

6653 Herdman Road Angelica, New York 14709

Phone: (585) 466-7271 Fax: (585) 466-3206

March 6, 2011

Ms. Mary E. Hohmann Division of Environmental Permits NYSDEC – Region 9 182 E. Union, Suite 3 Allegany, New York 14706-1328

RE: Environmental Assessment Increased Disposal Rate

Hyland Facility Associates

Dear Ms. Hohmann:

Hyland Facility Associates (Hyland) is submitting the enclosed three copies of a revised environmental assessment report prepared by McMahon & Mann Consulting Engineers, P.C.. The environmental assessment report was originally submitted in October 2007 as part of a permit modification request to increase the solid waste disposal capacity at the Hyland Landfill from 312,000 tons per year to 465,000 tons per year (i.e., approximately 49 percent increase).

MMCE made minor revisions to the text in Section 3.3 to indicate that a Title V permit application has been submitted to the New York State Department of Environmental Conservation. Also, vehicle numbers in Section 3.10 were revised to match solid waste and leachate hauling vehicle numbers in the Title V permit application submitted to you on February 22, 2011.

If there is any further information that you require or if you have any questions, please contact me at (585) 466-7271.

Sincerely,

HYLAND FACILITY ASSOCIATES

Joseph R. Boyles General Manager



Donald R. McMahon, P.E. Michael J. Mann, P.E. Kenneth L. Fishman, PhD., P.E. John A. Minichiello, CPESC, CPSWQ James Bojarski, P.E. Shawn W. Logan, P.E. Andrew J. Nichols, P.E. Todd Swackhamer, P.E.

March 3, 2011 File: 93-002

Mr. Joseph Boyles Hyland Facility Associates 6653 Herdman Road Angelica, New York 14709

RE: Hyland Facility Associates,

49 Percent Tonnage Increase

Environmental Assessment Revisions

Dear Mr. Boyles;

McMahon & Mann Consulting Engineers, P.C. has prepared the attached revised environmental assessment report originally submitted to the New York State Department of Environmental Conservation (NYSDEC) in October 2007. The environmental assessment report was submitted as part of a permit modification application requesting NYSDEC approval to increase in the annual waste disposal rate for the Hyland Landfill from 312,000 tons per year to 465,000 tons per year.

MMCE made minor revisions to the text in Section 3.3 to indicate that a Title V permit application has been submitted to the NYSDEC. Also, vehicle numbers in Section 3.10 were revised to match solid waste and leachate hauling vehicle numbers in the Title V permit application submitted to the NYSDEC on February 22, 2011.

Please contact our office (716-834-8932) should you have any questions regarding this submittal.

Sincerely yours,

McMAHON & MANN CONSULTING ENGINEERS, P.C.

John A. Minichiello, CPESC, CPSWQ

Michael J. Mann, P.E.

Enclosure

ENVIRONMENTALASSESSMENT

INCREASED DISPOSAL RATE

HYLAND LANDFILL ANGELICA, NEW YORK

> Prepared for: Hyland Facility Associates 6653 Herdman Road Angelica, New York 14709

October 2007

Revised March 2011

Prepared by: McMahon & Mann Consulting Engineers, P.C. 2495 Main Street Buffalo, New York 14214

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Figure

FIGURE 2-1 FACILITY SITE MAP

1.1 OBJECTIVE

This document provides an assessment of the potential environmental impacts associated with an increase in the approved design capacity of the Hyland Landfill. This proposed modification to the operation of the landfill would increase the approved design capacity from 1200 tons per day to 1790 tons per day, an increase of 49 percent. Corresponding 49 percent increases in the quarterly waste disposal limit, from 93,660 tons per quarter to 140,000 tons per quarter, and in the annual waste disposal limit, from 312,000 tons per year to 465,000 tons per year, are also being requested. No other changes to the design or operation of the facility are addressed in this document.

1.2 REASONS FOR PROPOSED MODIFICATION

The primary reasons for the requested increase in approved design capacity are related to the economics of facility operation and customer service. The current permit (issued in December 2006) specifies an approved design capacity of 1,200 tons per day, with a limit of 93,660 tons per quarter, and 312,000 tons per year. Strong demand for waste disposal services at Hyland so far during calendar year 2007, has resulted in monthly disposal rates averaging 26,000 tons, which, projected through the end of the year, would result in an annual disposal rate of 312,000 tons, 100 percent of the permitted amount. During the most recent three-month period (May, June and July), waste disposal totaled 93,160 tons, or 99.5 percent of the permitted quarterly limit. The high demand for waste disposal in the western New York region, has resulted in the Hyland facility operating at permitted capacity in the first year of its new permit.

