characteristics to demonstrate that these compounds will not migrate off the property. HDPE liners have a higher propensity to suffer installation defects such as punctures, rips and tears than 'asphaltic concrete' liners. Please provide an economic comparison of these two options and describe the relative risks associated with each option. A recent article, Landfill Liner Failure: An Open Question for Landfill Risk Analysis by A. Pivato in the Journal of Environmental Protection (2011, pp 287-297), presents evidence that liners in landfills with clay lines (>1 m), geomembranes, drainage layers, and leachate collection systems fail between 12-59 years with most failing between 30-40 years. Please describe the proposed mitigation strategy if the HDPE liners fail, estimated costs and estimated environmental and public health impacts.

<u>Response</u>:

TSS is not typically monitored in groundwater systems nor is this parameter required to be monitored in groundwater under 6 NYCRR Part 360. As described in response to a similar question, total phenols were detected slightly above the detection limit (0.005 mg/l) in the initial two monitoring events (each at 0.006 mg/l) at monitoring well MW-20S, but were not confirmed in the two subsequent monitoring events. Neither of the detections exceeded the flow regime statistical trigger values that have been established for the overburden at the site. Parisio, et al. (2009) note the following:

"...the analytical method used [for total phenols] does not distinguish between non-toxic and naturally occurring phenols such as tannins, lignin breakdown products or other plant-related sources and toxic industrial chemicals such as phenol, cresols or pentachlorophenol. Experience with water quality monitoring programs has shown that total phenols often occur in groundwater which does not show any other landfill leachate indicators or other signs of anthropogenic contamination."

Fate and transport modeling is not required to assess the potential migration of constituents whose presence has not been confirmed in the groundwater or that occur in the groundwater under natural conditions.

The commenter alleges landfill liner performance that is not consistent with actual experience in New York State. The National Research Council (2007) summarizes landfill liner performance data from New York as follows:

"The best-available information on the overall performance of liner systems comes from monitoring data for the environment surrounding the liner system. The New York Department of Environmental Conservation (NYDEC) reviewed groundwater monitoring data at all modern municipal solid waste (MSW) and hazardous waste landfills in the state (letter to the committee from Stephen Hammond, Director, NYDEC, August 30, 2006). For New York, "modern" means since 1988, when the state issued new regulations for MSW landfills that require double-liner systems. The number of facilities reviewed includes 27 MSW landfills and 4 hazardous waste landfills. Of these 31 landfills, 28 have double-composite liners, while 3 have double liners with a single geomembrane in the primary liner. In total these landfills comprise 1,100 acres of barrier systems and 450 years of operation. Considering that landfill cells are developed gradually over a period of years, the landfills assessed correspond to 7,000 to 10,000 acre-years of operation.

Based on groundwater monitoring data from onsite monitoring wells, NYDEC did not find a single instance of an adverse impact to groundwater that could be attributed to leakage through a containment system at any one of these facilities. NYDEC did find several instances where groundwater was impacted by older unlined portions that were also present at some of the landfill sites and by onsite activities not related to the barrier system, such as a leaking seal in a leachate conveyance line outside the landfill cell.

In addition, NYDEC reviewed water quality monitoring data from pressure relief systems, which existed at 20 of the 27 MSW landfills included in this study. These systems directly underlie the base liner, so they potentially provide direct information on leakage through the containment system. At all but 4 of the 20 landfills with pressure relief systems, the pressure relief systems covered the entire footprint of the barrier system. NYDEC also did not find a single instance where these data indicated the presence of contaminants that had been released from the overlying barrier system into the pressure relief system."

The National Research Council (2007) also summarizes research on the anticipated longevity of various landfill containment system components, including geocomposite and geomembrane liners. Under the typical conditions encountered in municipal solid waste landfills, the anticipated longevity of these components is in the hundreds of years.

Moreover, a double-composite liner system with an underlying pore pressure relief system founded on low permeability native materials provides multiple, redundant systems to minimize the potential for leachate migration and to detect and remediate a leachate release in the unlikely event of a multiple liner system failure.

Reference cited in above response:

National Research Council. 2007. Assessment of the Performance of Engineered Waste Containment Barriers. Washington, DC: The National Academies Press, 2007.

F.13.2

Provide pre- and post-construction water quality data that includes concentrations of phenols and p-cresol. Describe mitigation strategies that will be used to reduce concentrations of any chemicals of concern if they exceed public health safety standards.

<u>Response:</u>

The pre-construction water quality data from the proposed expansion area were submitted with the DEIS as part of the Hydrogeologic Report. Additional pre-operational and post-construction water quality data will be collected during the expansion area monitoring activities and will be submitted to NYSDEC in the form of monitoring reports. Therefore, all available water quality data are a matter of public record.

Mitigation strategies, including the facility monitoring program, specific contaminant trigger values, and the contingency monitoring plan, are addressed in the NYSDEC approved site Environmental Monitoring Plan (B&L, July 2004 and updated December 2010).

F.13.3

Describe how data from Ont. 66-12-52-40-4 sampling events upstream and downstream of the landfill will be made available to the public for review.

<u>Response</u>:

The quarterly and annual monitoring reports are submitted to NYSDEC and include the corresponding analytical laboratory reports and are therefore a matter of public record.

F.14 Air Quality

F.14.1

Describe exactly what methods will be employed to address odor issues (types of chemical sprays, etc.) and details on frequency, quantity, standard operator procedures describing when chemical sprays will be used, etc.

<u>Response</u>:

As outlined in Section 3.1.5.3 of the DEIS, best management practices (BMPs) for odor control will be practiced such as soil cover application techniques and active landfill gas collection system operation. To supplement these BMPs, odor masking agents may be utilized in

accordance with the manufacturer's instructions and NYSDEC regulations. Specific guidelines for the use and application of such masking agents, will be included in the Operations & Maintenance Manual prepared for the facility as part of the Part 360 permit application documents.

Refer to response to A.1.1, above, for the odor management measures.

F.14.2

Please include the contents of "updated site specific waste receipts."

<u>Response</u>:

Waste quantities and types accepted at the landfill are submitted to the NYSDEC annually and are available there for public review.

F.14.3

Please use a GCCS control efficiency of 75%, which is recommended by the EPA, in order to estimate fugitive LFG emissions.

<u>Response</u>:

Calculations in the DEIS currently use 80% collection control efficiency, which is within the appropriate collection efficiency range recommended by EPA in AP-42, Section 2.4 (11/06), in order to conservatively (high) estimate fugitive emissions. Similarly, the calculations use 95% collection/control efficiency to conservatively (high) estimate gas combustion and associated emissions.

F.14.4

Although BUD materials are stated to be considered "non-putrescible", it is well-known that the use of processed construction and demolition debris (C & D) as BUD greatly increases the release of sulfur dioxide emissions due to the presence of shredded gypsum board, or "drywall", which, upon its mixture with water, causes significant odorous emissions. Please include these emissions in the landfill gas generation inventory.

<u>Response</u>:

Construction and demolition debris (C&D) waste is included in the landfill gas generation inventory. Approved beneficial use material (BUD) includes non-putrescible waste utilized for road base and cover materials. As this material is not anticipated to contribute to gas generation, it was not included in the landfill gas generation modeling. As a conservative approach, the projected annual waste placement utilized in the landfill gas generation modeling was assumed to be 100% putrescible waste contributing to gas generation. Per actual facility operations, a portion of the waste accepted will be non-putrescible. In addition, waste projections were assumed to be the maximum permitted waste placement for the facility and maximum annual acceptance rate to provide further conservatism to landfill gas generation estimates.

F.14.5

Modeling Parameters – Leachate recirculation is anticipated in the expansion landfill area. The modeling parameter used to estimate the collection efficiency is 95%, yet the previous sections states that a GCCS of 80% will be used. Please explain this discrepancy. Additionally, please use the EPA- recommended gas collection efficiency default rate of 75%, or provide evidence that the collection efficiency for the method currently proposed is higher.

<u>Response</u>:

Refer to response to F.14.3, above.

F.14.6

A k=0.16/year for a "wet" model landfill is used even though leachate recirculation is suggested. Please provide estimates for how this parameter will change if leachate is recirculated.

<u>Response</u>:

The k value of 0.16 was used as a worst case scenario and does account for leachate recirculation. A model k value of 0.16/year is based on industry experience with wet landfills, and represents a four-times increase in refuse degradation over the U.S. EPA's Complication of Air Pollutant Emission Factors (AP-42) document (Section 2.4, 1997) default value of 0.04/year for wet climates.

F.14.7

The Landfill is located in an area with high rainfall. The EPArecommended value for "wet" landfills is a k =0.3. Provide estimated emissions using this value. (First-Order Kinetic Gas Generation Model Parameters for Wet Landfills, Faour, Reinhart and You, http://people.engr.nesu.edu/barlaz/lfgmodels/reinhartbioreactordecay.pdf, 2006.)

<u>Response</u>:

Refer to response to F.13.6, above.

F.14.8

Please clarify what is meant by "proposed flare for the current landfill." If this flare is not in operation, please explain why. Please explain why the combined facility PTE is higher than the control capacity.

<u>Response</u>:

Potential emissions from the landfill are based on the year of maximum landfill gas production. However, flare capacity, landfill gas well installation, and landfill gas collection system equipment is added incrementally as landfill gas generation increases over time. As such, the proposed flare referenced in the DEIS is a flare that will be permitted but is not yet installed onsite.

F.14.9

Section 3.1.5.2 of the draft EIS states "Emissions from leachate storage may increase slightly due to the potential for increased leachate generation and storage resulting from the landfill expansion." Attachment G predicts estimates of volatile organic compounds (VOCs) from leachate will increase from a baseline of 3,004 lbs to 4,006 lbs. This is a 33% increase, not a slight increase. Attachment G also provides calculations that predict that fugitive emissions of landfill gas will increase from 7,445 tons of methane per year to 10,522 tons of methane per year. This is a 41% increase in emissions. Please provide a table listing in separate columns current estimates of Hazardous Air Pollutants (HAPs) from flares, the landfill gas-to-energy project, leachate, and fugitive gas emissions, and providing the total HAP emissions from all sources combined, and columns for each source illustrating how HAP levels will increase after the proposed expansion is complete. Please present the data in this table in the same units as Agency for Toxic Substances and Disease Registry Minimal Risk Level (ATSDR MRL) units so a direct assessment of potential health impacts can be assessed. For any HAP that is exceeding the ATSDR MRL, please describe potential public health risks associated with each HAP and describe mitigation strategies to minimize these risks.

<u>Response</u>:

A table summarizing fugitive emissions, HAP emissions and a comparison of fugitive emissions to ATSDR values will be provided in the supplement to the Air Quality Review Attachment for the FEIS.

F.14.10

Please include estimate dust and other emission associated with the current soil borrow permit in final calculations of total emissions.

<u>Response</u>:

Estimates of fugitive particulate dust (PM-10 and PM-2.5) generated from on-site vehicle and heavy equipment operations has been provided in the supplement to the Air Quality Review Attachment in Appendix BB as Attachment G.

F.15 Greenhouse Gases

F.15.1

Describe in detail how fugitive emissions from any piles in the proposed area will be monitored. Include the equipment type (summa cans, PIDs, etc.) and how often surveys will be conducted. Provide pre- and postconstruction data.

<u>Response</u>:

It is unclear what the commenter is referring to by the term "piles".

F.15.2

Use empirical sampling values for LandGEM, not default values. Provide all LandGEM model simulation output files (which list all input values) to the public for public review.

Response:

Landfill gas modeling data is presented in Appendix BB as Attachment G, along with all user inputs and model results. Additionally, the model inputs were tailored to site specific data which account for historic and current site conditions, and anticipated gas generation from recirculation of leachate.

F.15.3

All landfill cover methods implemented as part of this expansion should guarantee the capture of fugitive gases at 90% efficiency or greater. Please describe the efficiency of the proposed landfill cover method as it compares to other methods and a cost comparison of other methods. Please revise the method chosen as needed to require a greater than or equal to 90% capture efficiency for fugitive emissions.

<u>Response</u>:

The landfill cover method for the OCL is a combination of soil cover and geomembrane cap, which provides the highest capture efficiency (approximately 95%) of any landfill capping system. However, please note that in the DEIS, a conservative estimate of 80% collection efficiency was utilized in order to over-estimate Fugitive emissions. Additionally, note that 95% collection efficiency was used for estimation of landfill gas to be collected and combusted, in order to size the gas collection and combustion equipment.

F.15.4

Describe the estimated increase in fugitive gas emission associated with increasing the leachate storage area from 400,000 to 1.2 million gallons. Provide a detailed list all components of the leachate VOC gas emissions. Describe how the increases in fugitive gas emission from leachate will be mitigated.

<u>Response</u>:

Leachate storage emissions are presented in Appendix BB as Attachment G, and individual VOC compounds list has been added.

F.15.5

Identify methods that will be used to reduce the amount of organic matter entering the landfill as a method to minimize greenhouse gas emissions. Estimate how much greenhouse gas will be prevented by implementing Ontario County's 10 Year Solid Waste Management Plan relative to total GGH emissions from the landfill. Include in Section 7 the total amount of GGH that would be emitted as a result of each alternative considered.

<u>Response</u>:

NYSDEC is addressing this approach in their updated Part 360 regulations. Ontario County Landfill will abide by the regulations once enacted.

