NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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December 7, 2015

Dear Sir or Madam:

Responsiveness Summary
Hyland Facility Associates
Air Title V and Solid Waste
Management Permit Modifications
Town of Angelica, Allegany County
DEC ID# 9-0232-00003/00012 and
DEC ID# 9-0232-00003/00002

Thank you for expressing your interest in the above referenced Part 360 Solid Waste Management permit modification application and Part 201 Air Title V permit modification application for the proposed solid waste acceptance rate increase at the Hyland Facility Associates solid waste management facility located at 6653 Herdman Road, Angelica, New York 14709.

After careful consideration of the applications and your comments, the New York State Department of Environmental Conservation (the Department, NYSDEC or DEC) made a determination to issue the modified Solid Waste Management permit and continue processing the Air Title V permit for this facility in accordance with applicable provisions of the Environmental Conservation Law (ECL), other applicable policy and regulation, and consideration of the effects that the proposed action will have on the natural resources of the State and the general welfare of the public.

This letter summarizes and responds to comments received from the public as a result of the publication of the Notice of Complete Application, the public comment period resulting from that Notice, the Legislative Public Hearing sessions that were held for the project and a subsequent extended public comment period.

RESPONSES TO PUBLIC COMMENTS

Comment: I am urging the DEC to ban the dumping of gas drilling wastes in New York landfills, none of which are equipped to handle radioactive and other hazardous wastes. The black shales that underlie New York and Pennsylvania are known to contain uranium, radium, radon and other radioactive elements. The DEC classifies these as naturally occurring radioactive materials (NORM), but what is actually entering NY's landfills is highly processed and concentrated. Things are getting worse, and Hyland/Casella should not be allowed to expand their waste stream in quantity or materials allowed.

Response: Hyland Landfill (Hyland) is a permitted, double-lined municipal solid waste landfill that is authorized to accept various types of non-hazardous solid wastes, including drill cuttings. This proposal does not change the type of waste streams which are accepted at the landfill. Hyland has applied for an increase in annual waste disposal to meet the growing regional needs for all waste types that Hyland is currently permitted to receive for disposal.

Drill cuttings are rock and soil residue from the boring of a well. The rock and soil residue can contain small amounts of naturally-occurring radioactive material (NORM). NORM wastes are not considered regulated radioactive waste and may be disposed of in municipal solid waste landfills such as Hyland. Beyond the standard operating requirements for municipal solid waste landfills required under the 6 NYCRR Part 360 regulations, Hyland and all landfills in the State which currently accept drilling wastes, have agreed to operate radiation detection systems to ensure that regulated radioactive wastes are not improperly accepted for disposal. Wastes that trigger the radiation detectors are investigated to determine their characteristics and whether they are acceptable for disposal.

Disposal of drill cuttings in municipal solid waste landfills is both environmentally sound and legal under State law and regulation. In *Matter of Chemung County, August 4, 2011*, the Commissioner held that drill cuttings from hydraulic fracturing well sites in the Marcellus Shale are a permissible solid waste for disposal under Part 360 of the Department's Regulations. Other wastes from gas drilling operations, such as equipment and piping which contains pipe scale; residues from the treatment or processing of flowback water, production brine, or other drilling or production wastes; and bulk liquids of any kind are restricted from disposal at solid waste landfills in New York State. Hyland has installed and operates radioactivity detectors in compliance with the standards established by the *Chemung County* decision relative to the acceptance of drill cuttings. In conformance with the Commissioner's Decision, the Department will continue to oversee this activity and ensure that such operations remain in full compliance.

Comment: DEC should do everything to protect the health of New Yorkers and should not allow the dumping of radioactive waste.

Response: The Department will continue to conduct routine inspections and provide oversight of the facility activities to ensure the landfill remains in compliance with the applicable regulations and permit conditions. Hyland is not permitted to accept radioactive waste or hazardous wastes. All industrial and special wastes are tested and analyzed for disposal acceptance criteria and reviewed by both Casella technical staff and by Department staff prior to approval and acceptance at Hyland.

Hyland operates under an Operations and Maintenance (O&M) plan that was reviewed and approved by the NYSDEC. This O&M plan provides guidelines for daily landfill

operations, including scanning incoming/outgoing trucks for radiation, disposal operations, daily and intermediate cover application, dust control, odor control, leachate management, Stormwater management, gas collection system operation and maintenance, and general safety measures.

Although not required under New York regulations, Casella voluntarily installed radiation detectors to monitor incoming waste loads for potential radioactivity as an added measure of protection against unacceptable wastes. The stationary radiation detection device is calibrated on an annual basis by a licensed third party consultant. To date, no waste from the oil and gas industry has triggered the detector alarms. Any load that does trigger the alarms must undergo a more thorough examination and is either accepted or rejected based on the results.

Additionally, Hyland has begun periodic analysis of its leachate for radioactive constituents. The results of these analyses are submitted to and reviewed by the Department's radiation program staff, who have indicated that the initial results did not reveal any concerns, and they will continue to evaluate future analytical results.

Hyland operates a landfill gas collection system which collects gas from the waste mass and burns it to produce energy. This system has been operating effectively since 2007. DEC regularly inspects all aspects of the landfill operations to insure compliance with New York State regulatory and permit requirements.

Comment: Is the waste stream to be transported via railroad? What record and oversight does the railway company have that will be trucking radioactive waste water? What would be the impacts from download from rail to truck air quality, noise, leachate etc.?

Response: These comments are not relevant to these permit applications since Hyland’s proposal and existing operations do not include railroad transportation of any wastes.

Comment: Current practices allow the trucks to roll through the radiation detectors as they enter the Hyland landfill facility. The trucks must come to a complete stop to allow the detectors to work properly. To use the detectors improperly, is an ineffective attempt at regulating the oil and gas industry.

Response: All vehicles entering the site must pass through the radiation detectors. Incoming waste trucks must slow down upon approaching the scale house and stop to exchange information with the scale attendant. As the truck is stopped at the scale house, it proceeds slowly through the detectors. The radiation detectors were installed and are operated as recommended by a licensed radiation consultant and according to the manufacturer’s specifications. This system has proven to be effective at other landfills operated by the owner of the Hyland Facility. Although there have not been any

incidents where radiation was detected in drill cuttings, radiation has been detected in regular municipal solid waste and in truck drivers who have undergone medical tests involving radioactivity. This demonstrates that the radioactivity detectors work well.

Comment: Vehicles transporting hazardous radioactive gas drilling waste increase the risk of human and animal exposure and contamination of water, air, and soil when accidents, spills and leaks occur. Gas industry trucks hauling fracking waste byproducts have no special hazardous warning signs or emergency instructions. Radioactive particles may become airborne as trucks and passenger vehicles travel along roads and can be tracked on tires into driveways and garages and ultimately tracked into homes. Rain and snowmelt carrying radioactive materials can runoff road surfaces where it can migrate onto nearby property and into streams, ponds and irrigation systems, leach into soil or seep into groundwater creating dangerous exposure pathways for human and livestock inhalation and ingestion of highly radioactive materials, and carcinogenic and endocrine disrupting chemicals.