A concern expressed during early discussions with NYSDEC representatives regarding this proposed modification earlier this year, is that a design capacity increase is being requested less than one year after issuance of a permit modification for a lateral cell expansion and an increase in maximum disposal rate from 232,440 tons per year to 312,000 tons per year. The reason for this requested modification following so soon after the December 2006 permit modification, is that the previous design capacity increase was actually requested in April 2002, when the Permit Modification Application and Full Environmental Assessment Form were filed for the landfill expansion. In the intervening five years, demand for waste disposal has continued to be strong,

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while landfills have continued to close, creating the need for higher disposal rates at the remaining facilities.

Experience during past peak disposal periods have indicated that existing equipment and personnel are adequate to support much higher disposal rates (the maximum daily disposal rate so far in 2007 was 2059 tons on June 20). Therefore, revenues and operating efficiency could be increased, with only a moderate increase in operating expenses related to equipment and personnel.

1.3 SCOPE

Since the proposed modification to the operation of the Hyland Landfill only involves an increase in approved design capacity, no additional field investigations or technical studies have been performed, with the exception of a supplemental traffic study, and preparation of a Title V air permit application. The Title V application was required as a condition of the Hyland Permit modification for a 48-acre lateral expansion, but the gas generation rate is affected by the proposed increase in design capacity, requiring modifications to the application.

Reference is made to the Draft Supplemental Environmental Impact Statement (DSEIS) prepared for the lateral expansion of this project approved in 2006 (Reference 1). The DSEIS, together with information developed in the supplemental traffic study, provide sufficient information on which to base the evaluations contained herein.

2.1 HYLAND LANDFILL

The Hyland Landfill has approximately 76 acres of landfill cell area, with a total disposal capacity of approximately 15 million cubic yards. Landfill cells are being constructed with composite liners, and leachate collection systems. There are also approximately 100 acres of ancillary facilities on the site, including leachate storage facilities, stormwater retention/sedimentation ponds, office/maintenance building, soil borrow area, access roads and parking areas, etc.

The facility is located at 6653 Herdman Road, in the Town of Angelica, Allegany County, New York. The facility site plan is shown on Figure 2-1.

2.2 PROPOSED MODIFICATION

The modification addressed in this document consists of an increase in the approved design capacity of the landfill from 1200 tons per day (6 days per week basis) to 1790 tons per day. This 49% increase is below the threshold defined in 6 NYCRR Part 360-1.8, that allows this application be processed by the New York State Department of Environmental Conservation (NYSDEC) as a non-material modification.

The most significant operational effect of this proposed change would be that the landfill would fill up more rapidly. The presently estimated remaining life of the permitted disposal capacity is approximately 20 to 25 years. This life would be reduced to approximately 14 to 17 years if the increased disposal rate were fully utilized. The size of the cells would not change, nor would the active working area within the active cell.

The only regulatory approvals required by this change would be modifications to the NYSDEC Operating Permit and the Air State Facility Permit. The air permit will transition to a Title V permit due to the recently approved expansion of the landfill, but the application also includes the impact of this proposed design capacity increase, as described below in Section 3.3.

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The discussion of potential environmental impacts in this section follows the general sequence and approach used in the "Full Environmental Assessment Form" found in 6 NYCRR Part 617. That document is used by NYSDEC to determine if an action may have a significant effect on the environment.

3.1 ZONING AND LAND USE

The Town of Angelica presently has no zoning ordinance. The current land use on and in the vicinity of the Hyland Landfill site would not be affected by the proposed increase in design disposal rate. With the exception of the landfill itself, most of the land area within one mile of the disposal area is forested, meadow, or brushland.

Hyland Landfill and the Town of Angelica have an on-going Host Community Agreement in place. This modification does not require any action or modification of that standing agreement.

3.2 WATER RESOURCES

Water resources on and in the vicinity of the Hyland Landfill would not be affected by the proposed increase in design disposal rate.

Leachate from the landfill is collected in tanks, and periodically transported by tanker truck to several Wastewater Treatment Plants for processing prior to discharge. Leachate generation rates will not be affected materially since the active fill area (the area that intercepts the precipitation that eventually becomes leachate) will not be increased.

Stormwater control facilities and procedures, as defined in the facility's "Stormwater Pollution Prevention Plan" (Reference 2), will not be affected by the proposed change.

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3.3 AIR RESOURCES

The major potential impacts on air resources are dust generation by construction activities and waste transport vehicles, and landfill gas generation. Construction activities would not be materially different from those currently occurring at the facility, although the intervals between construction of cells would be shortened due to the higher disposal rate.

With respect to waste transportation related dust, the full length of Herdman Road is now paved, and Peacock Hill Road has been upgraded to provide wider paved shoulders. Although some increase in dust generation may occur due to increased truck traffic, the use of on-site water trucks for dust control on unpaved roadways, and the improved surface conditions of Peacock Hill Road and Herdman Road should mitigate any dust problems.