F.15.6

Please explain how the carbon dioxide emissions from combustion of methane and NMOC's are considered "biogenic" and "part of the natural carbon cycle."

Response:

The carbon in CO2, generated by combustion of methane from landfills, originates from bio-organisms which create methane by digestion of organic compounds in the landfill. Since the methane produced by a landfill would naturally emit to the atmosphere if it were not collected and combusted, the CO2 is considered to be biogenic or "from living organisms".

F.15.7

Please justify the use of collection efficiencies of 95%, rather than 75% to calculate fugitive emissions from flares.

<u>Response</u>:

Fugitive emissions are emissions of landfill gas that escape the cap and landfill gas collection system, and are thereby emitted to the atmosphere. However, a modern landfill capped and lined with geomembrane materials, should exhibit 95% collection of landfill gas generated by the landfill (95% collection efficiency). As a conservative estimate, the DEIS utilizes 95% collection efficiency in order to properly size gas collection and combustion devices. Alternatively, the DEIS utilizes a collection efficiency of 80% to conservatively estimate the amount of fugitive landfill emissions (gas that is escaping the cap and gas collection system). This approach allows us to over-estimate emissions for both collected/combusted gas, and fugitive gas.

F.15.8

Please provide evidence for the "increase (sic) collection efficiencies of the NSPS gas collection system.

<u>Response</u>:

Refer to response to F.14.7, above.

F.15.9

Nitrous oxide is 310 times more efficient at trapping heat than carbon dioxide, and PFC's and HFC's are 1,000 to 10,000 times more effective at trapping heat. Please estimate the carbon dioxide equivalents created by the combustion of these compounds both in the shrouded flares and by the internal combustion engines. Include these estimates in calculations of total GHG emissions.

<u>Response</u>:

Nitrous Oxide (NO) is a byproduct of combustion, and therefore is not commonly present in landfill gas. Similarly, perfluorocarbons (PFC's), and hydrofluorocarbons (HFC's) are only found in extremely low (parts per million) concentrations in landfill gas. Since landfill gas is approximately 50% (or 500,000 ppm) methane, 35% carbon dioxide, 10% nitrogen, 4% oxygen, and less than 1% non-methane compounds, the greatest concentration of greenhouse gases come from combustion of methane and carbon dioxide. Therefore, combustion of typical landfill gas would not exhibit a measurable increase in greenhouse gas emissions by the presence of these compounds as suggested.

F.15.10

Applicability of PSD and NANSR Rules - Since the Landfill and the Landfill Gas to Energy Facility are considered a single stationary source for emissions of criteria and regulated pollutants by the EPA, and since their combined emissions exceed the thresholds for PSD and NANSR programs, they are considered a major source. Please explain in detail the technology and emissions controls which will be utilized to reduce emissions to the levels required by these programs.

<u>Response</u>:

Per NYSDEC Letter dated January 5, 2012 the facilities are considered not to be under common control, and therefore are not considered as such for PSD and NANSR applicability.

F.15.11

For each year through 2028, estimate the total number of trucks that will be required to transport waste from outside of Ontario County, the average total miles per year for all trucks transporting waste from outside Ontario County, the estimated amount of fossil fuels used, and the estimated greenhouse gas emissions associated with this traffic. Include these emissions in total emissions associated with the proposed expansion. Explain what methods will be used to mitigate the increase in greenhouse gas emissions associated with transport. Explain how the increases in greenhouse gas emissions resulting from transport of waste are justified and/or supported by New York State's solid waste management plan "Beyond Waste".

<u>Response</u>:

As detailed in Section 3.2.7 of the DEIS, since the annual tonnage limit of the landfill will not be increased due to the proposed expansion, there is no anticipated increase in truck traffic. The same local truck routes that have been used during the operating life of the landfill will continue to be used by truck traffic to and from the landfill facility.

F.16 Site Ecology

F.16.1

Perform an actual, on-site, empirical wildlife survey (rather than relying on secondary written sources) to rule out the existence of any of the following endangered species: Dwarf Wedgemussel, Pink mucket, Clubshell, Fat pocketbook, Rayed Bean, Chittenango Ovate Amber Snail, Tomah Mayfly, American Burying Beetle, Hessel's Hairstreak, Karner Blue Butterfly, Regal Fritillary, Persius Duskywing, Grizzled Skipper, Arogos Skipper, Bog Buckmoth, Pine Pinion Moth, Shortnose Sturgeon, Silver Chub, Pugnose Shiner, Round Whitefish, Bluebreast Darter, Gilt Darter, Spoonhead Sculpin, Deepwater Sculpin, Tiger Salamander, Mud Turtle, Bog Turtle, Queen Snake, Massasauga, Spruce Grouse, Peregrine Falcon, Black Rail, Piping Plover, Eskimo Curlew, Roseate Tern, Black Tern, Short-eared Owl, Loggerhead Shrike and Indiana Bat. A records search is insufficient.

Response:

In regards to the landfill expansion site, there will be no effect on any of the endangered species listed, given that the proposed landfill expansion will occur within what is currently being used as a soil borrow area and within other previously disturbed areas. Vegetation and habitat within these areas are sparse and habitat in general is non-existent since these areas have been repeatedly disturbed in the past and through daily landfill operation and maintenance. The proposed soil borrow area to the south of the landfill is currently used for agricultural purposes. Crops are planted and harvested annually resulting in vegetation that is constantly being disturbed. None of the species listed in the comment have been reported in NYSDEC historic records for the project area.

The comment refers to surveying for the following endangered mollusks: dwarf wedgemussel (Alasmidonta heterodon), pink mucket (Lamsilis abrupt), clubshell (Plerobema clava), fat pocketbook Potamilus capax), rayed bean (Villosa fabalis), and the Chittenango ovate amber snail (Novisuccinea chittenangoensis). All of these species reside in freshwater streams and rivers. The proposed project will not impact any streams or rivers adjacent to the proposed project, resulting in no impact to the endangered mollusk species of New York State.

As with the endangered mollusks, the endangered fishes of New York: shortnose sturgeon (Acipenser brevirostrum), silver chub (Macrhybopsis storeriana), pugnose shiner (Notropis anogenus), round whitefish (Prosopium cylindraceum), blubreast darter (Etheostoma camurum), gilt darter, spoohead sculpin(Cottus ricei), and deepwater sculpin (Myoxocephalus thompsoni), will not be impacted by the proposed expansion. No streams will be impacted by the proposed expansion, resulting in no impact to fish within the project limits.

Amphibians listed on the State's endangered species list includes: eastern tiger salamander (Ambystoma tigrinum) and northern cricket frogs (Acris crepitans). Neither of these species are known to live within Ontario County. The range of the northern cricket frog extends into southeastern NY, but not into Ontario County (NYSDEC (a), 2012). The eastern tiger salamander inhabits the pine barrens of Long Island (NYSDEC (b), 2012). The soil located within the proposed project area is a sandy to silt loam and not conducive to tiger salamander populations. The proposed landfill expansion and borrow area will not result in any impacts to endangered amphibians or their habitat.

Endangered reptile species of New York state include the mud turtle (Kinosternon subrubrum), bog turtle (Clemmys muhlenbergii), Atlantic hawksbill sea turtle (Eretmochelys imbricate), Atlantic ridley sea turtle (Lepidochelys kempii), leatherback sea turtle (Dermochelys coriacea), queen snake (Regina septemvittata), and the Massasauga rattlesnake (Sisturus catenatus). The three State listed sea turtles will obviously not be affected by the proposed project due to the inland location of the project. No wetlands will be impacted by the proposed project resulting in no impacts to mud or bog turtles. Also, staff from the NYSDEC concurred with the statement within the EIS that no impact to bog turtles or their habitat will occur as a result of the proposed project. The queen snake is a water dependent snake that can be found in rocky streams where their main prey, newly molted crayfish, resides (NYSDEC (c), 2012). The proposed project will not impact any adjacent streams resulting in no impact to queen snakes or their habitat. Only two populations of massasauga rattlesnakes are known to exist in New York, both of which are found in forested bogs (NYSDEC (d), 2012). Neither of these populations is located at or adjacent to the proposed project area. The proposed project will have no effect on any endangered reptile species of New York.

Endangered bird species of New York include spruce grouse (Falcipennis canadensis), peregrine falcon (Falco peregrinus), black rail (Laterallus jamaicensis), piping plover (Charadrius melodus), Eskimo curlew (Numenius borealis), roseate tern (Sterna dougalii dougalii), black tern (Chlidonias niger), short-eared owl (Asio flammeus), and loggerhead shrike (Lanius Iudovicianus). The spruce grouse inhabit coniferous forests within the Adirondack Mountains and foothills. The proposed project is not located within this region or habitat. Peregrine falcons require high cliffs and or pedestals in order to nest. The proposed project is geographically located in Great Lakes' Lake Plain, which is relatively flat to rolling in topography. The project area is not conducive to peregrine falcon habitat. Black rails inhabit high grounds of coastal salt marshes. Piping plovers inhabit dry sandy areas associated with coastal areas. Eskimo curlews also inhabit coastal salt marshes and their adjacent areas. The project location is located inland with no immediately adjacent coastal salt marshes, lakes, oceans or beaches resulting in no impact to black rails, piping plovers, Eskimo curlews, or roseate terns. Black terns are associated with inland coastal marshes along the Great Lakes and St. Lawrence River. The proposed project is not located in close proximity to these historic breeding grounds and will result in no impact to black tern colonies. The short-eared owl has historically been located in Ontario County and sporadically across New York State. Sightings of this reclusive bird are greater during the spring and fall when northern individuals migrate south into New York. The abundant agricultural fields of New York provide ample habitat for hunting opportunities. Given the quantity of open agricultural fields in the immediate area, the proposed project will not result in an impact to short-eared owls. The loggerhead shrike inhabits open grasslands and hedgerows where it hunts and then impales its prey on branches, barbed wire, or thorns. Western New York

historically contained populations of loggerhead shrike, but no nests have been observed in recent years (NYSDEC (e), 2012). The proposed project will not impact New York State listed endangered bird species.

The Indiana Bat (Myotis sodalis) inhabits forested areas, finding shelter under loose bark and in the knots and holes of trees. At night they emerge to feed on flying insects in forested corridors. The proposed project is not located within any forests areas and will not result in the cutting of roost trees. Ontario County is not a known to contain a winter hibernaculum, nor is it adjacent to a known hibernaculum county within New York. The proposed project will not impact any individual Indiana bats or their habitat.

Given the lack of habitat for New York State listed endangered species within and adjacent to the proposed project area, as well as the lack of historic documentation of endangered species at the project site and adjacent areas, there is no need to perform an empirical wildlife survey for State listed species.

Works Cited

NYSDEC (a). (2012). Northern Cricket Frog Fact Sheet. Retrieved on March 23, 2012 from: <u>http://www.dec.ny.gov/animals/7120.html</u>

NYSDEC (b). (2012). Eastern tiger Salamander Fact Sheet. Retrieved on March 23, 2012 from: <u>http://www.dec.ny.gov/animals/7143.html</u>

NYSDEC (c). (2012). Queen Snake Fact Sheet. Retrieved on March 23, 2012 from: <u>http://www.dec.ny.gov/animals/79586.html</u>

NYSDEC (d). (2012). Massasauga Fact Sheet. Retrieved on March 23, 2012 from: <u>http://www.dec.ny.gov/animals/7154.html</u>

NYSDEC (e). (2012). Loggerhead Shrike Fact Sheet. Retrieved on March 23, 2012 from: <u>http://www.dec.ny.gov/animals/7092.html</u>

F.17 Population Data and Environmental Justice

F.17.1

It has been well-documented that environmental Justice mapping is not a straightforward exercise in every case, and the difficulties encountered in

producing these spatial analyses may leave the maps open to a variety of interpretations (1,2,3). An environmental injustice area was noted in the report that appears to include an area within the vicinity of the Geneva Waste Water Treatment Plant (GWWTP). While no leachate is currently accepted at the GWWTP, further analysis is needed to determine the nature of the current injustice and if findings reveal the GWWTP is involved, additional analysis should be performed to establish how any additional leachate (associated with any future deliveries from the landfill) to this outfall could further impact the area's status. The report claims that currently no environmental injustice is present based upon current conditions, however, it lacks an analysis of how an expansion (or future expansions) may have the potential to contribute to an injustice condition in the future. See: 1) Dorling D, Fairbairn D. Mapping: Ways of Representing the World, Harlow, UK:Addison, Wesley, Longman, Ltd., 1997. 2) Juliana Maantay Mapping Environmental Injustices: Pitfalls and Potential of Geographic Information Systems in Assessing Environmental Health and Equity. Environ Health Perspect. 2002 April; 110(Suppl 2): 161–171. 3) Wood D. The Power of Maps. New York: Guilford Press, 1992.

<u>Response</u>:

As referenced in section 3.2.2.2, and as per the DEC Commissioner Policy 29 on Environmental Justice and Permitting (CP-29), the Ontario County Landfill is not located within an area that meets or exceeds the specific statistical thresholds of an Environmental Justice area.