Response: The Hyland facility does not currently (nor is the application proposing to) accept hazardous or radioactive waste of any type. Drill cuttings (rock and soil residue from the initial boring of a well) can contain small amounts of naturally-occurring radioactive material (NORM). NORM wastes are not considered regulated radioactive waste and may be disposed of in municipal solid waste landfills such as Hyland. Disposal of drill cuttings in municipal solid waste landfills is both environmentally sound and legal under State law and regulation. Other wastes from gas drilling operations, such as equipment and piping which contains pipe scale; residues from the treatment or processing of flowback water, production brine, or other drilling or production wastes; and bulk liquids of any kind are restricted from disposal at solid waste landfills in New York State. The Department will continue to oversee landfill operations and ensure that such operations remain in full compliance the state's environmental conservation law.

The U.S. Department of Transportation has regulatory authority and evaluates potential hazard risk for transport of materials and goods over the roadways as well as necessary driver and vehicle classification / placarding or transport licensing. Oil and gas generated wastes delivered to the facility are non-hazardous and do not require specific USDOT transport permits for hauling.

Beyond the standard operating requirements for municipal solid waste landfills required under the 6 NYCRR Part 360 regulations, Hyland and all landfills in the State which currently accept drilling wastes have agreed to operate radiation detection systems to ensure that regulated radioactive wastes are not improperly accepted for disposal. Wastes that trigger the radiation detectors are investigated to determine their characteristics and whether they are acceptable for disposal.

Comment: Will increased tonnage per day mean increased truck traffic? Will increased truck traffic further aggravate truck waiting time and congestion on public roads?

Response: Hyland's current Solid Waste Management facility permit authorizes a design capacity acceptance rate of waste of 1,200 tons per day. Hyland has documented that the current average daily number of waste hauling vehicles is 66, with a peak hourly rate of 20 to 25. It is anticipated that the increase in the approved design capacity to 1,790 tons per day will increase the amount of waste hauling vehicles to 93, with a peak hourly rate of 30 to 38.

A traffic assessment was completed to determine if the projected increase in truck traffic due to the increase in the waste acceptance rate would have a significant impact on traffic. The traffic assessment included a Level of Service study of the current and future traffic conditions at those intersections. The current Level of Service at those intersections meets the "A" rating during the peak morning and noon traffic times. The estimated Level of Service with the increased number of trucks did not change from the "A" rating. As an "A" rating is the best rating (i.e. vehicles experience the shortest wait times), and this rating will not change as a result of the proposed tonnage increase, the increase in traffic is not expected to adversely impact traffic at those intersections.

Comment: Village streets will not hold up under the increased truck traffic heading to and from the waste facility. The cost of maintaining and upgrading these streets fall to those of us who pay taxes here; not to those who stand to profit from their hastened degradation.

Every fracking-waste-hauling vehicle that enters our community presents a danger to us all, whether it be from a vehicular accident causing a spill to a slow leak of its contents along a street where people walk, bike, job, push strollers, etc. My neighbors and family and customers here should not be exposed to any greater risk than they are now. The chance of accidents and spillage is a large issue due to the increase of truck traffic.

Response: The Transportation of Waste clause in the Host Agreement between Hyland and the Town of Angelica states "Hyland shall adopt rules and policies to require all persons transporting solid waste to, and returning from, the Hyland project to travel directly from Exit 31 on Route 17 to Peacock Hill Road and to return via the same route, and to prohibit the transportation of waste through the Village except to the extent necessary to exit from, or enter onto, Exit 31 on Route 17. Such rules and policies shall provide that Hyland may refuse loads from trucks that do not comply with the route limitations." Hyland complies with and enforces this requirement. As such, haul trucks traveling to and from Hyland do not travel through the Village.

While trucks headed to and from the landfill may cause increased wear on local roads, it is expected that Host Agreement fees and taxes paid to the Town of Angelica would help offset the costs of maintaining the roads.

The facility does not currently accept nor is the permit application proposing that the facility accept hazardous or radioactive waste of any type. The Department of

Transportation evaluates potential hazard risk for transport of materials and goods over the roadways as well as necessary driver and vehicle classification / placarding or transport licensing. Oil and gas generated wastes delivered to the facility are non-hazardous and do not require specific DOT transport permits for hauling.

Comment: How effective is truck washing; is it being administered and reviewed? Hyland Landfill has a history of tracked out waste which can clearly be seen by anyone traveling on Peacock Hill Road. There is a spotty history of required truck washing actually taking place, and there does not appear to be adequate enforcement of current permit conditions. This landfill is not being managed correctly and the DEC is not protecting our land, water or air.

Response: The Department inspects all areas of the landfill during regular inspections to ensure that Hyland is in compliance with the NYSDEC-approved Operations and Maintenance (O&M) plan and its Solid Waste Management Facility permit. The Solid Waste Management Facility permit for the Hyland landfill requires all vehicles exiting the site to pass over the tire cleaning structure. This is required to prevent tracking of waste, soil or other debris off-site. In addition, the facility has upgraded its road sweeper. The Department's landfill monitor reports that the sweeper is observed cleaning the roadway frequently. People who observe dirt or other material tracked out on the roads in the vicinity of the landfill are encouraged to make a report to our Division of Materials Management at 716-851-7220.

Comment: Leachate from the Hyland Landfill is eventually discharged into the Genesee River which flows through Rochester, NY and into Lake Ontario, the source of drinking water for thousands of citizens. Water treatment plants were not designed to remove these wastes, therefore, any such discharge would pose a serious health threat.

Upstate Laboratories have admitted falsifying reports on water tests from Casella and from the Wellsville wastewater treatment plant where Hyland Landfill's leachate is sent.

Response: Leachate from the Hyland facility is trucked to the Village of Wellsville wastewater treatment plant for treatment and disposal. The leachate has to meet certain physical and chemical criteria under an industrial discharge permit prior to being accepted by the treatment plant. If the leachate doesn't meet the discharge criteria then it cannot be accepted at the plant. The discharge criteria are in place to ensure that the plant does not accept wastewater that cannot be adequately treated by the plant.

The landfill leachate is sampled and analyzed by a third party on a semi-annual basis and reported to the Department and any wastewater treatment plants receiving the leachate.

Hyland has begun periodic analysis of its leachate for radioactive constituents. Samples of leachate were submitted to a certified laboratory for radiological testing. The results

showed that the leachate would meet the standards for discharge to surface waters contained in 6NYCRR Part 380 (Prevention and Control of Environmental Pollution by Radioactive Materials). The levels of radiation measured were two orders of magnitude below (100 times less than) the discharge standard. In addition, outbound leachate trucks periodically go through the radiation detectors when leaving the site. No outbound leachate trucks have triggered the alarms.