The second potential air resource impact is related to landfill gases (mainly methane) generated by the decomposition of putrescible materials in the waste stream. It is expected that the disposal of larger quantities of waste within a given time period will result in an increased rate of landfill gas generation. To mitigate the impacts of landfill gas generation, Hyland has prepared a gas collection plan to control landfill gasses and the associated odors. In addition, this facility has considerable buffer distances between the disposal area and off-site receptors (at least one-half mile in all directions), which will mitigate potential impacts. A Title V Air Permit Application, incorporating the increased rate of projected peak air emissions, has been prepared and submitted to NYSDEC. Hyland will meet all applicable landfill gas control and air emissions permitting requirements established by the NYSDEC.

Air resources on and in the vicinity of the Hyland Landfill will not be significantly affected by the proposed increase in approved design capacity.

The addition of the recently permitted landfill gas to energy plant will have a positive effect in reducing Green House Gas emissions by destroying the methane collected at the facility, and generating energy without burning fossil fuels.

3.4 ECOLOGICAL RESOURCES

An "Ecological Evaluation" was included in the DSEIS prepared recently for the expansion of this facility (Reference 1) which confirmed the lack of any significant impacts from the facility, and the absence of any threatened or endangered species on the site. The rate of waste disposal was not a key factor in the ecological evaluation. In addition, the facility was not found to be located in or substantially contiguous to any "significant habitats". Ecological resources on and in the vicinity of the Hyland Landfill would therefore not be affected by the proposed increase in approved design capacity.

3.5 AGRICULTURAL LAND RESOURCES

Agricultural land resources on and in the vicinity of the Hyland Landfill would not be affected by the proposed increase in approved design capacity. The total area of ground surface impacted would not increase, and there are no active agricultural activities occurring in the vicinity of the disposal cells.

3.6 **AESTHETIC RESOURCES**

A visual impact evaluation was included in the DSEIS (Reference 1). This study determined that no off-site areas would be significantly visually impacted by the project. The change in disposal rate would not affect the conclusions of that evaluation. Aesthetic resources on and in the vicinity of the Hyland Landfill would therefore not be affected by the proposed increase in approved design capacity.

3.7 HISTORIC AND ARCHEOLOGICAL RESOURCES

An archeological assessment was included as part of the DSEIS (Reference 1). This assessment determined that there would be no significant impact on historic or archeological resources due to the construction and operation of the project. The change in disposal rate would not affect the conclusions of that study. Therefore, historic and archeological resources on and in the vicinity of the Hyland Landfill would not be affected by the proposed increase in approved design capacity.

3.8 OPEN SPACE AND RECREATION

Open space and recreation on and in the vicinity of the Hyland Landfill would not be affected by the proposed increase in approved design capacity. All land surrounding the landfill is privately owned by Hyland. Post closure plans for the facility are to maintain an open grassy area suitable for recreation or wildlife habitat. These plans will not be affected by the proposed change.

3.9 CRITICAL ENVIRONMENTAL AREAS

There are no critical environmental areas on or substantially contiguous to the Hyland Landfill.

3.10 TRANSPORTATION AND TRAFFIC

Traffic is one area of potential environmental impact where the proposed increase in design disposal rate will have a quantifiable effect. A 49% increase in disposal rate will increase the number of waste hauling trucks entering and leaving the site by a similar factor. The current average daily number of such trucks passing through the facility is approximately 65, with a peak hourly rate of 20 to 25. These rates could be expected to increase to approximately 97 trucks per day and 30 to 38 trucks per hour, if the proposed increase in disposal rate were fully utilized. Truck traffic related to construction activities would not increase on a daily or hourly basis, although the interval between periods of cell construction would be reduced.

Although an increase in disposal rate would result in an increase in truck traffic, it does not necessarily follow that the impact on traffic <u>conditions</u> would be significant. Information presented during the hearings held by NYSDEC relative to the modification of the Hyland permit to allow disposal of municipal waste, indicated that much higher levels of truck traffic could occur at this facility without significant degradation of traffic conditions. In the "Summary Hearing Report" (Reference 3) it was stated that even if truck traffic reached an average of 115 trips per day (a number suggested as possible by intervenors) the level of service of affected roadways would still be acceptable. To confirm and update these earlier findings, a traffic study was performed to evaluate the impacts of this proposed increase in

disposal rate. TVGA Consultants performed a traffic assessment in March 2007 (Reference 4), which determined that there would be no significant impact on the level of service of the intersections of the I-86 (formerly Routes 17) ramps and Peacock Hill Road, and at the intersection of Peacock Hill Road and Herdman Road.