F.17.2

The purpose of assessing a proposed action in terms of environmental justice is not limited to defining whether the proposed action is occurring within an area already designated as an environmental justice area. This section must also address whether the proposed action has the potential to increase the probability that the immediate area will become an environmental justice area. Baseline socioeconomic data is necessary to establish whether an environmental injustice has occurred or will occur. Please provide a table with relevant socioeconomic data that includes data for each year (or shortest time period possible) between 1990-2011 by census tract for all census tracts within a 7-mile radius from the landfill site (a radius that is know to be a minimum distance where odors from the landfill can be detected). This table should include:

Population density Median household income Median sale price of homes Education status, number graduating high school, graduating college, etc. Unemployment rates Number of residents employed Ethnic demographics

Using the baseline socioeconomic data collected, describe how each of these socioeconomic factors has changed over time within a 7-mile radius of the landfill. Describe whether the proposed action is occurring in an area at risk of becoming an environmental just area, and predict, using the socioeconomic trends in the data, how this expansion will increase/decrease the probability that the immediate area will become an environmental justice area.

<u>Response</u>:

There has been a municipal solid waste landfill operating at the Ontario County Landfill site since 1974 and therefore the potential impacts on socioeconomic factors would have been evident in the surrounding community since that time. It is not anticipated that the expansion of this same activity would have any additional impact on these factors. Please refer to the responses to A.4.11, A.10.1, and F.18.2 for more information regarding population and property values.

F.17.3

Conduct a similar analysis at the spatial scale of counties. Do the socioeconomic demographics for Ontario County, relative to other Counties in New York, suggest that the County is more likely or less likely to be an environmental justice concern relative to other Counties in New York? Since the proposed action will not increase employment, specify how it has, and predict how it may, affect each of the socioeconomic demographics outlined above.

<u>Response</u>:

Refer to response to F.16.2, above.

F.18 Public Health

F.18.1

Please identify chemicals in leachate that are not removed or modified to a non-biologically active state during waste-water treatment, and describe how these chemicals or chemical classes will be rendered harmless before leachate enters the Geneva or Canandaigua waste-water treatment plants. If no pre-treatment is recommended, please describe all potential health hazards associated with these chemicals and proposed mitigation strategies to minimize those hazards. The EPA currently acknowledges that hormone mimics, pharmaceuticals and personal care products are not regulated but cause public health problems. Describe how the public health impacts of these and other non-regulated chemicals that are found in leachate and are listed on the EPA's Contaminant Candidate List 3 will be minimized.

<u>Response</u>:

6 NYCRR Part 360 regulations do not require onsite treatment of leachate. All leachate will be transferred to a permitted wastewater treatment facility required to meet the discharge limits set forth in their NYSDEC SPDES discharge permit. These limits are established by the NYSDEC to protect the environment and human health to the greatest extent practicable.

As outlined in Section 2.8 of the DEIS, the preliminary Master Plan for the facility will assess future options for alternative leachate treatment methods, including onsite treatment of leachate. Any such future developments are entirely speculative, would be subject to an independent SEQR analysis and permitting and their implementation would depend greatly on a number of variables, including, but not limited to, future funding.

F.18.2

Incorporate a leachate study into the public health component of the document that examines the long-term chronic health impacts to both Seneca and Canandaigua Lakes, as well as for the human populations, that may be ingesting trace amounts of leachate in their drinking water.

<u>Response</u>:

There is no need for a leachate study. The Ontario County Landfill is subject to pretreatment limits at the wastewater treatment plants and there have been no significant problems associated with the leachate concentrations trucked to the facilities that Casella and the County are aware of. Wastewater treatment plants are required to conduct headworks analysis at their facilities. The City of Canandaigua and Geneva Waste Water Treatment Facilities are in compliance with the EPA Pretreatment Standards for Publicly Owned Treatment Works (POTW's). As such the facility has the ability to accept industrial wastewater, which includes leachate.

F.18.3

List all public health hazards identified by the EPA and DEC that can be associated with landfills, and describe known health risks associated with each hazard. For each hazard, provide details on proposed strategies that will be used to prevent the hazard, give citations for specific regulations. Also detail proposed mitigation measures if the strategies fail. For example, current odor issues and associated public health problems occurred even though the operator asserts all regulations were followed. Following existing regulations does not provide sufficient public health protection. Mitigation measures for situations where existing regulations fail to protect the public health need to be identified in advance.

<u>Response</u>:

The NYSDEC and EPA have developed the landfill development and operation regulations to mitigate all public health hazards associated with landfills currently identified by each agency. By complying with these regulations, the landfill will be constructed and operated in such a way that the health risks associated with these health hazards will be mitigated. The site Contingency Plan, to be submitted with the NYSDEC Part 360 permit application documents and to be approved by the NYSDEC will address the measures to be taken in the event that a potential public health risk is perceived to have occurred.

F.18.4

The landfill is a source of two potential food safety concerns, bird feces and sewage sludge, the biosolids from wastewater treatment plants more accurately defined as human wastes. There is no discussion on how the food safety risks to adjacent crops are affected by these two sources. There is no mitigation strategy to control birds and, residents living near the landfill have stated that trucks bringing in sewage sludge dump their loads, their tires get contaminated with the sludge and then the truck tires drag the sludge out of the landfill and other adjacent roads. Please estimate the public health risks associated with food safety concerns, the potential financial impact on nearby farmers if their products are contaminated with bird feces or human wastes, and the proposed mitigation strategies to prevent such contamination. The mitigation strategy should require state-of-the-art tire wash facilities to ensure that nothing that enters the landfill leaves the landfill on truck tires.

<u>Response</u>:

As referenced in Section 3.1.5.3, a water truck is available at all times to water down haul roads during dry periods to minimize dust generated by vehicles moving over exposed soils. Casella hires outside contractor to sweep Route 5&20 three times per week. On-site roads are watered daily if needed. Temporary workers are on site to clean tires to prevent tracking.

Casella funds the employment of a United States Department of Agriculture staff member to implement all necessary wildlife mitigation efforts at the site, including the control of the bird population at the facility.

These Vector Control measures are included in the facility's O&M Manual which will be updated for the proposed expansion and continue to be implemented at the facility.

F.19 Property Values

F.19.1

Provide data using a historical analysis of property values in the area surrounding Seneca Meadows landfill in Seneca County pre- and postlandfill operations to assess what the potential effects are to property values.

<u>Response</u>:

A landfill has been operational at this location since 1974. This data request is outside of the scope of this DEIS which is focused on addressing potential impacts of the proposed expansion

F.19.2

The DEIS states "Experience has shown that the presence of a landfill can impact property values in the vicinity of the landfill facility. However, the expansion is unlikely to increase the effects on local property values over what is already encountered." No data is provided to support this conclusion. Use the data collected in response to the point mentioned above to assess the validity of this conclusion.

<u>Response</u>:

As outlined in Section 3.2.5.1 of the DEIS, property values within the Town of Seneca have increased over the past four years. Utilizing data on property values within the County provided by the Ontario County Real Property Tax Office for the years 2000 through 2011, an assessment of property values in the vicinity of the landfill was able to completed for the four years prior to the privatization of the landfill (2000-2003) and for the four years subsequent to the privatization (2004-2007). The percent change in property values for each of these time periods was calculated for each municipality in the County, as well as for the County as a whole. These values for the municipalities in the closest vicinity to the landfill, the Towns of Seneca, Geneva, Phelps, and Hopewell and the City of Geneva were compared to the County-wide values. From 2000 to 2003, the percent change in property values for all of Ontario County was 11.37%. In comparison, the percent change in property values for the municipalities listed above was an average of 13.96%, or slightly above average. From 2004 to 2007, the percent change in property values for all of Ontario County was 19.5%. In comparison, the percent change in property values for the municipalities listed above was an average of 21.99%, or slightly above average. Although many factors can impact property values, there is no evidence that the proximity to the landfill has had a negative impact on the property values in the study area over the study period.

F.19.3

The DEIS states "The Property Protection Plan will ensure that property values are protected should the proposed landfill expansion project impact property values." Outline the conditions that would represent an "impact" to property values and provide detailed documentation on how residents would participate in such a program. Describe in detail, the triggering mechanisms for such an agreement. Present the plan and solicit public comment on the plan to determine whether or not such an agreement is considered equitable by the community. Include language in the plan that allows for an appeals process and protects the residents from any legal liabilities when attempting to engage in any disputes with the managing company. Allow such a plan to be directed by the County and not by the landfill operator to eliminate potential conflicts of interest.

<u>Response</u>:

As outlined in Section 3.2.5.3, this Property Protection Plan is already in place and has been approved as part of the Host Community Agreement. That document governs when it is triggered and the related process.

F.20 Historic and Archeological Resources

F.20.1

Attachment J, which provides the Phase 1A/1B survey, is corrupt and could not be downloaded from the website. Please correct this problem.

<u>Response</u>:

Attachment J, U.S. Army Corps of Engineers Jurisdictional Determination, was, in fact corrupt. The file has been restored and can now be downloaded from the website. This file is also available at all County libraries and the County Office Building for review. The link for the Phase 1A/1B Archaeological Investigation Report, Attachment E, is functioning properly. F.21 Noise Analysis

F.21.1

Provide all noise survey data and include sampling locations, times and types of equipment utilized for such studies. Compare current noise levels and permitted noise levels and explain any discrepancies.

<u>Response</u>:

Supporting document "Operating Noise Impact Assessment" is provided in the FEIS.

F.22 Fiscal Analysis

F.22.1

Estimate fiscal impacts on Ontario County roads associated with truck traffic associated with importing waste from outside Ontario County. Describe mitigation strategies that will be used to reduce the fiscal impact on Ontario County municipalities responsible for road management.

<u>Response</u>:

As detailed in Section 3.2.7 of the DEIS, since the annual tonnage limit of the landfill will not be increased due to the proposed expansion, there is no anticipated increase in truck traffic due to the importation of waste from outside Ontario County. The same local truck routes that have been used during the operating life of the landfill will continue to be used by truck traffic to and from the landfill facility. The municipalities and government agencies responsible for the management of these roadways have factored the typical levels of all truck traffic along these routes, including traffic associated with the landfill, into their maintenance schedules. The proposed landfill expansion will not have an impact on these established schedules.

F.22.2

Compare the economic costs under the expansion scenario with a noexpansion scenario for potential healthcare costs associated with asthma, diabetes, leukemia, bladder cancer, and hospital admissions for myocardial infarction.

<u>Response</u>:

A review of readily available studies indicates that there is not conclusive evidence linking residence in proximity to a modern municipal solid waste landfill with a dual composite liner system to any of the illnesses presented above. As such, there is no need for the requested analysis.

F.22.3

Describe the economic benefits of an increase in tourism as a result of decreased disposal of waste generated outside of Ontario County.

<u>Response</u>:

The comment assumes that tourism will increase if out of county waste is reduced. However, there is no evidence supporting this assumption. Refer to response to A.4.1 above for additional information regarding impacts on tourism.

F.22.4

Describe how the tax base of the County would be impacted should residents move into or out of the County, based on the existence of the current landfill versus the expanded landfill.

<u>Response</u>:

As detailed in the comment response for comment E.1.b, there is no evidence that the presence of the landfill or the proposed expansion has had or will have an impact on population within the County. Moreover, the landfill as is and as expanded provides significant tax benefit to the County and Town as referenced in Section 3.2.11 of the DEIS. F.23 Cumulative and Growth Inducing Impacts

F.23.1

Baseline socioeconomic data is missing from the draft EIS. Please provide a table with relevant socioeconomic data that includes data for each year (or shortest time period possible) between 1990-2011 by census tract for all census tracts within a 7-mile radius from the landfill site (a radius that is know to be a minimum distance where odors from the landfill can be detected). This table should include:

Population density Median household income Median sale price of homes Education status, number graduating high school, graduating college, etc. Unemployment rates Number of residents employed Ethnic demographics

Data from this table should be used to provide an analysis of changes in each of these socioeconomic factors and predictions for the period from 2011-2028. The landfill may not be "expected to directly induce population growth" as stated in the DEIS, but there is no data provided to estimate decreases in population now or in the future associated with the proposed expansion.

<u>Response</u>:

Refer to the response to comment F.16.b above.

F.24 Air

F.24.1

The assumption in the DEIS that emissions from the landfill and the gasto-energy facilities will be allowed to be evaluated separately and not under "common control" is not justified. The EPA, not the DEC, will make a final determination on this question during the evaluation of Title V Air Permits. Until that determination is made, the DEIS needs to include predictions for cumulative air emissions based on an assumption of "common control" and predictions for air emissions evaluating the facilities separately.

<u>Response</u>:

The New York State Implementation Plan (SIP) for PSD and NANSR was approved by the EPA, and effective December 17, 2010, the PSD and NANSR programs are delegated to the NYSDEC by EPA. Per NYSDEC letter dated January 5, 2012 the facilities are considered not to be under common control, and therefore are not considered as such for PSD and NANSR applicability. A supplement to the Air Quality Attachment is provided in the FEIS that includes the cumulative impact assessment of both the landfill emission sources and the separately owned and permitted landfill gas to energy (LFGTE) facility emission sources.