Casella had historically utilized Upstate Laboratories for the analysis of their groundwater monitoring well samples. The U.S. Environmental Protection Agency's investigation of Upstate Laboratories did not reveal any issues with data relative to the Hyland facility. During the time period that the laboratory was utilized, they were certified by the New York State Department of Health through the Environmental Laboratory Approval Program (ELAP). The samples that have been taken since that time correlate well with the data that had previously been provided by Upstate Laboratories.

Hyland now uses the ALS Environmental facility in Rochester, New York, for its testing needs. ALS is certified through New York State Department of Health ELAP program.

Concern: Leachate breakouts, and non-compliance with Permit Conditions have gone on for years without any indication that Hyland responds to notices of violation. The odors are becoming worse. The DEC knows about our concerns, but the problems persist.

Response: Leachate breakouts occur periodically at landfills. The Hyland facility is required to follow its Operation and Maintenance (O&M) manual, which was reviewed and approved by the Department and is part of the facility's Solid Waste Management permit. As part of the routine facility maintenance, inspections include observations of the landfill for evidence of leachate breakouts. Breakouts are to be repaired promptly. Methods to repair breakouts may include excavation of the breakout and backfilling with free draining material to promote drainage into the landfill leachate collection system. Waste and soil excavated to repair leachate breakouts are disposed in the landfill.

The gas collection and control system (GCCS) at Hyland is operated and maintained as proscribed in the facility Title V Permit. Hyland voluntarily installed the GCCS to control odors and conducts regular monitoring of the system to ensure it is performing in compliance with the Title V permit. Under the draft Title V permit modification, Hyland will be required to comply with New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAPs), both of which are regulations that specify how to operate in compliance with the relevant sections of NSPS and NESHAPs. These requirements will become more stringent under the draft Title V permit modification. Hyland continually adds to the GCCS as the waste matures and gas is produced, and also as required by relevant regulations.

The Department's periodic inspections of the landfill facility have found violations of permit conditions and Hyland has been fined for non-compliance. At the present time, Hyland is under an order on consent and must follow a schedule to bring the facility into compliance with the permit. The Department has inspected the Hyland Facility for compliance with the requirements of the order on consent and has found facility to be in compliance with the order on consent. The Department will continue to monitor the site and violations of permit conditions or regulatory standards will be addressed. People who observe potential violations are encouraged to make a report to our Division of Materials Management at 716-851-7220.

Comment: Casella chose to avoid an environmental review by asking for 49% increase in the waste acceptance rate, instead of 50%. How long will it be before they ask for another 49% without review?

Response: No environmental review or permitting procedural requirements were avoided by Casella by applying for a 49% increase in the facility's waste acceptance rate. The permit applications were treated as "major" pursuant to the Uniform Procedures Act (6NYCRR Part 621) and Notices of Complete Application were published in the local newspaper and the Department's Environmental Notice Bulletin and the public was given several opportunities to comment upon the application documents in the draft permit. In addition, the applications were reviewed appropriately under the State Environmental Quality Review Act.

Hyland has stated that the company applied for the 49 percent increase in annual waste disposal to meet the growing regional needs for all waste types that the facility is currently permitted to receive for disposal. Any additional applications submitted to the Department for this facility will be handled in accordance with applicable regulatory criteria.

Comment: Over a year ago, DEC has permitted modification #5 in April 2012 without any public participation. By that modification they are permitting a new never used process to solidify wastewater fracking wastes which will be trucked via rail that needs to be reloaded near Hyland to trucks. Train derailment was not discussed but is currently in the news. Just one of many technical questions that will be asked by the public this time around even though DEC advises them not to bother.

Response: Modification No. 5 of Hyland's Solid Waste Management Facility Permit was approved April 3, 2012, consistent with the requirements of 6 NYCRR Parts 360, 624, and 617. The permit application and supporting materials were thoroughly reviewed in accordance with these regulations. The publication of a notice of complete application was not required.

most but not all; how much is horizontal hydrofracking-related? how much oversight?

This permit modification authorized a liquid solidification process. Most of the liquid wastes which are solidified at the Hyland facility are unrelated to horizontal hydro-fracking.

In addition, please see the comment and response related to railroad transportation of wastes. Hyland's current proposal and existing operations do not include railroad transportation of any wastes.

Comment: This proposal actually worsens the landfill's release of greenhouse gases.

Response: Municipal solid waste (MSW) landfills can be a significant source of methane emissions. Methane is a potent greenhouse gas with a global warming potential that is 25 times greater than CO_2. At Hyland Landfill, methane gas is collected and controlled via underground pipes located within the waste disposal area. In 2006, landfill gas collection wells were first installed at Hyland Landfill. Today, Hyland Landfill has more than 46 gas collection wells located at the facility. The landfill gas collection system in general includes gas collection wells, lateral and header pipes, gas condensate removal units, control valves, other ancillary components including blower units for vacuum application, and a utility flare to safely burn landfill gas when electricity is not being produced. Typically, LFG is used to power engines, which generate electricity. Using landfill gas in this manner helps to reduce odors and other hazards associated with LFG emissions, and it helps prevent methane from migrating into the atmosphere and contributing to local smog and global climate change.

Comment: I request the DEC extend the public comment period and allow more time for the review of these applications.

Response: The initial public comment period on these applications began in April 2013, lasted for a period of 30 days and was thereafter extended by an additional six weeks. A very large number (approximately 4200) of comments were received and it was determined that a public hearing would be held. On October 14, 2014, a Legislative Public Hearing was conducted in two (2) sessions in the Village of Angelica. No one from the public made comments at the hearing nor did we receive any written comments during the hearing. At the time of the hearing, it was announced that a new public comment period was open until October 28, 2014. This new public comment period was later extended about six weeks, until January 30, 2015. It is the Department's position that sufficient opportunity for interested parties to review and comment upon the permit applications was provided.

Comment: DEC should make a formal press release to the local newspapers to genuinely give people a notice of the opportunity to comment. The commenter sent a press release to four newspapers in Allegany and Cattaraugus County and found only one announcement. Please do a press release so that the community has sufficient opportunity to know about the public comment period.

Response: The Department complied with its legal obligations to publicize the draft permits and the public comment periods associated with those applications via the Environmental Notice Bulletin and a newspaper of general circulation. The Department did not issue a press release to announce the comment periods and the extension of those comment periods. From the unusually large number of comments, received it seems clear that the public was well aware of the comment periods for these applications.

Comment: The DEC already received thousands of public comments on these applications identifying significant environmental and health issues. In these circumstances, a public hearing is called for.

Response: On October 14, 2014, a Legislative Public Hearing was conducted in two (2) sessions in the Village of Angelica. No one from the public made comments at the hearing nor did we receive any written comments during the hearing process. At the time of the hearing, it was announced that a new public comment period was open until October 28, 2014.

Subsequently, a decision was made to extend the new public comment period about six weeks, until January 30, 2015. It is the Department's position that sufficient opportunity for interested parties to review and comment upon the permit applications was provided.

