GZA GeoEnvironmental, Inc. (GZA), on behalf of Wynn MA, LLC (Wynn MA), has prepared this revised Release Abatement Measure Plan Modification (RAM Plan Modification) to describe Response Actions pursuant to the Massachusetts Contingency Plan (MCP) that will be completed during the construction of the Wynn Boston Harbor (formerly known as the Wynn Resort in Everett) at the former Everett Staging Yard Disposal Site (the Site). This RAM Plan Modification was necessitated by the recent detection of asbestos in soil associated with demolition debris excavated during construction activities on the Everett Staging Yard portion of the Site. At the request of MassDEP, this revised RAM Plan Modification has been revised to include the Non-Traditional Asbestos Abatement Work Plan (NT Plan) prepared by Environmental Health & Engineering, Inc. (EH&E) of Needham, Massachusetts. The NT Plan has been submitted to MassDEP’s Bureau of Air and Waste (BAW) under separate cover; however, for ease of reference, the text of the NT Plan has been included in a separate section below. In addition, this revised RAM Plan Modification includes details regarding the handling and disposal of on-Site groundwater treatment system wastes.

EXECUTIVE SUMMARY

Construction activities at the Site are being conducted following the provisions in the RAM Plan previously submitted to MassDEP on May 3, 2016 (the May 3 RAM Plan). The May 3 RAM Plan details the Site history, Site releases, Site conditions and surrounding receptors, and RAM implementation. The provisions of the May 3 RAM Plan will stay in effect during subsequent construction activities at the Site, but will be modified as described in this revised RAM Plan Modification to address asbestos in soil as encountered at the Site. Asbestos has been detected in less than 10% of the soil samples tested to date; in all but a few cases, the asbestos is present at trace (<1%) quantities.

The asbestos encountered sporadically in some Site soils is associated with demolition debris mixed into fill material in certain areas of the Site handling, bulk loading, transport, and off-Site disposal of soils identified as containing asbestos.
BACKGROUND

The Site is identified by the Massachusetts Department of Environmental Protection (MassDEP) as Release Tracking Number (RTN) 3-13341. A Site Locus Map is presented as Figure 1, and the RAM Project area that will be subject to the provisions of this revised RAM Plan Modification are shown on Figure 2.

This revised RAM Plan Modification has been prepared in accordance with 310 CMR 40.0444 of the MCP, and with the Limitations in Appendix A. The revised RAM Plan Modification will be submitted electronically through MassDEP eDEP online filing system. A copy of the RAM transmittal form (BWSC-106) is included in Appendix B.

Construction activities at the Site have been conducted following provisions in the May 3rd RAM Plan. The May 3rd RAM Plan details the Site history, description of releases, Site conditions and surrounding receptors, and RAM implementation. The provisions of the May 3rd RAM Plan will stay in effect during subsequent construction activities at the Site and will be modified as described in this revised RAM Plan Modification to address asbestos in soil as encountered at the Site.

The NT Plan has been prepared by EH&E and is included within this revised RAM Plan Modification. The NT Plan provides procedures and health and safety controls for bulk loading, transport, and off-Site disposal of soils identified as containing asbestos. In addition, some of the information contained herein is derived from direction issued by MassDEP via email on October 19, 2016, relative to sampling of soils for asbestos testing.

The Site is a Public Involvement Plan (PIP) site under the MCP. As the modifications listed below do not substantially alter or expand the May 3rd RAM Plan, this submittal is not subject to an additional comment period per Section 40.1405(6)(e)(2) of the MCP.

PERSON ASSUMING RESPONSIBILITY FOR RAM PLAN MODIFICATION

The entity assuming responsibility for this RAM Plan Modification is Wynn MA, LLC. Information for Wynn MA’s contact person is provided below:

Mr. Robert DeSalvio  
President  
Wynn MA, LLC  
101 Station Landing, Suite 2200  
Medford, Massachusetts 02155  
Tel: 857-770-7801

RAM MODIFICATION IMPLEMENTATION

Objectives and Schedule

The objective of this revised RAM Plan Modification is to establish procedures that will be followed for sampling soil with visible demolition debris which could potentially contain asbestos and for managing, treating, and disposing of asbestos-impacted soil. The revised RAM Plan Modification also discusses air monitoring for asbestos that will be conducted around the perimeter of the Site and around work zones within the Site.
HEALTH AND SAFETY PROTOCOLS

Excavation work will be conducted by personnel trained to handle contaminated materials per Occupational Safety and Health Administration (OSHA) Regulation 29 CRF 1910.120. Procedures will be followed to protect the health and safety of all on-site workers and the community.