F.25 Alternatives Analysis

F.25.1

The Operations, Management and Lease Agreement (OML), (the contract between Ontario County and Casella Waste Systems, Inc., operators of the landfill) requires that Casella hold 100,000 tons per year of space as "Reserved Capacity" for waste originating in Ontario County. According to the 2010 Annual Report filed by Casella, Ontario County contributed approximately 78,000 tons of waste to the landfill in 2010. Please provide a table illustrating the total waste contributed to the landfill from Ontario County for each year between 2003-2011 and how much of the reserve capacity is left for each year. Include an Alternative in this section that describes how much reserve capacity Ontario County has accumulated since 2003, and how much reserve capacity Ontario County would accumulate by 2028 if the County reduced its production of waste by 10, 20, 30 and 40%. Describe how long this accumulated reserve capacity would last under each waste reduction scenario. Include another Alternative that estimates, if no expansion were allowed, how long the current accumulated reserve capacity would last under each waste reduction scenario in terms of providing future landfill space for Ontario County's waste.
<u>Response</u>:

Refer to response to A.3.14, above.

F.25.2

Please provide an Alternative that describes how long the existing permitted space (5,856,000 cubic yards) would last if only Ontario County waste were allowed in the landfill. (By my estimates, the remaining constructed site capacity is 3,106,000 cubic yards. Even without any reduction in waste produced within Ontario County, at 79,000 cubic yards per year, it would take 39 years for Ontario County to fill the existing constructed capacity. If you include the permitted and not yet constructed capacity, 2,750,000 cubic yards, it would take Ontario County 74 years to fill the permitted capacity.) Please provide detailed information on the economic pros and cons of this Alternative.

<u>Response</u>:

Refer to responses to A.3.3 and A.3.4, above.

F.26 Alternative Soil Borrow Site

F.26.1

Require all borrow areas be reclaimed in accordance with all MSHA and DEC regulations.

<u>Response</u>:

As referenced in Section 2.4 of the DEIS, a mined land use plan will be developed as part of the Part 360 application documents. This document will propose reclamation in accordance with NYSDEC mining regulations.

F.27 Attachment L-Hydrogeologic Investigation Report

F.27.1 - Figure 13 – Generalized Potentiometric Surface-Bedrock Unit-Dec 2010

This attachment does not include any data. Please provide it.

<u>Response:</u>

It is unclear what data is required on this particular figure. As the title implies, Figure 13 illustrates the generalized potentiometric surface of the bedrock flow zone based on the December 2010 groundwater elevation data. All data points used in producing the contour lines are provided on the figure.

F.27.2 Hydrogeologic Investigation

Literature Review: Please provide data from another source confirming Barton and Loguidace Corporation's findings describing the hydrogeologic characteristics of this site. (Supplemental Hydrogeologic Investigation Report, B&L, P.C., 2004.) The sources used for site-specific geologic information are 56 and I09 years old, respectively. This is not adequate. Please provide an update using more recent geologic data.

Response:

The 1909 and 1956 references utilized for the study were utilized to establish regional hydrogeologic conditions. These older quadrangle references are commonly used in the industry to describe regional soil and bedrock conditions which do not change significantly over time. While more recent studies may have been completed within the region for other sites specifically, these do not provide an update to the conditions of the region as a whole. As outlined in the DEIS, extensive site specific data has been collected in order to confirm the findings of these regional references and to provide a more detailed analysis of landfill site's hydrogeology.

F.27.3 Water Supply Source Survey

Please state how owners were contacted, and provide a copy of the source survey questionnaire. Please state which owners or inhabitants were contacted. Please explain how data was collected from owners who were not contacted, and if not contacted how data was confirmed for these residents.

<u>Response</u>:

The Residential Well Survey was conducted by B&L personnel by interviewing the residents at their homes. The information collected during the interview was recorded by B&L personnel on to data sheets. An example of the questionnaire form and the completed data sheets will be included with the final EIS. If the resident was not home or did not respond, the date(s) and time(s) that the property was visited is recorded on the data sheets.

F.27.4

Please supply the raw data from the quarterly and annual monitoring reports for the two surface water monitoring locations where Unnamed Tributary 4 to Flint Creek (Ont. 66-12-52-40-4) is sampled.

<u>Response</u>:

The quarterly and annual monitoring reports are submitted to NYSDEC and include the corresponding analytical laboratory reports and are therefore a matter of public record.

F.27.5

Please supply the water level data from January 2008, January 2009 and January 2010 which represent the seasonal high groundwater conditions. Please explain why these years of data represent an "incomplete site-wide data set" and why December 2010 data was used instead.

<u>Response</u>:

The active landfill monitoring well network water level data is collected during routine groundwater sampling events. Because the proposed expansion area monitoring well network was not routinely sampled, water level measurements were not typically collected at the same frequency as the active landfill monitoring wells. In terms of producing site-wide groundwater contour maps, the data set was considered incomplete when the water level data from both networks was not collected concurrently. The December 2010 data was selected for the site-wide groundwater contour mapping because it represented data from both monitoring well networks that was collected generally during the same time of year as what was identified as the seasonal high conditions in the proposed Phase XII and IV expansion area. The water level data is included with Appendix F of the Hydrogeologic Investigation Report.

F.27.6

Please explain why the southwesterly flow induced by the groundwater suppression system for Phase III landfill were "inferred" in section 5 and now are "evident."

<u>Response</u>:

There is no reference to the word "inferred" in Section 5 Moreover, the definition of the infinitive tense "infer" is provided below includes to:

"derive by reasoning; conclude or judge from premises or evidence." (<u>www.dictionary.com</u>) as well as to

"deduce or conclude (something) from evidence and reasoning rather than from explicit statements" (<u>www.oxforddictionaries.com</u>)

Based on the above, the use of the word "inferred" in the discussion of the southwesterly groundwater flow direction in Sections 1 is consistent with use of the word "evident" in Section 4, and vice-versa.

F.27.7 Effective Porosity

Please explain why the lower level soil porosities were used to calculate flow velocities. In order to present a conservative, worst-case estimate of offsite contamination, the upper levels of porosity cited by Fetter (I980) should be used. Since glacial till porosities range from 10% to 20%, twenty percent should be used, instead of 10%. Sorted sand and gravel, which make up some brown till, ranges in porosity from 25% to 50%, yet 25% was used. Even a mixed sand and gravel, used to characterize the brown till at this site, has a range of 25% to 35%, yet 25% was used. Please re-calculate the flow velocities based on conservative estimates.

<u>Response:</u>

The seepage velocity (V_{s}), or the average speed at which a particle of water will move in the subsurface, is given by the relation:

 $V_s = ki/n_e$

Where k is the hydraulic conductivity (L/T), i the hydraulic gradient (dimensionless), and n_e is the effective porosity (%).

The average linear velocity (seepage velocity, V_s) is directly proportional to the hydraulic conductivity and gradient and is inversely proportional to the effective porosity. Accordingly, as the effective porosity decreases, the seepage velocity increases. It is in this sense that the flow velocity calculations provided in the Site Investigation Report are conservative. Because the seepage velocity is inversely proportional to the effective porosity, the use of higher effective porosity values would results in a lower calculated flow velocity.

As an example, the calculated flow velocity for the shallow overburden zone was based on a geometric mean hydraulic conductivity of 1.28 x 10⁻ ⁵ cm/sec (3.63 x 10^{-2} ft/day), a hydraulic gradient of 0.027, and an effective porosity of 0.25:

$$V_{s} = ki/n_{e}$$
$$V_{s} = (3.63 \times 10^{-2} \text{ ft/day})(0.027)$$
$$0.25$$

 $V_s = 3.92 \times 10^{-3}$ ft/day or 1.4 ft/yr

Substituting a higher effective porosity (0.5), as suggested by the commenter, yields a lower seepage velocity, as illustrated below:

. .

$$V_s = (3.63 \times 10^{-2} \text{ ft/day})(0.027)$$

0.5

 $V_s = 1.96 \times 10^{-3}$ ft/day or 0.72 ft/yr

Accordingly, selection of a lower effective porosity yields a higher flow velocity, which is, in fact, conservative.

F.27.8

The hydraulic properties used to calculate volumetric flow rates and seepage velocities are on a best case scenario basis, but final calculations are described as "conservative". The presented volumetric flow rate is calculated on a set of non-representative values, which are 10% to 15% lower than the conservative porosity estimates. Estimated flow rates and seepage velocities are uncharacteristic of this site based on a worst-case scenario. Please recalculate these estimates.

<u>Response</u>:

The average linear velocity (seepage velocity, V_s) is directly proportional to the hydraulic conductivity and gradient and is inversely proportional to the effective porosity. Accordingly, as the effective porosity decreases, the seepage velocity increases. It is in this sense that the flow velocity calculations provided in the Site Investigation Report are conservative. Because the seepage velocity is inversely proportional to the effective porosity, the use of higher effective porosity values would result in a lower calculated velocity. See response above for a specific example of the calculation.

F.27.9 Environmental Quality

Please include the most recent data from all monitoring wells. Since the amount of permitted daily waste was increased in 2008 to 2,999 tons per day, the current data does not reflect the co-disposal history of the Phase III landfill.

<u>Response</u>:

The most recent water quality data for all monitoring wells are submitted to NYSDEC on a quarterly basis and are a matter of public record. As outlined in section 2.4.2 of the DEIS, the installation of a double composite landfill liner system over relatively low permeability soils, along with a leachate collection and containment system, and an extensive network of groundwater monitoring wells, will ensure protection of groundwater resources. The increase in waste acceptance rate at the landfill in 2008 did not impact the integrity of this system and did not result in an increase in landfill footprint or the total quantity of waste placed in the landfill.

F.27.10

Please explain the use of the term "analytical variability" when used to explain parameter exceedances of phenols, benzene, acetone and carbon disulfide in shallow overburden wells, 20S, 21S and 22S, which are downgradient wells reported to be divided hydrogeologically from the Phase III landfill. Please explain use of the phrase, "short-lived residual effects from monitoring well installation and sampling activities", and how these activities could introduce these chemicals into wells which are described as those with "appreciable recharge" capacities. According to the US EPA, at the detection limit, a chemical may be reliably said to be present. Since the detection limits are defined to minimize the probability of a Type I error, and the EPA defines detection limits that have less than a one percent chance of producing a Type I error, please explain your rationale for dismissing the presence of a chemical detected with a 99% confidence level. Please explain how the term, "analytical variability" is applied to qualitative data. Additionally, the raw lab data and quality control data submitted by Upstate Laboratories do not support conclusions presented in the DEIS. Please explain why.

<u>Response</u>:

Both acetone and carbon disulfide are common laboratory contaminants that are frequently detected in environmental samples as a result of inadvertent laboratory cross-contamination. The chemicals are present in laboratory air as a result of their use as laboratory solvents in a variety of analytical methods and/or extractions. Although less frequently encountered as a natural occurrence, both acetone and carbon disulfide may also occur naturally. Carbon disulfide occurs naturally in coastal and ocean waters and can also be produced by microorganisms in the soil (ATSDR, 1996). Acetone is present as a metabolic component in blood, urine and human breath and also occurs naturally as a breakdown product of humic substances (EHC 207, 1998).

Acetone was detected on a single occasion at an estimated concentration of 8J ug/l in monitoring well MW-22S and was not confirmed in the three subsequent monitoring events. The detection limit reported for the trip blank and holding blank (10 ug/l) associated with this sampling event is higher than the estimated concentration present in the single sample from MW-22S. Taken together with the fact that the presence of acetone has not been confirmed in any subsequent monitoring event, it is reasonable to conclude that the reported acetone is the result of analytical variability.

Carbon disulfide (19 ug/l) and benzene (2J ug/l) were detected on a single occasion in monitoring well MW-20S and were not confirmed in the three subsequent monitoring events. Taken together with the fact that the presence of carbon disulfide has not been confirmed in any subsequent monitoring event at this location, it is reasonable to conclude that the reported concentration is the result of analytical variability. Benzene is less likely to occur as a laboratory contaminant; however, benzene is commonly detected in ambient air, particularly where vehicle exhaust may be present. In addition, it is conceivable that trace levels of petroleum hydrocarbons such as benzene could be associated with inadvertent cross-contamination during the drilling and well installation process. Given that the presence of benzene has not been confirmed in any of the three subsequent monitoring events, it is reasonable to conclude that the reported presence of benzene is likely attributable to either analytical variability, as a short-term residual from drilling and well installation, or a result of exposure to ambient vapors containing benzene during sampling activities.

Phenols were detected slightly above the detection limit (0.005 mg/l) in the initial two monitoring events (each at 0.006 mg/l) at monitoring well MW-20S, but were not confirmed in the two subsequent monitoring events. Neither of the detections exceeded the flow regime statistical trigger values that have been established for the overburden at the site. Parisio, et al. (2009) note the following:

"...the analytical method used [for total phenols] does not distinguish between non-toxic and naturally occurring phenols such as tannins, lignin breakdown products or other plant-related sources and toxic industrial chemicals such as phenol, cresols or pentachlorophenol. Experience with water quality monitoring programs has shown that total phenols often occur in groundwater which does not show any other landfill leachate indicators or other signs of anthropogenic contamination."

F.27.11

Please explain how qualitative detection of ammonia, phenols, acetone, toluene, and m+p xylene in monitoring wells 20D, 21D and 22 D represent "analytical variability" as above. Please explain how well installation and sampling "activities" could introduce these chemicals at the levels at which they were detected, especially in light of the quality control data submitted by Upstate Laboratories. Please explain how water quality at this location is "somewhat different" than is typically observed in the soil/bedrock interface unit. Please elaborate on how this might affect flow rates and seepage velocity.