The Department has made a determination not to hold an additional legislative or an adjudicatory hearing for this proposed project. The criteria for holding a public hearing are outlined in 6 NYCRR 621.8. After a thorough review of the permit application and the public comments received, it was determined that no new significant or substantive issues that would require a hearing were raised. The comments received have been adequately addressed by the permit applications and the responses provided here.

Comments: The SEQRA review done on the Hyland Landfill application did not address radiation issues. We submit that the prior negative declaration under SEQRA no longer applies. In light of the significant environmental issues that are involved with the radioactive wastes that this landfill would be receiving, the agency has the obligation to conduct a new SEQRA review before taking action on this permit application.

It is imperative that a full Environmental Impact Statement (EIS) should be conducted on receiving and treating leachates from Pennsylvania well drill cuttings and other flowback, produced waters, etc.

I ask that you reconsider your negative declaration and change it to a positive one.

I am writing to protest the approval of applications by Hyland Facility Associates Project is an Unlisted Action and will not have a significant impact on the environment.

Response: SEQRA was properly complied with for Hyland's proposed tonnage increase. An additional environmental review is, accordingly, not required for this action, including preparation of an EIS. Hyland submitted a long environmental assessment form, a detailed environmental assessment report, as well as a comprehensive evaluation of potential impacts to air quality and traffic. The Department thoroughly reviewed these submittals and requested follow up information from Hyland, which was provided. Based on the Department's review of this information, a negative declaration was properly issued. A coordinated review was performed in this action, and SEQRA was properly complied with.

Hyland's proposal does not change the type of waste streams that are accepted at the landfill. NORM wastes are not considered regulated radioactive waste and may be disposed of in municipal solid waste landfills such as Hyland. Beyond the standard operating requirements for municipal solid waste landfills required under the 6 NYCRR Part 360 regulations, Hyland and all landfills in the State that currently accept drilling wastes have agreed to operate radiation detection systems to ensure that regulated radioactive wastes are not improperly accepted for disposal. Wastes that trigger the radiation detectors are investigated to determine their characteristics and whether they are acceptable for disposal.

Disposal of drill cuttings in municipal solid waste landfills is both environmentally sound and legal under State law and regulation. Other wastes from gas drilling operations, such as equipment and piping which contains pipe scale; residues from the treatment or processing of flowback water, production brine, or other drilling or production wastes; and bulk liquids of any kind are restricted from disposal at solid waste landfills in New York State. The Department will continue to oversee this activity and ensure that such operations remain in full compliance.

Comment: The Department has impermissibly segmented review of Hyland's project plans.

Response: The applications for the waste acceptance rate increase were thoroughly evaluated through the submission and review of a long environmental assessment form, an environmental assessment report, as well as various impact studies. These applications were reviewed independently from the application for wastewater solidification since each proposal is not functionally dependent on the other. The application for wastewater solidification was also given appropriate review under the relevant regulations, including SEQRA. As such, each application was given a thorough and appropriate review under SEQRA.

Comment: I protest that this will not have a significant impact on the environment, pursuant to SEQR §617.5: (c) The following actions are not subject to review under this Part: (25) purchase or sale of furnishings, equipment or supplies, including surplus

government property, other than the following: land, radioactive material, pesticides, herbicides, or other hazardous materials; [emphasis added].

It does not seem an appropriate process for the DEC to issue the Negative Declaration before the permit applications have been submitted. We believe these issues contraindicate issuing the Article 27 Title 7 Solid Waste Management and Article 19 Air Title V Facility Permits for the Hyland Landfill in Angelica, NY and strongly urge the DEC to conduct a new environmental review under the State Environmental Quality Review Act.

Response: SEQRA was properly complied with for Hyland's proposed tonnage increase. Hyland submitted a long environmental assessment form, a detailed environmental assessment report, as well as a comprehensive evaluation of potential impacts to air quality and traffic. The Department thoroughly reviewed these submittals and requested follow up information from Hyland, which was provided. Based on the Department's review of this information, a negative declaration was properly issued. A coordinated review was performed in this action, and SEQRA was properly complied with.

6 NYCRR 617.5(c), cited by the commenter, provides an example of a Type II action, which is typically exempt from SEQRA review. However, in this instance, the proposed tonnage increase was reviewed pursuant to SEQRA and no exemption, from 6 NYCRR 617.5 or otherwise, was relied upon. Permit applications were submitted prior to decisions being made under SEQRA.

The following are the Department’s responses to the comments of the Concerned Citizens of Allegany County (CCAC) submitted by Gary Abraham, Esq. on July 21, 2013. The response to each issue is separated by comment headings that correspond to the headings in Mr. Abraham’s letter.

COMMENT (1), PAGES 3-5: RULES FOR DETERMINING WHETHER THE LANDFILLS NSPS APPLIES TO HYLAND

NSPS RULES

Regarding the first comment concerning the applicability of the New Source Performance Standard (NSPS) for Municipal Solid Waste Landfills (40 CFR part 60, subpart WWW), Hyland was subject to the NSPS since startup in 1998. This is based on the fact that the NSPS is applicable to all Municipal Solid Waste (MSW) landfills that commence construction after May 30, 1991. The NSPS, however, is structured such that landfills do not trigger certain requirements within the regulation until specific thresholds are satisfied. The two significant NSPS thresholds include:

(a) When the permitted landfill size or design capacity is greater than or equal to 2.5 million megagrams (Mg) or 2.5 million cubic meters (m^3), the NSPS requires the

landfill to submit Non-Methane Organic Compound (NMOC) emission rate reports; and

(b) When the uncontrolled NMOC emission rate is equal to or greater than 50 Mg per year (Mg/yr), the NSPS requires the landfill to install a well-designed and well operated gas collection system and a control device capable of reducing NMOC in the collected gas by 98 percent (%).

To estimate the NMOC emission rate in item (b) above, the NSPS outlines a three-tiered procedure. The first tier or Tier 1 methodology is the most conservative and typically results in an NMOC greater than 50 Mg/yr. The EPA intended the Tier 1 calculation to overstate NMOC emissions and encourage site-specific data collection (see EPA Q&A reference[1], page 19, question 2). Landfills exceeding the 50 Mg/yr threshold using the Tier 1 method can choose to comply with the NSPS performance standards or move to the second tier of the applicability determination. Tier 2 requires the landfill to test the landfill gas NMOC concentration and use this value in estimating a revised NMOC emission rate. If the NMOC emission rate is less than 50 Mg/yr, then the landfill does not need to comply with the performance standards or install a gas collection and control system. If the Tier 2 NMOC emission rate is greater than 50 Mg/yr, then the landfill can choose to comply with the performance standards or move to the third tier of the applicability determination. Tier 3 requires the landfill to perform another test to obtain additional site-specific data. It has been the department's experience that when a landfill exceeds the Tier 2 applicability, the landfill generally chooses to comply with the performance standards and not collect the Tier 3 site specific data.