SOIL SAMPLING PROCEDURES

Cells where demolition debris is visible and could potentially contain asbestos will be sampled at a frequency of one four-point composite sample per 100 cubic yards of soil. In accordance with MassDEP’s email on October 19, 2016, soils that do not contain visible demolition debris will not be sampled. Soil samples will either be tested at an on-Site certified lab established by AEC laboratories (for real time analysis) and/or will be sent off-Site to AEC laboratories (located in Weymouth, MA), Proscience Laboratories (located in Woburn, MA), and CEI Laboratories (located in Cary, NC) or other MassDEP accredited asbestos testing laboratories.

Asbestos analyses will be forwarded to MassDEP within 7 days of GZA’s receipt. Analyses performed prior to Friday, October 21, 2016, were provided to MassDEP on Monday October 24, 2016, via email.

MANAGEMENT OF ASBESTOS-CONTAINING SOIL

In areas of the Site where asbestos is detected in the soil, the following management procedures will be implemented:

- During construction activities that have the potential to create dust, primarily excavation of soils identified as containing asbestos, the soil will be managed in such a way as to prevent the generation of visible dust and air monitoring will be performed as indicated in the Environmental Monitoring section below. If dust is being generated by a specific activity involving disturbance of soil, that activity will temporarily be halted until additional areas are wetted or misted with water. Temporary water lines or water trucks will be dedicated to each work area where soil with asbestos is disturbed.

- Excavated soil identified for off-Site disposal will either be live-loaded into tractor-trailers for off-Site disposal or will be stockpiled at the Stockpile and Soil Treatment Area (refer to Figures 2 and 3). To maintain constructability, soil may need to be temporarily stockpiled near the work area while waiting for truck transport to the stockpile location area or off-Site disposal. Stockpiles will be covered with GeoMatrix Permeable Fiber Mat or Gorilla Snot™ for dust control. In addition, polyethylene sheeting may be used to cover stockpiles; this sheeting will consist of 10-mil thick material that is ballasted over the stockpile. Stockpiles will be kept continuously covered. Active faces of stockpiles being worked will be covered at the end of each work day. The stockpile area will be identified as containing asbestos by placement of placards at the stockpile area. Soils identified as containing asbestos that will be live loaded will be managed in accordance with the NT Plan.

- Equipment and wheels of vehicles that contact asbestos-impacted soil will be decontaminated as described below, using a “wheel wash” prior to moving onto public streets.

- During on-Site truck transport of excavated soils identified as containing asbestos to the stockpile area, the truck loads will be dampened as necessary for transport. If this is not effective in preventing generation of dust, the trucks will be covered with tarp to minimize potential dust generation during on-Site transport.
DUST CONTROL

Dust control will be performed by the Contractor during excavation, stockpiling, and all other earthwork operations at the Site. The Contractor will provide all required measures to control the generation of dust from Site activities and to prevent off-Site dust migration. Dust suppression techniques such as wetting, misting soil covering, ensuring the material is damp when excavated, loaded, and transported, strategic placement of wind barriers, and/or the application of temporary covering agents will be employed as necessary to reduce dust levels. Wetting techniques will be controlled so as not to cause runoff and soil erosion. Dust suppression techniques will be modified or enhanced if on-Site dust is visually observed or if monitoring indicates exceedances of maximum allowable dust levels in accordance with 310 CMR 6.00 or for the airborne asbestos levels.