<u>Response</u>:

As noted previously, acetone is a common laboratory contaminant and also occurs under natural conditions. Acetone was detected on a single occasion in monitoring wells MW-21D and MW-23D, both at estimated concentrations less than the detection limit associated with holding and trip blanks (10 ug/l). As was the case for the overburden monitoring wells with acetone detections, the bedrock monitoring well acetone detections were associated with the initial one or two sampling rounds and were not replicated in the subsequent monitoring events.

Toluene was detected on two occasions in monitoring well MW-20D at estimated concentrations of 2J to 3J ug/l, again at estimated concentrations less than the detection limit associated with holding and trip blanks. m,p-Xylenes were also detected in monitoring well MW-20D on two occasions, each at an estimated concentration of 2J ug/l. Toluene may occur as a laboratory contaminant and is also present in ambient air, particularly where vehicle exhaust may be present. m,p-Xylenes are less likely to occur as a laboratory contaminant; however, they are commonly detected in ambient air, particularly where vehicle exhaust may be present. In addition, it is conceivable that trace levels of petroleum hydrocarbons such as toluene and m,p-Xylenes could be associated with inadvertent cross-contamination during the drilling and well installation process. Given that the presence of toluene and m,p-Xylenes has not been confirmed in the subsequent monitoring events, it is reasonable to conclude that their reported presence is likely attributable to either analytical variability, as a short-term residual from drilling and well installation, or a result of exposure to ambient vapors containing petroleum hydrocarbons during sampling activities.

Phenols were detected slightly above the detection limit (0.005 mg/l) on a single occasion (each at 0.006 mg/l) at monitoring well MW-21D, MW-22D, and MW-23D, but were not confirmed in the subsequent monitoring events. Neither of the detections exceeded the flow regime statistical trigger values that have been established for the bedrock at the site. Parisio, et al. (2009) note the following:

"...the analytical method used [for total phenols] does not distinguish between non-toxic and naturally occurring phenols such as tannins, lignin breakdown products or other plant-related sources and toxic industrial chemicals such as phenol, cresols or pentachlorophenol. Experience with water quality monitoring programs has shown that total phenols often occur in groundwater which does not show any other landfill leachate indicators or other signs of anthropogenic contamination."

Ammonia-nitrogen was detected in a single bedrock monitoring well (MW-21D) on two occasions at concentrations of 8.4 ug/l and 8.57 ug/l. A subsequent analysis indicated that ammonia-nitrogen was not detected at this location. Neither of the detections exceeded the flow regime statistical trigger value that has been established for the bedrock at the site. A subset of bedrock monitoring wells at the site contains ammonia-nitrogen at similar concentrations and the detections pre-date landfill operations in this area of the site. In addition, monitoring well MW-21D is not located downgradient of current operational landfill areas. The ammonia-nitrogen is likely the result of historical agricultural land use in the site vicinity or as a result of natural conditions.

The results of the analytical chemistry do not affect flow rates and seepage velocity.

F.27.12

Please explain how the detection of phenols and 1,2 dichorloethane in the cross-gradient wells, 23D and 24 D, and phenols in downgradient well 26D are examples of "analytical variability" when these detection levels are at a 99% confidence level. Please state how exceedances of the above-mentioned chemicals, as well as TDS, turbidity, color, sulfate, antimony, iron, magnesium, sodium, barium, manganese and thallium and lead will be remediated such that levels are brought to those considered safe pursuant to current regulations.

<u>Response</u>:

Total phenols were detected on a single occasion (July 2006) in monitoring wells MW-23D, MW-24D, and MW-26D at concentrations only slightly above the detection limit and were not confirmed in subsequent monitoring rounds during 2007 and 2008. None of the detections exceeded the flow regime statistical trigger values that have been established for the bedrock at the site. As noted previously, Parisio, et al. (2009) note the following:

"...the analytical method used [for total phenols] does not distinguish between non-toxic and naturally occurring phenols such as tannins, lignin breakdown products or other plant-related sources and toxic industrial chemicals such as phenol, cresols or pentachlorophenol. Experience with water quality monitoring programs has shown that total phenols often occur in groundwater which does not show any other landfill leachate indicators or other signs of anthropogenic contamination."

1,2-dichloroethane was detected on a single occasion in monitoring well MW-24D at an estimated concentration of 1J ug/l, which has not yet been verified by subsequent sampling and analysis. Future monitoring events will determine whether this constituent is present in the groundwater system.

The reported concentrations of TDS, turbidity, color, sulfate, antimony, iron, magnesium, sodium, barium, manganese, thallium and lead do not indicate the need for remediation.

The reported concentrations of antimony were associated with a single monitoring event (January 2007) and were not detected in prior or subsequent monitoring events. The widespread detection of antimony in a single event suggests the presence of positive analytical bias. The reported concentrations did not exceed the proposed flow regime or intrawell trigger values.

Thallium has been reported in the referenced monitoring wells at concentrations that exceed regulatory guidance criteria. However, the method employed for metals analysis (inductively coupled plasma – atomic emission spectrometry) is known to yield false positive detection rates exceeding 90% due to interferences in the sample analysis (Chapnick, et al., 2010). Potential sources of interference for the thallium

analysis include aluminum, magnesium, and iron (Chapnick et al, 2010), which occur naturally in the site groundwater (and which may also be elevated as a result of sample turbidity in the total metals analyses as a result of acid digestion of particulate matter).

Contrary to the implication of this comment, there were no exceedances of applicable regulatory criteria for lead in these groundwater samples.

Turbidity and color are typically elevated in monitoring wells constructed in relatively low permeability materials as a consequence of the modest flow rates and infrequent use of the wells. Elevated results for these parameters do not indicate that contamination is present.

The remaining parameters cited in this comment (sulfate, iron, magnesium, sodium, barium, and manganese) are considered to be naturally-occurring.

Reference cited in above response:

Chapnick, S. D., Pitts, L. C. and Rothman, N. C. (2010), Arsenic and thallium data in environmental samples: Fact or fiction?. Remediation, 20: 39–59. doi: 10.1002/rem.20260

F.27.13

Please provide data and information to justify the conclusion that presence of these chemicals are "indicative of natural background water quality conditions" rather a result of being directly underneath an active landfill. Please provide data to demonstrate that "isolated exceedances appear to be reasonably consistent with the historical data, and should be considered naturally-occurring." Please provide data to demonstrate that these synthetic chemicals naturally occur in groundwater. Please explain the "historical data" and indicate the monitoring wells associated with Phase III that are referenced in this section.

Response:

None of referenced wells are located "directly underneath an active landfill". The majority of the monitoring wells in which these detections have occurred are located either upgradient or cross-gradient from the active landfill areas. The data supporting these conclusions have been reported in the Site Investigation Report, and site historical data are a matter of public record.

F.27.14

Please explain how the proposed expansion areas "are monitorable" if the existing data collected rejected on the basis of "analytical variability", "well installation" or "sampling activities."

<u>Response</u>:

The purpose of monitoring prior to waste disposal activities is to establish the nature and degree of natural variability in water quality before waste disposal operations begin. Contrary to the implication of this comment, the data that are considered suspect as a result of inadvertent field or laboratory contamination are not rejected and are and will be included in the environmental monitoring database for the site. In addition to the monitoring that has been reported to date, additional monitoring wells will be installed during the summer 2012 and will be monitored for at least four quarters prior to initiation of waste disposal operations. This preoperational data will also be included in the existing water quality database for the site. The existing water quality database will also be reviewed by NYSDEC, who will also review any proposed flow regime or intra-well trigger values for the groundwater monitoring network.

Monitorability in the context of 6 NYCRR Part 360 is based upon the ability to:

- sufficiently characterize groundwater and surface water flow to locate upgradient and downgradient directions;
- install environmental monitoring points that will detect potential releases from the landfill;
- characterize and define a release from the landfill and determine what corrective actions may be necessary to remediate the potential release; and
- the ability to carry out those corrective actions.

The Site Investigation Report, together with the reports of prior investigations and monitoring at the site, demonstrates that the site meets these criteria.

F.27.15

Please explain why lab reports indicate that water samples were not sealed when received at Upstate Laboratories.

<u>Response</u>:

This comment was interpreted to be in reference to the absence of custody seals on the sample coolers noted in the laboratory Sample Receipt Checklists. As noted in the corresponding laboratory Case Narratives, all samples were collected at the site and hand-delivered to the laboratory by B&L personnel. The sample coolers were under the continuous control of B&L personnel; therefore, sample cooler custody seals were not warranted.

F.27.16 Water Supply Survey Listing

The data used is inaccurate and at least 5-7 years out of date. Please update the data to include current owners of property.

Response:

Because a door-to-door residential well survey was completed, owner/residence information could be updated as needed based on the interview. Any such instances are documented in the residential well survey field forms, which are provided in the final EIS.

The residential well survey was conducted by B&L personnel by interviewing the residents at the properties identified within a distance of 0.25 miles upgradient of the landfill and 1.0 miles downgradient of the landfill. The interview consisted of general questions regarding the nature and construction of the well, and water usage and quality (if applicable). B&L recorded the interviewee responses on individual field forms (an example will be provided in the final EIS). The field forms indicate the date and time that each property was visited. Please note that on the basis of confidentiality the field forms have been reproduced with the omission of personal comments.

F.27.17 Residential Well Survey

Please provide raw data sheets showing completion by owners in March 2010.

<u>Response</u>:

The data sheets are provided in the FEIS.

F.27.18

Please describe the criteria used in the survey.

The data presented is incomplete and out of date. Surveys were not received by all owners listed. Please update data to include current ownership and repeat the survey such that all current owners within a one-mile easterly and one-quarter mile westerly radius are included.

Response:

The residential well survey was conducted by B&L personnel by interviewing the residents at the properties identified within a distance of 0.25 miles upgradient of the landfill and 1.0 miles downgradient of the landfill, as described in DEIS Appendix L. The interview consisted of general questions regarding the nature and construction of the well, and water usage and quality (if applicable). B&L recorded the interviewee responses on individual field forms (an example is provided in the FEIS). The field forms (also provided in the FEIS) indicate the date and time that each property was visited. Please note that on the basis of confidentiality the field forms have been reproduced with the omission of personal comments.

G. NYSDEC Comments

Volume 1: DEIS

G.1 Summary Section

G.1.1

Wetland Resources p. S 4: There are 2 state regulated Freshwater Wetlands on or immediately adjacent to the landfill, ST 5 and ST 6; St 6 is near the proposed expansion and ST 5 is now between the closed Phase 1 and II landfills. Page 5 4 of the DEIS states that "Landfill activities have been performed in the areas adjacent to these wetlands for almost 20 years with no impacts observed". This statement is unsupported. While some gross impacts to wetlands, e.g., reduction of actual wetland acreage, may not have been observed, it has not been studied or documented. Construction and operation of the 3 landfill phases adjacent to the wetland may have had at least indirect impacts on wetland function and benefits, particularly those related to storm water discharges and habitat fragmentation. Furthermore, with the exception of the hydrologic impacts considered during the 2010 borrow pit Part 360 permit modification, no ongoing assessment of the full range of potential wetland impacts has been conducted by Ontario county or Casella Waste Services. Any potential impacts to ST 6 identified in the more detailed hydrologic and impact analyses may be included in an expanded wetland monitoring plan as part of the mitigative measures.

<u>Response</u>:

The statement, "Landfill activities have been performed in the areas adjacent to these wetlands for almost 20 years with no impacts observed." has been removed from the FEIS. B&L agrees it is not possible to analyze historic impacts to State mapped wetland ST-5. Landfill phases that surround ST-5 are previously permitted and inactive. That area of the County owned property will not be developed under the currently proposed expansion and as such is not being studied as part of this document. However, the County, B&L and Casella do agree that data and information should continue to be collected for NYSDEC mapped wetland ST-6 due to its close proximity to proposed landfill activities. To date no adverse impacts associated with borrow area activities has been noticed within ST-6 as identified in the December 2011 Ecological Wetland Assessment Annual Report (B&L). Currently, ecological reports will be issued annually for wetlands ST-6 for as long as borrow activities are ongoing, plus one year. As stated below in response to a comment in Section 3.1.13 – Mitigative Measures, the County, Casella and B&L agree to incorporate the Annual Wetland H (ST-6) Ecological Assessment as a condition of the Article 24 and Part 360 permits.

G.1.2

The site is surrounded by regulated wetlands, both State and Federal. The long term planning should evaluate the long term goals and whether this expansion is the anticipated final expansion of the facility, or if long term plans will entail impacts to streams or State and/or Federal wetlands.

<u>Response</u>:

This EIS was compiled in an effort to evaluate any potential environmental impacts associated with the currently proposed Ontario County Landfill expansion and proposed soil borrow area. This document does not provide information regarding the future of the landfill facility since it is not known what the future land use activities may entail. As referenced in Section 1.2.2 of the DEIS, and future developments will require separate SEQRA review and permitting.

G.1.3

This section does correctly acknowledge the Department's Article 24 jurisdiction for construction of a stormwater discharge and other "incidental work" within the 100 foot adjacent area of Freshwater Wetland ST 6, and the need for an Art. 24 pemit.