When a landfill has reached the 50 Mg/yr NMOC threshold, the NSPS performance standards specify that a landfill must:

(a) install a well-designed gas collection system within 30 months;
(b) operate the collection system under negative pressure;
(c) operate each wellhead with a gas temperature less than 55 degrees Celsius;
(d) operate each wellhead with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent;
(e) operate the collection system such that the surface methane concentration is less than 500 ppm; and
(f) operate the control device to reduce NMOC by 98 %.

Reference 1
EPA Reference: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards Research Triangle Park, North Carolina, MUNICIPAL SOLID WASTE LANDFILL NEW SOURCE PERFORMANCE STANDARDS (NSPS) AND EMISSION GUIDELINES (EG) -- QUESTIONS AND ANSWERS Revised (May 2002)

NSPS Applicability to Hyland Landfill

Applicability of the NSPS was resolved conclusively by previous air permits issued to Hyland Landfill, including the pending permit modification. For clarification purposes, it is necessary to summarize the NSPS applicability completed for each air permit below:

Air State Facility (ASF) Permit, 2003

On November 24, 2003, the first ASF permit was issued to Hyland Landfill for operation of a landfill gas flare. The permit states Hyland Landfill was subject to the NSPS based on the construction date occurring after May 30, 1991. However, since the landfill design capacity was less than 2.5 million Mg or 2.5 million m^3, the only provision of the NSPS applicable to Hyland Landfill was the requirement to complete an initial design capacity report. This report was previously submitted to the EPA Administrator dated December 3, 2001, which confirmed the design capacity was less than the 2.5 million Mg and 2.5 million m^3 NSPS threshold.

Even though Hyland was not subject to the federal NSPS performance standards listed in items (a) through (f) above, Hyland had already installed a gas collection system in the landfill. As such, the department and Hyland agreed to require compliance with items a, b, c, d, and f. State performance standards comparable to the NSPS were placed under state regulation 6NYCRR Part 212.4(b), Conditions 4 through 9 of the permit.

ASF Modification 1 (MOD 1), 2007

On January 1, 2007, MOD 1 to the ASF permit was issued for a 48-acre expansion. The 48-acre landfill expansion caused the Hyland landfill to exceed the 2.5 million Mg and 2.5 million m^3 NSPS threshold. As such, the permit outlined the additional NSPS requirements applicable to the landfill. These requirements included:

(a) *Completion of an amended design capacity report within 90 days of receiving the Solid Waste Permit Modification*. Hyland submitted the amended design capacity report on March 13, 2007, that confirmed the 48-acre expansion increased the design capacity of the landfill to greater than 2.5 million Mg or 2.5 million m^3.

(b) *Completion of the initial or Tier 1 NMOC report within 90 days of receiving the Solid Waste Permit Modification*. Hyland submitted the Tier 1 NMOC report on March 13, 2007. As expected, the Tier 1 report indicated the NMOC emission rate was greater than 50 Mg/yr.

(c) *Completion of a Tier 2 NMOC report within 180 days of the first calculated exceedance of the 50 Mg/yr threshold*. Hyland submitted the first Tier 2 report on September 18, 2007. The site-specific NMOC concentration was tested to be 117 parts per million by volume as hexane (ppm_v). The resulting uncontrolled NMOC emission rate for 2007 was 11 Mg/yr; less than the 50 Mg/yr threshold.

(d) *Submission of a Title V permit application within 15 months of receiving the Solid Waste Permit Modification*. An initial Title V permit application was submitted on October 18, 2007. This application included a proposal to increase the waste acceptance rate by 49% while maintaining the current permitted landfill design capacity. A revised Title V application was submitted on March 20, 2008, that did not include the proposed increase of waste acceptance rate. The Title V permit was issued on February 25, 2009.

Again, even though Hyland was not subject to the federal NSPS performance standards, the department required Hyland to operate and maintain the gas collection and control system in compliance with items a, b, c, d, and f above. State performance standards similar to the NSPS were placed in the permit under state regulations 6NYCRR Part 212.4(b) and Part 212.11(a) and federal regulation 40CFR60.18. The corresponding permit conditions included 1-3 through 1-15.

ASF Modification 2 (MOD 2), 2007

On October 10, 2007, MOD 2 to the ASF permit was issued for construction and operation of a Landfill Gas to Energy (LFGTE) Plant. During this permit action, the only active remaining applicable federal NSPS requirements included:

(a) *Completion of an additional Tier 2 NMOC report by September 20, 2008.* As allowed by the NSPS, a landfill can choose to submit Tier 2 NMOC reports on an annual basis or estimate the NMOC emission rate for a five-year period. Hyland's first Tier 2 report only estimated the NMOC emission rate for the year 2007. As such, Hyland was required under the MOD 2 permit to submit an additional Tier 2 NMOC report. The second Tier 2 test was submitted on September 15, 2008. The updated site-specific NMOC concentration was tested to be 205 ppm_v and the resulting maximum uncontrolled NMOC emission rate over the next five year period was 47 Mg/yr in the year 2013.

(b) *Submission of a Title V permit application by March 20, 2008.*

Once again, during review of this project, the department was more restrictive than the EPA by requiring Hyland to comply with additional NSPS requirements not applicable to the landfill. More importantly, the requirements added to this permit include NSPS requirements that were proposed by the EPA on September 8, 2006, and that, today, still have not been promulgated into law. The performance standards added to this permit included the requirement for Hyland to treat the landfill gas prior to combustion in the LFGTE plant. These pre-treatment performance standards, along with items a, b, c, d, and f above, are significant in reducing volatile organic compounds and air toxics. The reduction of these emissions has direct and indirect health and environmental benefits to the community.

Air Title V (ATV) Permit, 2009

On February 25, 2009, an ATV permit was issued to Hyland as required by the NSPS for landfills having a design capacity greater than 2.5 million Mg or 2.5 million m^3. In general, the permit contains the same performance standard requirements as the ASF MOD 2 permit.

The department did not receive any comments from the EPA regarding this permit action. In addition, the EPA did not question the determination of non-applicability of the NSPS performance standards to this landfill.

no Tier 2 report was submitted in 2009; **see below, p. 19**

ATV Modification 1 (MOD 1), proposed 2013

On May 8, 2013, a draft permit modification for a 49% increase in the waste acceptance rate was noticed to the public for review. Based on a 2010 Tier 2 report, the NMOC emission rate for the landfill was less than 50 Mg/yr; therefore, no additional NSPS requirements were applicable to the facility. However, due to an emergency adoption of 6NYCRR Part 231, effective May 23, 2011, to incorporate EPA's final rule for regulation of Greenhouse Gases (GHGs), Hyland had to evaluate GHG for the first time. In accordance with newly adopted 6NYCRR Part 231-8, the proposed project was determined to be a major modification for GHG emissions, thus, requiring the use of Best Available Control Technology (BACT). The department determined BACT for GHG emissions from the Hyland Landfill included:

(a) *Complete implementation of the NSPS*. Since Hyland was already complying with most of the NSPS, the last remaining performance standard included operating the collection system such that the methane concentration from the landfill cover is less than 500 ppm (see item (e) above);