It should also be noted that considerable upgrade work has been done on both Peacock Hill Road and Herdman Road, funded by Hyland, to improve the condition and safety of these access roads. A letter from Hunt Engineers (Reference 5) indicates that the reconstructed Peacock Hill road has the structural capacity to carry more than 400 trucks per day. In addition, waste hauling trucks have been prohibited from travelling through the Village of Angelica on the way to or from the facility. Finally, it should be noted that, after exiting Route 17, traffic travels along only 0.8 miles of public roadway (Peacock Hill Road) before entering the now private Herdman Road. Given these factors, it can be reasonably concluded that traffic conditions in the vicinity of the Hyland Landfill would not be significantly impacted by the proposed increase in design disposal rate.

3.11 ENERGY

The effect of the proposed increase in approved design capacity on energy consumption would be to increase the rate of consumption of fuels (gasoline and diesel) for hauling waste to the facility, and for handling (spreading, compaction, etc.) the waste at the facility. Looking at this issue from a more "global" point of view, however, it is very unlikely that the proposed change in approved design capacity at Hyland will increase the regional rate of waste generation. Therefore, increased hauling to Hyland will result in reduced hauling to other disposal facilities. In addition, given the economics of waste transport and disposal, there is an incentive to reduce hauling distances as a means of cost control. It is possible (though not certain) that additional disposal capacity at Hyland could reduce energy consumed in waste transportation, on a regional basis, due to these economic incentives.

Energy resources, on a regional basis, would not be significantly affected by the proposed increase in approved design capacity.

3.12 NOISE AND ODOR

The change in noise impact related to the proposed increase in disposal capacity would be largely due to the increased number of waste hauling trucks on access roads. Although the noise level per truck would not increase, the number of trucks would increase, potentially increasing the annoyance factor. In the DSEIS prepared for this facility (Reference 1) noise levels from waste hauling vehicles were assessed and determined to not have a significant impact on receptors due to the minimal number of sensitive receptors, the distance between the few residences along Peacock Hill Road and the roadway, and the intermittent nature of the traffic. These factors should continue to mitigate noise impacts. With respect to on-site operations generated noise, a combination of adequate buffer distances to the site property line, and noise easements, will continue to ensure compliance with applicable noise criteria in 6 NYCRR Part 360-1.14(p).

The potential odor impact is related to landfill gases generated by the decomposition of putrescible materials in the waste stream. However, the Hyland facility utilizes an active gas collection system and a flare to control and combust landfill gas. In the future an on-site landfill gas to energy plant will combust much of the gas generated, with odor control equivalent to the existing flare. Experience at this facility to date indicates no significant odor impact at off-site locations.

Noise and odor impacts would not be significantly affected by the proposed increase in approved design capacity.

3.13 PUBLIC HEALTH

No change in the type of waste disposed at the facility is being proposed (no hazardous wastes are disposed of at Hyland). Quantities of fuels and lubricants stored on-site will not increase, and the existing "Spill Prevention, Control and Countermeasure Plan" (Reference 6) will still be effective in reducing the risk associated with release of these materials. Public health in the vicinity of the Hyland Landfill would therefore not be affected by the proposed increase in approved design capacity.

3.14 GROWTH AND CHARACTER OF COMMUNITY

Growth and character of the community in the vicinity of the Hyland Landfill would not be affected by the proposed increase in approved design capacity. It is possible that some additional employment opportunities could be created due to the increased level of facility operation, but the impact would not be significant with respect to local economy, and certainly not adverse.

4.0 SUMMARY AND CONCLUSION

The preceding sections identify potential increases in traffic, noise, and dust generated by the facility, resulting from the proposed increase in approved design capacity. Although these increases may occur, the environmental impacts will not be significant.

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- 1. McMahon & Mann Consulting Engineers, P.C., <u>Hyland Facility Associates Landfill Expansion Project Draft Supplemental Environmental Impact Statement</u>, January 2006.
- 2. Sanborn, Head Engineering, P.C., <u>Hyland Facility Associates, Inc. Stormwater Pollution</u> Prevention Plan, 2006.
- 3. Frank Montecalvo, Administrative Law Judge, 1997, <u>Summary Hearing Report, Rulings</u>, and Order of Disposition, File No. 9-0232-00003/00002.
- 4. Letter from Kelly Thompson (TVGA), to Larry Shilling (Hyland Facility Associates), dated March 19, 2007. (attached)
- 5. William D. Roe P.E. (Hunt Engineers), May 14, 1997, Letter to Glenn Herdman regarding Peacock Hill Road reconstruction project.
- 6. McMahon & Mann Consulting Engineers, P.C., <u>Hyland Facility Associates, Inc. Spill</u> Prevention, Control and Countermeasure Plan, 2007.