<u>Response</u>:

The FEIS has been updated to include information regarding the NYSDEC's Article 24 jurisdiction over ST-6 and the adjacent 100-foot buffer.

G.1.4 - Page S 4

This section discusses how groundwater will be managed within the soil borrow area. The DEIS document indicated that groundwater suppression is needed just to the north in the proposed expansion. Stage VIII and IX expansion areas will require groundwater suppression to deal with the surrounding groundwater but not in the soil borrow area. Additional detail must be provided to better describe how the excavation will intersect water bearing layers of the till and what the effects would occur and if groundwater management will be needed. A discussion of the characteristics of the ablation and lodgment till should be formulated to support the inference that there are no significant impacts to groundwater. Additional detail should be provided to better describe how the excavation will not intersect the water bearing layers of the top of bedrock; excavation depth vs. bedrock depth for example. A description of any surface water management should also be given. An evaluation of any potential impact to the wetlands from dewatering should be provided. See also Section 3.1.4.

<u>Response</u>:

The contribution of groundwater to the proposed excavation is considered to be insignificant in comparison to the surface water (precipitation) factor. Therefore, it is anticipated that groundwater entering the borrow area excavation will be managed in the same manner as surface water and precipitation entering the excavation, which is described in DEIS Attachment K.

Based on B&L's 2010 assessment of the proposed Eastern Borrow Area, groundwater does not contribute significant flow to the ST 6 wetland. The assessment concluded rather, that stormwater runoff from the surrounding area is the major source of water for the wetland. Therefore, the development of the proposed borrow area is not expected to significantly reduce flow to the surrounding wetlands from groundwater. As described in DEIS Appendix K, surface water and a relatively minor component of groundwater from the soil borrow operation will be periodically pumped to Pond Number 3A. The Pond Number 3A outlet will return the surface water collected from within this drainage basin to the same drainage system that it would have discharged to under natural conditions. Therefore, impacts to the wetland as a result of the soil borrow operation and associated dewatering activities are not anticipated.

G.1.5

Figure 7: There are numerous references to the figure indicating that it shows all of the proposed conditions however, this does not appear to be the case. The figure doesn't show any of the facility relocations that will be needed to accommodate the expansion (stormwater ponds, leachate storage, road relocation, maintenance building relocation, etc.). Better drawings are needed to see the full picture of what is proposed. The figures should also show the 100 foot adjacent area of the state regulated wetlands on the site.

<u>Response</u>:

The proposed conditions referenced are included on Figure 6 of the DEIS. This figure has been updated to show the 100 foot adjacent area of the state regulated wetlands on the site.

G.1.6

Acquisition of the borrow area: There's a DEIS reference to the fact that they will not be purchasing the land until after the 300 permit is issued. This raises Uniform Procedures Act (UPA) questions about who the "applicant" would be. Please provide the 360 application for the mine and explain this issue. Will eminent domain be involved? If so, the Part 360 prohibition on new landfills in Ag. Districts if land is acquired by eminent domain could apply. Please discuss.

<u>Response</u>:

The property is expected to be transferred to either the County or Town prior to operation and Casella will retain operational control of the property during the term of the OML. Under either scenario, it is anticipated that the County will be the applicant. Eminent domain will not be used for the property acquisition.

G.1.7

The DEIS should evaluate alternative technologies described in the NYS Solid Waste Management Plan, "Beyond Waste; Sustainable Materials Management Strategy for NYS Including Findings, Goals, Impact, Focus, and Recommendations". It is our understanding that the County is doing a Master Plan and a county specific Solid Waste Management Plan (SWMP). We recommend that at least a preliminary discussion of how the proposed landfill expansion will fit in to the draft county SWMP and subsequently the NYS Solid Waste Management Plan.

If recommendations from the NYS Solid Waste Management Plan are not proposed at this time, alternatives in the plan should be acknowledged and discussed in the DEIS with respect to the current application. The potential for future use of recommendations from the state plan for use in future applications should be discussed. For example, the use of source separation of organics for alternative treatment options could be preliminarily discussed and compared to the landfill expansion option with respect to treatment efficiencies, greenhouse gases, etc. and conceptually evaluated for potential future options.

In addition, a discussion of the long term planning related to the county's master plan should be included.

Response:

Section 1.7 of the DEIS discusses the project's consistency with the local Solid Waste Management Plan, which is in its draft form. This draft SWMP assesses alternate waste management technologies and includes provisions for increased diversion efforts. The SWMP indicates the separation and treatment of organics as a potential alternative treatment method while acknowledging that the landfilling of wastes is still the most financially and environmentally viable disposal alternative for remaining wastes over the next 10 years. The proposed landfill expansion is in accordance with the disposal goals set forth in the draft SWMP for Ontario County.

As discussed in section 1.2.2 of the DEIS, while a conceptual Master Plan for future developments on and in the vicinity of the landfill property is in the preliminary stages, these developments would be considered to be independent of the proposed expansion project. Any developments ultimately recommended by the Master Plan would not be dependent on the construction of the proposed landfill expansion for their viability, and therefore would not be considered as an impact of the proposed landfill expansion.

G.2 Section I: Project Background and Description

G.2.1

Page 1 — Project Background: Does not include a description of the LFGTE expansion as part of description of Action. As described in our letter dated June 22, 201 I, the DEC agreed to Lead Agency on the basis that the County would evaluate both the LF expansion and the LFGTE expansion as one action under SEQR. Review of both projects under SEQR was described in the Resolution No. 398~201I by the County signed on June 24, 2011. This information is available; a modification application has been submitted to the Department by IES under separate cover for the LFGTE expansion. See additional comments below under Air Quality.

G.2.2

Page 2, Section 1.2 indicates that the landfill consists of . . . a separately owned and operated LFGTE facility. This is inconsistent with the statement on page 17.

<u>Response</u>:

Per NYSDEC letter January 4, 2012 the facilities are considered not to be under common control, and therefore are not considered as such for PSD and NANSR applicability. The two facilities are permitted separately and considered separate for applicable regulatory assessments. However, a supplement to the Air Quality Attachment is provided in the FEIS that includes the cumulative impact assessment of both the landfill emission sources and the separately owned and permitted LFGTE facility emission sources. The FEIS includes a cumulative impact assessment for noise for the proposed expansion and LFGTE facility.

G.2.3 Page 5 the applicant should review the cross section for Stages I & II. The description does not appear to be consistent with the construction drawings for those stages. In addition, Stage II was sub divided into IIA and IIB, not II and IIA as noted in the DEIS.

<u>Response</u>:

Statement noted. The text is updated to reflect the changes in the FEIS.

G.2.4 Section 1.8: Regulatory Reviews and Approvals for Landfill Expansion

The description of the proposed work within the 100 foot adjacent area of ST 6 and the need for an Article 24 permit is correct. However, this section may need to be expanded to include Article 24 jurisdiction and need for a permit for work within the 100 foot adjacent area of ST 12, pending field review of the delineated boundaries (see comments in Section 6 of Vol. 3, below).

<u>Response</u>:

Section 1.8 will be updated in the FEIS to include a statement that identifies the potential for NYSDEC Article 24 jurisdiction over wetlands associated with ST-12, pending field confirmation of a hydrologic connection.

G.2.5

The 360 permit applications must be submitted in order for the Department to complete its review of the hydrogeologic issues and potential for impacts to groundwater.

<u>Response</u>:

The Part 360 permit application documents are not required to be submitted with the DEIS as per Part 617.9(b)(5); however, a complete Hydrogeologic Investigation report was provided as Attachment L to the DEIS, which should provide sufficient information for the Department to review the site's hydrogeologic conditions.

G.3 Section 2: Proposed Action

G.3.1

This section should include a narrative on Environmental Monitoring Plan required by 6 NYCRR Part 360 that describes the monitoring program for all groundwater, surface water, leachate and landfill gas, sampling locations, sampling schedule, analyses used, evaluation of data and reporting requirements. A section should be included to show that a number of new monitoring wells have been completed for the purpose of monitoring the proposed expansion area as well as obtaining geotechnical data for the propose of the hydrogeological investigation report and the proposed landfill design.

<u>Response</u>:

Section 2 has been modified in the FEIS to include a reference to the updated Environmental Monitoring Plan that will be prepared for the Part 360 application documents. Section 3.1.4.1 of the DEIS adequately discusses the new monitoring well installation and the purposes of these wells.

G.3.2 Section 2.5.4 Noise

The noise analysis was conducted in reference to the DEP Guidance Document (DEP 00 1) however, the Noise Report, including the actual data must be presented so the evaluation can be reviewed and confirmed. In addition, the DEIS should address the potential for noise impacts at the property lines and in accordance with Part 360 noise criteria as well as the DEC policy. The DEP policy alone is not sufficient for evaluation of noise impacts at a 360 permitted facility. Please submit the Part 360 application which includes the detailed analysis to show compliance with 360 1.14. It is not clear if the noise analysis is intended to address the landfill or borrow area. Please explain. Both must be addressed in the DEIS. The LFGTE facility expansion should also be evaluated in the DEIS with respect to noise impacts. As discussed under the Air Quality Sections, the LFGTE expansion should be evaluated in this DEIS.

<u>Response</u>:

The noise analysis included conclusions regarding the expansion landfill and proposed borrow area operations. A supporting document, "Operating Noise Impact Assessment", is provided in the FEIS and includes cumulative impacts of the landfill and LFGTE facility. Part 360 noise compliance will be addressed as part of the Part 360 permit application.

G.3.3 Section 2.6.5 - Odor Control

The DEIS should evaluate the adequacy of the existing landfill operations and the infrastructure (gas collection system, flares, power generation, etc) to control and eliminate landfill odors off site. The evaluation should consider history of odor complaints, distance from the landfill that odors were noted, weather conditions at the time of the complaints, types of odors — landfill gas, waste, etc., mitigation measures taken by the landfill, success rate of those mitigation measures. The evaluation should also determine if there is sufficient capacity to burn all the gas that is currently being generated and forecast to be generated at the landfill. The evaluation should also address contingencies such as backup control capability should one or more elements of the gas collection control system are taken out of service due to a shutdown malfunction or other maintenance.

Due to the increase in odor complaints to the Department, we recommend that the County prepare an Odor Compliant Management Plan including specific procedures for documenting complaints, conducting follow up, and documenting resolution of the complaint. Please submit a draft Plan. The annual report should include a report on the data obtained from the previous year pertaining to complaints and resolution.

<u>Response</u>:

The landfill operator maintains a log of complaints on site that is available for Department review. A new table will be provided in the FEIS for description of combustion devices at the existing landfill. The DEIS outlines combustion devices and projected landfill gas collection rates based on projected landfill gas generation. The landfill will maintain adequate flare backup capacity to control collected landfill gas should the LFGTE facility not be operational. An Odor Management Plan will be prepared and submitted to the Department for review during the Part 360 Solid Waste permitting for the proposed landfill expansion project.

G.3.4

Section 2.9 Regulatory Reviews and Approvals for Landfill Expansion. See comments in Sec. 1.8 above.

<u>Response</u>:

Statement noted.

G.3.5

Section 2.6.5: Page 39; add a separate section to address prevention of tracking mud and debris from the landfill site to County Rd 49 and Rts 5&20. This section should also address cleaning the roads on a regular basis, if necessary.

<u>Response</u>:

Statement noted.

G.3.6

Page 23 indicates that technical reports will be submitted with the 360 application. We recommend that those reports are submitted as soon as available so that the Department can fully evaluate them as part of the SEQR record.

<u>Response</u>:

Statement noted. Additional detail has been added in the FEIS in the Supplemental Air Assessment and the Operating Noise Impact Assessment.

G.3.7

Section 2 should include a description and quantitative assessment of the landfill gas production increases due to the expansion. The landfill gas model estimates should be provided and compared with the existing and proposed LFGTE capacity.

Response:

A quantitative assessment of the landfill gas production, modeling, and control capacity estimates are provided in Attachment G – Air Quality Review. To provide further clarification, a table and LFG production chart is provided in the supplement to the Air Quality Attachment for the FEIS.

G.3.8 Section 2.5: Landfill Construction

I. As noted in the Department's letter dated June, 22, 2011, "The proposed expansion should be considered in the context of the County's Solid Waste Management Plan (SWMP) (DSH SW 05 01). And the full build out of the site, including landfill, appurtenances, and soil borrow areas, should be discussed with respect to the SWMP and the County's master plan for the site."

<u>Response</u>:

Section 1.7 of the DEIS discusses the project's consistency with the local Solid Waste Management Plan, which is in its draft form. As referenced in Section 1.2.2 of the DEIS, the Master Plan for the landfill property is currently in the preliminary stages and the actual developments at the site resulting from this plan are purely speculative at this point. Because the proposed landfill was already in the planning stages when work on the Master Plan began, it has already been incorporated into the preliminary stages. Furthermore, with the exception of the soil borrow area, the proposed landfill appurtenances associated with the expansion have been conceptually planned so that they maximize the use of the space in the vicinity of the existing Phase III landfill. The existing barriers to development which include County Road 5 to the east, State Routes 5&20 to the north, and the tributary to Flint Creek on the west would make any major future developments on the property immediately surrounding the existing Phase III landfill difficult. That is why maximizing the use of this area by placing the landfill appurtenances such as the leachate storage and maintenance building makes the most sense for long term development at the site.