(b) *Early implementation of the National Emission Standard for Hazardous Air Pollutants (NESHAP): Municipal Solid Waste Landfills (40CFR part 63, subpart AAAA)*. Since the NMOC emission rate was less than 50 Mg/yr, Hyland was not subject to the NESHAP. However, the department determined compliance with the NESHAP should be considered BACT; and

(c) *Extended operation of the landfill gas collection and control system beyond the NSPS closure requirement of less than the 50 Mg per year NMOC generation rate*. The department also went beyond the NSPS and NESHAP requirements by having Hyland operate and control landfill gas emissions longer than required by the NSPS or NESHAP. This agreement alone will ensure a reduction in landfill gas emissions for many years beyond the NSPS requirements.

even more reduction would result from permit denial

In summary, each permit issued to Hyland since 2003 properly evaluated applicability to the NSPS. Hyland is not subject to the NSPS performance standards because the NMOC emission rate is less than 50 Mg/yr. The department did not illegally evade

applicable CAA programs as alleged by CCAC. The department has evaluated each of these permits in such a manner to protect the people and environment using the best possible methods regardless of whether it was required by regulation. The current draft ATV MOD 1 permit further imposes additional EPA requirements on Hyland that are not currently applicable to this facility. By requiring the facility to comply with both the NSPS and NESHAP, the department has ensured the utmost minimal impact of air emissions from this facility on the community. **but not the utmost minimal impact of air emissions on this community**

COMMENT (2), PAGES 5-9: HYLAND HAS NOT SUFFICIENTLY DISCLOSED THE REASONS FOR A PERMIT MODIFICATION AND COMMENT (3), PAGES 9 -10: FAILURE TO DISCLOSE THE NEED FOR THE PERMIT MODIFICATION VIOLATES SEQRA

Hyland has stated that the company applied for the 49 percent increase in annual waste disposal to meet the growing regional needs for all waste types that the facility is currently permitted to receive for disposal. The Environmental Assessment Report submitted by Hyland provided a broader discussion of the reasons for the proposed 49 percent increase in annual waste tonnage, including that a strong demand for waste disposal services had been shown at the landfill, resulting in the landfill operating at capacity in its first year. Any additional applications submitted to the Department for this facility will be handled in accordance with applicable regulatory criteria.

COMMENT (4), PAGES 11-12: HYLAND'S EMISSIONS CALCULATIONS ARE SERIOUSLY FLAWED

The argument that Hyland's emission calculations are flawed is factually incorrect. The emission calculations in question are addressed in comment headings (4a) through (4f) which correspond to the headings in Mr. Abraham's letter. First, however, it is ,necessary to explain that there are two significantly different emission calculations completed for MSW landfills causing much confusion. The two calculations are used for very different purposes as described below.

The first type of emission calculation is used strictly to determine when a landfill triggers the 50 Mg/yr NMOC threshold of the NSPS. The EPA specifically designed this calculation with a three-Tier methodology to compute the "uncontrolled" emission rate of NMOC. This uncontrolled emission estimate represents the maximum amount a landfill can emit. The estimate does not allow for a reduction in emissions due to control through landfill covers and collection systems. More specifically, Hyland cannot reduce emissions by 75% for the collection system or by 98% for the control device.

The second type of calculation is used for permit review to determine applicability of additional regulations such as New Source Review (NSR), Prevention of Significant Deterioration (PSD), Title V and other state regulations. The permit emissions represent a more accurate, but still conservative estimate, of the landfill's impact on the environment. The total landfill emissions include: 25% fugitive landfill gas, 75%

combusted landfill gas from the LFGTE plant and flare, and particulate emissions from landfill equipment and truck traffic. These emissions include various contaminants such as NMOC, volatile organic compounds, GHG, hazardous air pollutants, nitrogen oxides, carbon monoxide and particulate matter. The permit emission calculations are completed following the EPA document "Compilation of Air Pollution Emission Factors" also known as AP-42. It is important to note, the NMOC emissions are not calculated using the 3-tier methodology. So, the NMOC emission rate obtained from the second calculation is generally less than the NMOC emission rate computed in the first type of calculation.

It appears CCAC has misunderstood the difference between these two calculations. In support of the responses to comments (4a) through (4f), it is recommended the reader refer to EPA Q&A reference[1] section III – Design Capacity Determinations, pages 16 and 17 including questions 1 through 5 and section IV – Estimating Emissions, pages 19 through 22 including questions 1 through 8. The second type of calculation for the permit emissions are referred to as "emission inventory estimates" in the EPA Q&A reference[1].

Comment (4a), pages 12-13: The LandGem emissions estimation model
For both of the calculations, the first step to estimate emissions generated from a landfill is to use the EPA Landfill Gas Emission Model also known as LandGEM. The LandGEM model requires certain input parameters of which five are listed below.

Methane generation rate (k)
Potential methane generation capacity (L_o)
NMOC Concentration (CNMOC)
Waste design capacity of landfill
Amount of waste in landfill

CCAC believes these values were used incorrectly. Again, it appears CCAC does not have an accurate understanding of the LandGem model and the input parameters. The LandGem model and the input parameters were used correctly for the two different types of calculations.

Default Parameters
The first three LandGEM input parameters, including k, L_o and CNMOC, are sometimes referred to as default parameters. The NSPS 3-Tier calculations require certain mandatory default parameters to be used in the LandGEM model as presented in Table 1. The EPA Tier 1 method is the most conservative calculation using all three default values. The EPA intended the Tier 1 calculation to overstate NMOC emissions and encourage site-specific data collection.

Table 1 – EPA LandGem Required Default Parameters

Input Parameter	Tier 1 Method	Tier 2 Method	Tier 3 Method
NMOC Concentration (CNMOC) ppm_v	4,000	Site-specific	Site-specific
Methane generation rate (k) yr^{-1}	0.05	0.05	Site-specific
Methane generation potential (L_o) m^3/Mg	170	170	170

Hyland used the correct above-referenced input parameters in the Tier 1 and Tier 2 calculations for determining whether the landfill NMOC emission rate is greater than the 50 Mg/yr NMOC threshold. The exact parameters used in each analysis are summarized in Table 2 as follows:

Table 2 – Hyland Landfill NMOC Tier 1 & 2 LandGem Input Values

Input Parameter	2007 Tier 1	2007 Tier 2	2008 Tier 2	2010 Tier 2
CNMOC, ppm_v	4,000	117	205	211
k, yr^{-1}	0.05	0.05	0.05	0.05
L_o, m^3/Mg	170	170	170	170

The input parameters listed in Table 2 for the 2007 Tier 1 analysis match the Tier 1 EPA three default values (i.e., 4,000, 0.05, and 170) shown in Table 1. The three Tier 2 reports completed in the years 2007, 2008 and 2010, each used the two required EPA default values of 0.05 yr^{-1} and 170 m^3/Mg.