G.4 Section 3.0 Existing Environmental Setting, Potential Environmental Impacts and Proposed Mitigative Measures

G.4.1 3.1.2.1 Environmental Setting Bedrock

Bedrock has been recently exposed along the northwestern side of the landfill where large volume of the rock which can be useful for identifying features to determine the stratigraphic relations of the bedrock. In general, the bedrock is a black to gray black shale that lack abundant fauna that is typical of the gray fossiliferous Windom Shale or Kashong Shale. The shale at the site contains the common brachiopod Leiorhynchus, a characteristic element of the Ledyard Shale of the Ludlowville Formation.

<u>Response</u>:

Statement noted. This assessment of the bedrock stratigraphic relations will be included in the final Hydrogeologic Investigation Report submitted as part of the Part 360 permitting documents.

G.4.2 3.1.2.2 Potential Impacts

The bedrock in the northwest area of the proposed landfill expansion is within a few feet of the ground surface. Bedrock has been excavated in other areas of Phase III. As with the soil, the handling and stockpiling of bedrock should be addressed.

<u>Response</u>:

Statement noted. A section regarding bedrock excavation procedures has been added to the FEIS.

G.4.3 Section 3.1.3 Stormwater

The SWPPP must be submitted along with the 360 permit application in order for the Department to fully evaluate the potential for impact to stormwater and the proposed mitigations.

<u>Response</u>:

Statements noted. As detailed in Section 2. 4 of the DEIS, a revised SWPPP for the site which includes the proposed landfill expansion will be submitted to the NYSDEC with the 6 NYCRR Part 360 Permit application package.

G.4.4 3.1.3.1 Environmental Setting — Surface Water — Drainage Patterns — Drainage Area (DA 4) pp. 57-58

The statement that DEC concluded that the borrow area and its stormwater management would not have an impact on Freshwater Wetland ST 6 and hence required no Article 24 permit is correct, but the B&L studies that provide the basis for our determination should be cited in this section.

<u>Response</u>:

This section has been updated to include references to B&L's Baseline Ecological Wetland Assessment Report (2010) and the Borrow area groundwater intercept calculations, NYSDEC package (2010).

G.4.5 3.1.4.1 Environmental Setting — Groundwater Quality

Groundwater Use

A residential well survey was reported to have been completed in March 2011. It is not known from the DEIS or the Hydrogeologic Investigation Report does not present the data generated by the survey. Other than the list of respondents in Appendix E of the Hydrogeologic Investigation Report the results of the survey is limited. A sample of the survey should be included. A narrative should be completed to describe the survey; if it was solicited by mail and/or by interviews. The data collected for all wells, regardless of current usage, should be provided.

<u>Response</u>:

As described in the Hydrogeologic Investigation Report, the residential well survey was conducted by B&L personnel in March, 2011 by interviewing the residents at the properties identified within a distance of 0.25 miles upgradient of the landfill and 1.0 miles downgradient of the landfill. The interview consisted of general questions regarding the nature and construction of the well, and water usage and quality (if applicable). B&L recorded the interviewee responses on individual field forms; an example is provided in the final EIS. The completed field forms (also provided in the final EIS) indicate the date and time that each property was visited. Please note that on the basis of confidentiality the field forms have been reproduced with the omission of personal comments.

G.4.6 3.1.4 Overburden Groundwater Flow Zone

This section should discuss any potential impacts to Freshwater Wetland ST 6, particularly any potential to alter the groundwater component of its

hydrologic regime that would trigger the Department's Article 24 pennit jurisdiction and consideration through the Art. 24 permit process.

<u>Response</u>:

Based on B&L's 2010 assessment of the proposed Eastern Borrow Area, groundwater does not contribute significant flow to the wetland (ST 6); therefore, the proposed development is not expected to significantly reduce flow to the wetland from groundwater. The assessment concluded that stormwater runoff from the area surrounding the wetland is its major source of water. Since the proposed southern borrow area is entirely within a separate drainage basin, it is not anticipated that its construction will alter the hydrologic regime of the ST 6 wetland.

G.4.7 3.1.4.3 Mitigative Measures

If impacts to the hydrologic regime of ST 6 resulting from alterations of overburden groundwater flows are demonstrated, this section will need to include mitigative measures for those impacts. Proposed monitoring of the discharge to and water levels in the wetlands before, during, and after the project may be required.

<u>Response</u>:

Based on a previous assessment, groundwater does not appear to contribute significant flow to the wetland (ST 6), so the proposed development is not expected to significantly alter the hydrologic flow regime of the ST 6 wetland. On-going wetland monitoring at ST 6 during the excavation of the current Eastern Borrow Area appear to confirm this conclusion. It is anticipated that the ST 6 wetland monitoring will continue during and after the proposed site development activities.

G.4.8

Page 62 63. Figures I2 and 13 in Attachment L show groundwater elevations of 800 830 feet in proposed borrow area. The DEIS indicates that groundwater will not enter the borrow pit due to groundwater levels and soil permeability. Please explain the rationale for this conclusion in greater detail. Also, surface water and snow inch will enter the area. Please describe how water in the borrow area will be managed. If it is to be sent to stormwater basins, will there be a mechanism to return some of the water to the regulated wetlands?

<u>Response</u>:

While it is expected that groundwater will be encountered, its contribution to the proposed excavation is considered to be insignificant in comparison to the surface water (precipitation) factor. It is anticipated that groundwater and surface water entering the borrow area excavation will be managed via a series of stormwater basins, as described in DEIS Attachment K.

Surface water and a relatively minor component of groundwater from the soil borrow operation will be periodically pumped to Pond Number 3A. The Pond Number 3A outlet will be slowly return the surface water collected from within this drainage basin to the same drainage system that it would have discharged to under natural conditions. It is noted that there are no regulated wetlands in this drainage basin; therefore, the discharging of water from Pond Number 3A to regulated wetlands is not anticipated.

G.4.9 Ecology

3.1.7.1 Site Ecology — Wildlife, Vegetation

Staff concur with the characterization of existing vegetative conditions and the description of wildlife resources, including the 2 described T&E species, in the proposed landfill area. They also concur with the conclusion that the proposed expansion is unlikely result in impacts to either bog turtles or bald eagles or their habitats, nor significantly impact other more common wildlife species. However, please provide a description of the proposed borrow area. Does it also include which were either disturbed, ag, or very common old field/shrubland early successional habitats?

Response:

The proposed borrow area has been used for agricultural purposes for numerous years. Crops known to have been planted and harvested on the proposed borrow area parcel include corn and alfalfa. The parcel has routinely been disturbed by agricultural practices and does not provide habitat for endangered species.

G.4.10 3.1.7.1 Site Ecology — Wetlands

See comment on the "no impacts observed in 20 years" above. This misleading statement should be removed from both sections. There is no basis for this statement.

<u>Response</u>:

The statement, "no impact observed in 20 years" has been removed from this section.

G.4.11 3.1.13 — Mitigative Measures — Vegetation, Wildlife, Critical Environmental Areas, Wetlands

Staff concur with the conclusions that no mitigative measures are required for potential impacts to vegetation, wildlife, or critical environmental areas. Staff concur that the mitigative measures proposed to evaluate and correct ecological or hydrological impacts to Wetland H (ST 6) are reasonable and consistent with the Departments 2010 jurisdictional determination regarding the borrow pit. This is succinctly stated at the conclusion of this section: "The methods incorporated into the Ecological Wetland Assessment Baseline Report will continue to be implemented for Wetland H until the construction of the proposed expansion is complete." This language will be included in the Department's SEQR findings and will also be included as a condition in the Part Article 24 permits and may be included in the Part 360 permit.

<u>Response</u>:

Casella and B&L agree to incorporate the Annual Wetland H Ecological Assessment as a condition of the Article 24 and Part 360 permits.

G.4.12 Air Quality

Section 3.1.5: Air Quality

The Department issued a letter indicating that the Seneca Energy Landfill Gas to Energy Facility (LFGTE) facility and the Ontario County landfill

were not under common control. Therefore, the Department is not requiring one Title V permit to be issued for both facilities and emissions don't have to be added in order to determine PSD/NSR applicability. However, to thoroughly evaluate the potential air quality impacts of the landfill in the DEIS, a comprehensive analysis of all potential emissions and all controls should be described. This must include control of landfill gas by landfill flares alone and control by the expanded LFGTE facility operating at its capacity, with the remaining gas volume controlled by the landfill flares.

<u>Response</u>:

A supplement to the Air Quality Attachment will be provided in the FEIS that includes the cumulative impact assessment of both the landfill emission sources and the separately owned and permitted landfill gas to energy (LFGTE) facility emission sources.

G.4.13

The DEIS must contrast emissions from the current landfill with potential emissions from the expanded landfill, from the present time until landfill gas production ceases. The DEIS must also document how landfill gas produced will be controlled. This must include emissions from combustion of the gas entirely by flares (as in Attachment G), to account for the case where the LFGTE facility could be off line or shut down, and emissions from combustion of landfill gas by the expanded LFGTE facility operating at its capacity with all 8 existing and 3 proposed generator engines operational, which must by necessity include combustion by flares of any gas volume above that which the II generator engines could handle at peak landfill gas production. Since generator operation will decrease the volume of gas treated by flares while at the same time emitting an alternate stream of emissions from the separate LFGTE facility, that stream must be characterized in detail in the DEIS to allow evaluation by the Department for SEQR purposes. The DEIS should address the maximum emission] scenario(s) for all pollutants. The DEIS should specify emission levels from the II generator engines operated at their capacity with the remaining gas flow at peak flow rate going to flares, and also the "flare only" level of emissions at peak landfill gas flow rate.

<u>Response</u>:

A supplement to the Air Quality Attachment is provided in the FEIS that includes the cumulative impact assessment of both the landfill emission sources and the separately owned and permitted landfill gas to energy (LFGTE) facility emission sources. Emissions from the operating scenarios described above are addressed in this document.

G.4.14

A summary table with graph providing information for the following should be provided: current projected gas generation (existing landfill); current amount of gas utilized by the energy plant (scfm); proposed amount of gas to be utilized by the energy plant including the 3 new engines; projected amount of landfill gas to be produced by the expansion; amount of gas generation in the peak year of gas production due to the expansion, and sum of both the existing landfill and expanded landfill peak gas production.

<u>Response</u>:

A supplement to the Air Quality Attachment is provided in the FEIS that includes the information requested.

G.4.15

As requested previously in the LFGTE Title V application process, gas curves of the expected existing landfill emissions and emissions from the proposed landfill expansion along with the sum of both curves must be submitted. The DEIS should discuss whether the proposed flare and engine expansions will provide enough to control the peak gas production (including landfill and expansion) or if additional flares and for engines will be required in the future. The Air Quality Review in Attachment G indicates that the proposed Renewal Permit application (including 3000 scfm flare) and the Title V application (to come) for the proposed flare (5,500 scfrn) will have the capacity to manage all gas from the landfill and landfill expansion. Please provide the percentage(s) of the peak of landfill gas production that the 1 I engines at capacity will be able to combust over the entire gas curve, in graph format. Based on this graph, please discuss the possibility of the future request for additional engines (beyond those currently proposed in the Seneca Energy II LLC Title V application) along with likely additional regulatory programs such as New Source Review.

Please acknowledge that if additional controls are to be added or modified, (beyond what is currently before the Department), they will be addressed in the future under a separate Title V modification.

<u>Response</u>:

A supplement to the Air Quality Attachment is provided in the FEIS that includes a graph of LFG production and control. The DEIS describes that future LFG combustion will be handled by flares. It is not possible to assume that the landfill gas to energy facility will or may be expanded in the future because of the high capital cost for renewable energy equipment and the constantly fluctuating energy market. In addition, per the owner and operator of the LFGTE facility, the interconnect agreement among the New York Independent System Operator, Inc. (NYISO), New York State Electric & Gas Corporation (NYSEG) and Seneca Energy II, LLC, which limits the facility capacity to 12 megawatts (MW). The facility currently has the potential to generate 6.4 MW, and an additional proposed three-engine project will increase the capacity just below this approved limit.

G.4.16

As described in the Notice of Incomplete Application dated June 22, 2011, by the Department to Seneca Energy II LLC, that the application was deemed incomplete for emissions information requested to verify that the LFGTE facility expansion was not linked to the landfill expansion for SEQR purposes. The information has not yet been submitted and the landfill and the LFGTE expansion have not been documented as being separate for purposes of SEQR. Page 31 states, "Based on landfill gas model estimates, the existing landfill has the potential to generate sufficient quantities of landfill gas to supply the existing and proposed LFGTE facilities and the landfill gas generated from the expansion landfill is not required for LFGTE to operate." Again, this statement needs to be supported by documentation. To avoid impermissible SEQR segmentation, the emissions from landfill and the LFGTE must be presented and evaluated in the DEIS as part of the SEQR action.

<u>Response</u>:

The requested information was submitted to the Department on April 11, 2012 and April 26, 2012 on behalf of Seneca Energy II, LLC for the 3-

engine expansion of the Seneca Energy II, LLC LFGTE facility. Additionally, a supplement to the Air Quality Attachment is provided in the FEIS that includes a graph depicting LFG production and energy plant capacity, and clear definition that the proposed 3-engine expansion of the Seneca Energy II, LLC facility is not dependent on the proposed landfill expansion as described in this DEIS. Cumulative emissions from the two facilities is provided in the supplement to the Air Quality Attachment of the FEIS.

G.4.17

Also, the landfill flare and the LFGTE facility are both near capacity for flaring and burning existing landfill gas. Although a new flare at the landfill was given a temporary authorization by the Department under Part 201, Operational Flexibility, it was not described in the DEIS. Please include this flare in the DEIS. Although some detail is included in the Attachment G, Air Quality Review, please include a summary discussion of the current Title V permit for the landfill with respect to which flares are actually constructed verses included in the permit with placeholders (i.e., XXFL), should they be required in the future. Please carry this discussion on to the Title V Renewal application and the proposed Title V application for expansion of the control facilities at the landfill (new 5500 scfm flare) due to the proposed landfill expansion. Please clarify that the temporary flare will be likely replaced by one of the permitted (but not yet constructed) flares such as the 1200 scfm enclosed flare.

<u>Response</u>:

A supplement to the Air Quality Attachment is provided in the FEIS that includes a summary of operations approved under operational flexibility and a table summarizing the landfill gas control capacity of the facility.

G.4.18

Note: some of the data requested does appear in Volume 2, Attachment G, Air Quality Review. However, it should be summarized in the main body of the DEIS, particularly Sections 2 and 3.

<u>Response</u>:

Statements noted. The FEIS reflects these suggested changes.

G.4.19 Section 6.0: Cumulative Impacts:

Brief qualitative discussion of landfill gas and the LFGTE facility should be included here such that a complete evaluation of landfill gas resulting from the proposed landfill expansion is included in this EIS. The DEIS needs to discuss the increase in landfill gas emissions from a "worst case" scenario and whether they exceed the regulatory thresholds and whether they are significant. The priority pollutants should be examined in a table to show whether they are Major. This section must also include an evaluation of the peak year and whether the concentrations of compounds modeled specific to landfill gas exceed any individual health based guidance values of applicable standards or guidelines established by USEPA and NYSDEC.

<u>Response</u>:

Section 6.0 of the DEIS (Cumulative Impacts) will be updated in the FEIS to include a discussion of the peak year emissions from the landfill facility and the LFGTE facility. Attachment G – Air Quality Review, Sections 5.0 – 7.0, includes a discussion of the landfill facility potential to emit (PTE) and a comparison to major source thresholds. The review concludes that the landfill expansion is not a major PSD or NSR project. In addition, a supplement to the Air Quality Attachment will be provided in the FEIS that includes a summary table of peak emissions scenarios and comparison to major source thresholds.

G.5 Volume 2: Attachment G: Air Quality Review

G.5.1

Please provide the documentation requested in the Department's letter dated June 22, 2011, attached.

For the PSD and NANSR Review for both the existing and proposed expansion, provide a table of the criteria pollutants including their current potential and actual emissions from the existing landfill, the future potential emissions of the landfill expansion, and the difference between the two. This should be sufficient to show that they are not subject to PSD or NSR.

<u>Response</u>:
The requested information was submitted to the Department on April 11, 2012 and April 26, 2012 on behalf of Seneca Energy II, LLC for the 3engine expansion of the Seneca Energy II, LLC LFGTE facility. Attachment G – Air Quality Review, Appendices C and D, include the potential emissions from the existing permitted landfill, and the potential emissions from the landfill expansion. This information shows that the existing facility and proposed landfill expansion project are not subject to PSD or NSR permitting requirements. A supplement to the Air Quality Attachment is provided in the FEIS that includes a summary table of emissions scenarios.

G.5.2

The Title V application for the landfill expansion must be submitted to allow the Department to continue its review of potential impacts to air quality. The Title V permit application must include all the necessary calculations, gas curves, control equipment specifications and other engineering documentation needed to show compliance with 40 CFR 60 Subpart WWW. Please provide the gas collection control system design with the Part 360 application so that the Department may evaluate the management of fugitive emissions and odors. If this information is not available at this time, provide a statement indicating when this information will be submitted.

<u>Response</u>:

Statement noted. The Title V Application for the landfill expansion will be submitted to the Department with the Part 360 Application following conclusion of the SEQR review.

G. 6 Volume 3 Attachment H: Comprehensive Wetland Delineation Report

G.6.1

The concept of a comprehensive wetland delineation for the entirety of Ontario County/Casella Waste Services holdings is a very good one for purposes of both the proposed expansion and future landfill, borrow area and infrastructure improvements. In general the delineation report appears thorough and well organized, and employs the proper methodologies as currently mandated by the Corps of Engineers. The actual wetland boundaries will require field confirmation by the Corps and the Department during the plant growing season; until then the unconfirmed tentative boundaries are useful for project and jurisdictional discussion purposes. Has a copy of this report been sent to the Corps with a request for a jurisdictional determination?

<u>Response</u>:

The Comprehensive Wetland Delineation Report was submitted to the United States Army Corps of Engineers (USACE) as part of a request for an Approved Jurisdictional Determination (JD) regarding wetland and stream resources on the County owned property. The USACE issued an Approved JD in a letter dated April 28, 2011. The Approved JD is included in Appendix BB as Attachment J.

G.6.2 6.0 Results

6.1 — Wetland Labeling

This table should be expanded include the NY Freshwater Wetland identification number where applicable. That is, Wetland H is Freshwater Wetland ST 6 (in part), I & J are presumed to be part of ST 12, J is part of ST 5.

<u>Response</u>:

The correlation between State Mapped Freshwater Wetlands and delineated resources on the County property were described within Section 3.2 NYSDEC Freshwater Wetland Mapping, as well as individually for each delineated resource within Section 6.2 Delineated Wetland Descriptions. There is no need to include the State labeling on the Table within Section 6.1 as this information is described within different sections of the document and the table is only providing a list of delineated wetlands and their associated areas.

G.6.3 6.2 Delineated Wetland Descriptions

Wetlands A — G: No comments. These are Waters of the US (wetlands and streams) for Corps CWA 404/401 jurisdictional purposes. For the

Department, the 2 mapped tributary streams are Class C (non navigable) Waters of the State and the 2 unmapped tributary streams are Class D waters.

Wetland H: This wetland has been previously determined to be a jurisdictional portion of Freshwater Wetland ST 6. That relationship and the Department's Article 24 jurisdictional determination should be briefly noted here, as was done in Section 3.1.3.1 (Environmental Setting, pp 54 55 of Vol. 1).

<u>Response</u>:

The State was in the process of claiming Article 24 jurisdiction over Wetland H at the time the Comprehensive Wetland Delineation Report was being issued. Wetland H will be updated within this section to include information regarding the Article 24 jurisdictional determination.

G.6.4

Wetlands I & J: These 2 wetlands are serially connected along Stream 2 to the larger body of Freshwater Wetland ST 12. Although much of the mapped portion of ST 12 occurs south of Rilands Road, the Map does include a small area of it north of Rilands Road. Wetlands J and then I share a direct hydrologic connection to ST 12 along the Class C tributary to Flint Creek.

Pending confirmation of the wetlands' boundaries, it is likely that the Department will assert Article 24 jurisdiction of Wetlands I & J as jurisdictionally contiguous to ST 12 and amend the Freshwater Wetland Map for Ontario County to reflect current conditions. For project planning purposes, plans that include these wetlands should include a 100 foot adjacent area (again, pending field confirmation of boundaries).

Response:

The sections associated with Wetland I and J have been updated to include information regarding their potential Article 24 jurisdiction pending field confirmation.

G.6.5 7.0 Summary & Conclusions

This section should be expanded to include reference to Wetland K as part of Freshwater Wetland ST 5; to summarize the Department's prior determination that Wetland H is part of Freshwater Wetland ST 6, as was done in Volume I); and to discuss the potential for Wetlands I & J to be determined a part of Freshwater Wetland ST 12, as outlined above.

<u>Response</u>:

The Summary & Conclusions section has been updated to include information regarding the NYSDEC's jurisdiction over Wetlands H, I, J, and K due to these wetlands having hydrologic connections to mapped NYSDEC wetlands (Article 24).

G.7 Volume 4 of 5 Appendix L: Hydrogeologic Investigation Report

Based on the Department's preliminary review of the hydrogeological investigation report, we offer the following comments. Addition review of the hydrogeological information will be undertaken during review of the Part 360 applicant and additional information needs may also be identified at that time.

G.7.1 1.0 Introduction

1.1 Background

The final version of the hydrogeologic investigation work plan is required to be submitted in the permit application within the Hydrogeologic Investigation Report.

<u>Response</u>:

The final version of the hydrogeologic investigation work plan will be submitted with the Hydrogeologic Investigation Report in the permit application.

G.7.2 2.0 Methods of Investigation

2.2 Literature Review

Not only should the literature search identify known environmental and for hydrogeologic conditions that prohibit or restrict the landfill expansion, the literature search is a comprehensive review of pertinent and site specific hydrogeologic conditions.

<u>Response</u>:

A supplemental literature search did not identify any known environmental or hydrogeologic conditions that prohibit or restrict the proposed landfill expansion. The following additional sources were reviewed:

Batt, R.J., 1996, Faunal and Lithologic Evidence for Small-Scale Cyclicity in the Wanakah Shale (Middle Devonian) of Western New York, PALAIOS, Vol. 11, No. 3 (Jun., 1996), pp. 230-243.

Brett, C.E., and Baird, G.C., 1994, Depositional Sequences, Cycles, and Foreland Basin Dynamics in the Late Middle Devonian (Givetian) of the Genesee Valley and Western Finger Lakes Region: Field Trip Guidebook, New York State Geological Association, 66th Annual Meeting, p. 505-568.

Brett, C. E, and Baird, G. C., 1996, Middle Devonian sedimentary cycles and sequences in the northern Appalachian Basin, in Witzke, B. J., Ludvigson, G. A., and Day, J., eds., Paleozoic Sequence Stratigraphy: Views from the North American Craton: Boulder, Colorado, Geological Society of America Special Paper 306, p.213-241.

Brett, C.E., Baird, G.C., and Bartholomew, A.J., 2007, Paleoenvironmental gradients along a ramp to basin transition in the Middle Devonian Ludlowville Formation of central New York State: Field Trip Guidebook, New York State Geological Association, 79th Annual Meeting, Cortland, NY, p. 83-106.

Domagala, M.A., and Selznick, M.R., 1979, Paleontology and Stratigraphy of the Ledyard Shale (Middle Devonian) at Spring Creek, Alden, New York, Rochester Academy of Science, Mineral Section, 25 pp.

Mayer, S.M., Baird, G.C., and Brett, C.E., 1994, Correlation of facies divisions in the uppermost Ludlowville Formation (Givetian) across western and central New York State, in Landing, E., ed., Studies in Stratigraphy and Paleontology in Honor of Donald W. Fisher, NYS Museum Bull., No. 481, p.229-264.

Wygant, G.T., 1986, Deposition and early diagenesis of a Middle Devonian marine shale: Ludlowville Formation, western New York, in Brett, C.E., Dynamic Stratigraphy and Depositional Environments of the Hamilton Group (Middle Devonian) in New York State, Part 1, NYS Museum Bull. No. 457, p. 78-101.

G.7.3 2.2.3.1 Exploratory Borings

4th paragraph: The location of S 5 has not been provided.

Response:

The location of S-5 is not shown on the Site Investigation Plan (Figure 2), as the figure does not extend this far south. This boring will be added to the Weathered Bedrock Surface Plan (Figure 9) and displayed as off-set on the Site Investigation Plan.

G.7.4 2.2.3.3 Well Development, Appendix C

The field logs for the well development are illegible and should be reviewed and formally presented to clarify the field notes.

<u>Response</u>:

The well development logs/field notes will be reviewed and formally presented in the FEIS.

G.7.5 2.2.3.2 Monitoring Wells

The 1.3 Previous Investigations section of this Hydrogeologic Investigation Report state in the second bullet item, third sentence, "With the addition of the Stage IX expansion wells; however, an easterly component of flow has also now been identified in both water bearing zones, with the direction of flow generally towards the wetland area adjacent to Post Road." The 6 NYCRR Part 360 2.1 I(c)(I)(i)(b) require s a maximum monitoring well spacing of 500 feet in the downgradient perimeter of the landfill. Note, the monitoring well array along the eastern limits of the proposed landfill expansion is currently approximately 1000 feet.

<u>Response</u>:

In response to the conditions described in the comment above, B&L has prepared a Supplemental Hydrogeologic Investigation Work Plan for the installation of additional monitoring wells at the site, which has been approved by the NYSDEC. In order to meet the 6 NYCRR Part 360 monitoring well spacing requirements of 500 feet in the downgradient direction, four (4) additional monitoring well couplets will be installed along the northeastern and eastern site Stage IX boundary during the summer/fall of 2012 with NYSDEC approval.

G.7.6 2.3 Water Supply Source Survey

See comments under 3.1.4.I Environmental Setting

Response:

Please see corresponding response.

Appendix AA

Index of Persons Who Submitted Comments

Exhibit AA

Index of Persons Who Submitted Comments

The names of persons who submitted comments on the DEIS are listed below in alphabetical order. Next to each person's name is the page number(s) on which a summary of his or her comment can be found. The CFSWMA's response immediately follows each comment. The transcript of the November 5, 2008 public hearing on the DEIS and the comment letters are reproduced in Appendix CC (separately bound volume).

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