The site-specific CNMOC values were obtained by collecting and analyzing the landfill gas from the Hyland Landfill gas collection system in accordance with NSPS requirements. The CNMOC value increased from 117 ppm_v in 2007 to 205 ppm_v in 2008 and 211 ppm_v in 2010. The increase of the NMOC concentration from 117 ppm_v to 205 ppm_v is supported by the fact that several additional vertical wells were added to the collection system between the years 2007 and 2008. The third test completed in 2010 confirms the accuracy of the data and represents the age and type of waste at Hyland Landfill. In comparison, data collected from a larger and older landfill in a nearby county was recently tested with a CNMOC value of 348 ppm_v.

improbable on its face: the annual rate of change should be as much or more in progressive years

The second type of calculation used for permit review does not use the above-referenced conservative NSPS 3-Tier default parameters. As stated by the EPA[1] (see page 22, question 8), the Table 1 default values should not be used for purposes other than the NSPS. The input parameters used for each permit application to estimate emissions were used correctly as recommended by AP-42. The input parameters used in Hyland's permit applications are summarized in Table 3.

Table 3 – Hyland Landfill Permit Application LandGem Input Values

Input Parameter	ASF 2003	ASF MOD1 2007	ASF MOD2 2007	ATV 2009	ATV MOD1 2013
CNMOC, ppm_v	595	595	595	595	211
k, yr^{-1}	0.04	0.04	0.04	0.04	0.05
L_o, m^3/Mg	100	100	100	100	100

The LandGem user guide also recommends the values used in Table 3 for computing emission inventory estimates. The 2013 permit application uses slightly different parameters than the prior applications. The main reason for the difference is due to the availability of site-specific data which better represents actual conditions at the landfill.

emission inventory values can be used for compliance demonstrations??

Comment (4b), pages 13-15: Hyland improperly discounted its design capacity

The fourth LandGEM input parameter is the waste design capacity. The waste design capacity is an optional input used to calculate the closure year of the landfill. The waste design capacity is entered in units of mass not volume. Thus, the facility must convert the volume of the landfill into mass by determining the actual density of the waste in the landfill.

CCAC claimed Hyland used an incorrect waste density to determine the design capacity of the landfill. CCAC believes Hyland should have used a density of 1,800 pounds per cubic yard (lbs/yd^3). Table 4 demonstrates the difference in NMOC results when using the 1,800 lbs/yd^3 in comparison to the 2010 NMOC Tier 2 report and the pending permit application. Hyland used a waste density of 1,520 lbs/yd^3 in the 2010 NSPS Tier 2 report and a waste density of 1,355 lbs/yd^3 in the pending Title V permit application.

Table 4 – Waste Density Comparison

	2010 Tier 2 NMOC Report	Tier 2 result when using 1,800 lbs/yd^3	2011 ATV MOD 1 permit application	2011 permit application result when using 1,800 lbs/yd^3
Waste density, lbs/yd^3	1,520	1,800	1,355	1,800
Design Capacity, tons	10,768,668	12,752,370	9,567,778	12,752,370
Year when reach 50 Mg/yr	After 2015	After 2015	After 2015	After 2015

As shown in Table 4, the smaller waste density value of 1,355 lbs/yd^3 results in a smaller design capacity of 9,567,778 tons. Conversely, the greater waste density of 1,800 lbs/yd^3 results in a greater design capacity of 12,752,370 tons. Generally, the greater design capacity represents more waste that can be placed in the landfill. In reality, the amount of waste that can be placed in the landfill is dependent upon the type of waste in the landfill and the compaction practices used by the landfill.

The following conclusion can be made regarding the impact of using 1,800 lbs/yd^3 for the waste density; using 1,800 lbs/yd^3 in the LandGEM model resulted in the same projection as the 2010 Tier 2 report and the 2011 permit application, that the NMOC emission rate would not exceed 50 Mg/yr until after 2015.

As stated by the EPA[1], landfill densities range from 300 – 1800 lbs/yd^3, with more typical values between 800-1000 lbs/yd^3. Hyland used waste densities in the upper end of the EPA range which results in more conservative estimates. As shown in Table 4, using different waste densities did not change the review of this facility regarding NSPS applicability or permit review.

Comment (4c), pages 15-16: Hyland improperly discounted its waste acceptance rate

The fifth LandGem input parameter includes the amount of waste in the landfill. The actual amount of waste accepted by the landfill for each individual operating year is entered into the LandGem model. Hyland input the actual waste received during each year between 1998 through 2010. For future years, Hyland input the maximum amount of waste the facility is allowed to accept based on the solid waste permit.

For the NSPS Tier 2 calculations, the department required Hyland to input all the waste into LandGem, including the 20% of Beneficial Use Determination (BUD) material. This requirement was purposely over conservative even beyond the EPA methodology. No waste material was left out of the NSPS Tier 2 calculations even though the EPA allows non-degradable waste material to be excluded from the NMOC three-Tier calculations (see EPA Reference[1] page 17, question 5). The reason the department was more conservative with this calculation was in direct response to comments received from Mr. Abraham nearly 10 years ago. On April 2, 2004, Mr. Abraham submitted a petition for the Concerned Citizens of Cattaraugus County (CCCC). As a result of the petition, the department required Hyland to include BUD material in the Tier 2 calculations.

The permit application calculations, however, do leave out waste that is non-degradable, such as asbestos, ash and drill cuttings because such waste would not produce emissions. Degradable BUD material, such as petroleum contaminated soil, was not excluded since such waste would produce NMOC emissions.

not permissible unless the non-degradable waste is also disposed in a segregated area with in the landfill

As such, the emission calculations completed for the NSPS Tier reports and the Title V permit application are correct. The NSPS Tier calculations are overly conservative and still do not trigger the 50 Mg/yr NMOC threshold until after 2015.

Comment (4d), page 16: Hyland improperly discounted its methane generation potential

Hyland properly used the methane generation potential, L_o, in all the calculations. As shown in Table 2, Hyland used the required default value of 170 m^3/Mg in the Tier 1 and Tier 2 reports. As specified in AP-42, the EPA states a L_o of 100 m^3/Mg refuse is appropriate for most landfills. In addition, the LandGem user manual specifies a L_o value of 100 m^3/Mg be used for conventional landfills when estimating emissions for inventory purposes; which means for permit application purposes. As shown in Table 3, Hyland used a perfectly valid L_o of 100 m^3/Mg for each permit application. CCAC is incorrect in stating that Hyland used improper LandGem input parameters to avoid applicability to the NSPS.

Comment (4e), pages 16-18: Hyland's NMOC concentration rate is not adequately supported

CCAC does not believe the landfill gas NMOC sampling results are correct. As discussed in Comment (4a) and shown in Table 2, Hyland collected and analyzed landfill gas from the gas collection system on three separate occasions to obtain an NMOC concentration. The 2010 testing resulted in a NMOC concentration of 211 ppm_v.

CCAC states two problems with the landfill gas testing including: (1) the gas samples should have been collected from sampling probes instead of the gas collection system, and (2) gas was not collected from cell 3 of the landfill.

First, CCAC implies that collecting gas from temporary probes is better than collecting gas from the gas collection system. This proposition is not accurate for several reasons. First, sample probes are used for landfills that do not have a gas collection system. Generally, small diameter (i.e., 1.25 inch) sample probes are installed at a minimum depth of 3 feet below the bottom of the landfill cover. The gas is drawn from around the immediate vicinity of the sample probe using a sampling train at a rate of about 250 cubic centimeters per minute. The depth and volume of gas collected from sampling probes is very limited in representing the entire landfill gas composition. A permanent gas collection system, on the other hand, includes several large diameter vertical wells and horizontal piping that extends all the way through the waste material both horizontally and vertically. Massive blowers and engines are used to pull the generated gas through the landfill. The gas sample is collected from a point in the common header piping system where all the gas joins together. The gas collected from this location thoroughly represents all sections of the landfill where the waste has degraded and is producing gas.

contra, excessive vacuum on the collection system pulls in clean air from the ambient atmosphere; what assurance is there that the "massive blowers and engines" did have this result here?

CCAC does not approve of the gas being sampled from the header because they believe the gas collection system at Hyland is poorly designed and operated. In accordance with the NSPS, a well-designed collection system has two vertical wells per hectare. The Hyland landfill has 25 vertical wells in cells 1 & 2 covering a 12 acre area. Thus, Hyland's gas collection system is well-designed because the landfill has greater than 2 wells per hectare. **this is not the only measure of a well-designed and well-operated GCCS**

Regarding operation of the permanent gas collection system, Hyland has been collecting monthly wellhead data since 2003. These data demonstrate the collection system operates within the NSPS criteria for a properly operated system. Each well is operated under negative pressure, with a gas temperature less than 55 degrees Celsius, and with an oxygen level less than 5 percent. These measurements confirm that no excess air infiltration is occurring and the collected gas is representative of the waste mass. Given the adequate collection system, the department disagrees with CCAC regarding the use of small sample probes instead of the well-designed and operated gas collection system.

Second, CCAC believes cell 3 should have been included in the gas collection system. This belief is not correct based on the fact that the NSPS does not require gas collection from areas until the waste is five years old. Waste placement in Cell 3 began in 2008; therefore, the waste was only two years old when the last Tier 2 test was conducted in 2010.

Comment (4f), page 18: Conclusion: Hyland is bound by its Tier 1 NMOC Emission Rate Report

Hyland is not bound by the Tier 1 report. The entire statement made by CCAC under this comment is incorrect and it appears that CCAC does not understand the details of the emission calculations. Hyland is operating a well-designed and well-operated gas collection system as evidenced by the monthly wellhead measurements. Hyland has complied with the gas well density of at least 2 wells per hectare. Hyland has not assumed a 75% reduction of landfill gas in the Tier 2 tests because this is not allowed by the NSPS. Based on the criteria of the EPA three-tier NMOC calculation system, Hyland is allowed to complete a Tier 2 test when the Tier 1 test shows emissions are greater than 50 Mg/yr. The Tier 2 tests are valid and demonstrate Hyland has not reached 50 Mg/yr NMOC and is not required to comply with the NSPS or NESHAP.

COMMENT (5), PAGE 19: THE DRAFT TITLE V PERMIT IMPERMISSIBLY RELAXES ANNUAL NMOC EMISSION MONITORING

The draft permit does not impermissibly relax annual NMOC emission monitoring. The draft permit does not contain any requirement for Hyland to complete annual or five year Tier 2 NMOC emission monitoring. The department determined under a PSD review for GHG BACT that Hyland should fully comply with the NSPS and NESHAP. Because Hyland is required to comply with the NSPS, the requirement to complete Tier testing is no longer needed or required to determine if emissions are greater than 50 Mg/yr. As

per the NSPS 60.757(b)(3), after installation of a gas collection and control system in compliance with the NSPS, each landfill is exempt from the NMOC emission rate reports.

questions remain as to whether the GCCS is in compliance with the NSPS

COMMENT (6), PAGE 20: THE DEPARTMENT'S TITLE V PERMIT REPORT IS DEFICIENT

The Title V draft permit is not deficient. The proposed Title V permit modification does not rely on a Tier 2 report as believed by CCAC in this comment. The entire basis of the proposed permit is the PSD analysis for GHG BACT. Without the BACT requirement imposed by this permit, Hyland would still not be required to comply with the NSPS or NESHAP because the NMOC emission estimates are still less than 50 Mg/yr.

However, Hyland has worked with the department and has agreed to fully comply with these regulations. As stated under Comment (1) above, Hyland has been complying with most of the NSPS since 2003. The only one significant remaining requirement to complete for full compliance with the NSPS is listed in Comment (1), item (e). In addition, the NESHAP will require the facility to prepare and implement a startup, shutdown and malfunction plan.

COMMENT (7), PAGES 20-24: THE IMPACT ON EMISSIONS OF TOXIC AND RADIOACTIVE CONSTITUENTS IN NONCONVENTIONAL WASTE STREAMS WAS NOT CONSIDERED

This comment is addressed above in this document.

COMMENT (8), PAGE 24: THE POTENTIAL IMPACTS OF RADON GENERATION WAS NOT CONSIDERED

This comment is addressed above in this document.

COMMENT (9), PAGE 24-26: THE IMPACT ON EMISSIONS OF OPERATING A "BIOREACTOR" LANDFILL WERE NOT CONSIDERED

CCAC believes Hyland landfill operates as a bioreactor defined by the NESHAP and, therefore, should be subject to the bioreactor requirements of the rule.

Hyland landfill is not operated as a bioreactor. Hyland's operations do not meet the definition of a bioreactor. Specifically, Hyland does not add liquid other than leachate in a "controlled fashion" into the landfill. Regardless of whether Hyland is or is not operating as a bioreactor, Hyland would not be subject to the NESHAP until the uncontrolled NMOC emission rate is 50 Mg/yr or greater. Furthermore, the NESHAP compliance requirements for a landfill that does operate as a bioreactor, includes complying with the NSPS and installing a gas collection and control system. The Hyland facility is already doing this.

permission to dispose wastes that are no more than 20% solids is a NY-specific permit condition, arguably making the landfill a bioreactor per se

COMMENT (10), PAGE 26: ADDITIONAL SEQRA ISSUES
These comments are addressed elsewhere in this document.

COMMENT (11), PAGE 26-27: THE DEPARTMENT HAS IMPERMISSIBLY SEGMENTED REVIEW OF HYLAND'S PROJECT PLAN
This comment is addressed elsewhere in this document.

If you have any questions regarding this letter, please contact me at 716/851-7165.

Sincerely,

/s/

David S. Denk
Regional Permit Administrator

DSD

ecc: Mr. Peter Grasso, NYSDEC Division of Materials Management
Mr. Alfred Carlacci, NYSDEC Division of Air Resources
Mr. Jerry Leone, Regional Engineer, Hyland Facility Associates
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