DECONTAMINATION OF EQUIPMENT AND VEHICLES

Vehicles and other equipment used during soil disturbance in areas where asbestos is detected in soil will be decontaminated prior to leaving the Site (exclusion zone). One or more decontamination (decon) facilities will be constructed utilizing two layers of 0.45 mil rubber roof membrane sufficient in length and width to accommodate the cleaning of all heavy equipment, trailers and dumpsters prior to their exiting identified asbestos work zone areas. The rubber membrane will be formed over haybales and secured to the ground to form a damming barrier so that all wash water can be effectively collected to be processed through a 5-micron filtering system, either at the individual decon facilities or in the on-Site treatment plant. Following filtering, this water will be infiltrated into the on-site soils using recharge pits. If necessary, the water (after filtration) may be pumped to the currently operating on-Site water treatment system for additional treatment prior to discharge. Refer to Figure 2 for the proposed layout of work zones and decontamination areas.

ENVIRONMENTAL MONITORING PLAN

Dust monitoring around the entire perimeter of the Project Area will continue as detailed in the May 3rd RAM Plan. In addition, air sampling stations for asbestos sampling will be established at the four perimeter stations and four interior locations as shown on Figure 3. Four sampling stations at each compass direction will also be established adjacent to each work location where asbestos-impacted soil will be disturbed.

Samples from the perimeter, interior and work locations will be collected and analyzed as follows:

- High flow pumps will be used to collect air samples with sufficient air volumes to achieve detection limits below 0.010 fibers per cubic centimeter (f/cc). During full workdays, two sets of samples will be collected around each location: one set for approximately half of the workday (morning) and a second set of the remainder of the workday (afternoon). These work zone air samples will be appropriately spaced and located proximate to each area where the above described activities are being performed.

- Samples will be analyzed for total airborne fibers, including but not specific to asbestos, using Phase Contrast Microscopy (PCM) on an immediate turn-around time basis. Results from the first set of samples will be available quickly enough so that corrective actions, if warranted, can be implemented the same workday. Results from the second set will be available such that corrective actions, if warranted, can be implemented by the morning of the next workday.

Any individual perimeter air sampling result that meets or exceeds 0.010 f/cc will result in the temporary stoppage of dust generating activities in the work area and the reevaluation and improvement of work practices, engineering controls, and dust/fibers suppression methods, as warranted.
Air sampling resulting will be provided on a daily basis to the MassDEP Northeast Regional Office (NERO) Asbestos Program at NERO.asbestos@state.ma.us. Notification will also be provided immediately to the MassDEP upon receipt of results meeting or exceeding 0.010 f/cc.

Air samples will be collected by LBP Solutions or other acceptable companies. All samples will be analyzed via PCM on site by LBP personnel (or personnel with a similar acceptable company) or by a laboratory certified by the Massachusetts Department of Labor Standards (DLS), Division of Occupations Safety for PCM analysis.

During disturbance of asbestos-containing material, GZA will monitor for dust adjacent to the work area using a Thermo Scientific MIE pDR-1000 DataRam Dust Monitor (total dust meter) and a Thermo Scientific MIE pDR-1500 (PM10 dust meter). If dust or air-borne asbestos levels exceed the action level specified in the Contractor’s Health and Safety Plan, the Contractor will modify its dust-suppression techniques as necessary to maintain a permissible level of dust.

**OFF-SITE SOIL DISPOSAL**

Bulk loading, transportation, and off-Site disposal of soils identified as containing asbestos will be performed in accordance with the NT Plan.

The following facilities are currently proposed to receive soils identified as containing asbestos:

- **Waste Management Crossroads Landfill**, Norridgewock, Maine. This facility will be used for soils that do not require treatment for TCLP lead and/or arsenic and that contain asbestos at concentrations above 1%. Soils will be transported via tractor trailer to this facility.

- **Waste Management Turnkey (TREE) Landfill**, Rochester, New Hampshire. This facility will be used for soils that require treatment for TCLP lead and/or arsenic and that contain asbestos at concentrations both above and below 1%. Soils will be transported via tractor trailer to this facility.

- **Waste Industries Taylor County Disposal Landfill**, Georgia. This facility will be used for soils that do or do not require treatment for TCLP lead and/or arsenic and that contain less than 1% asbestos concentrations. Soils will be transported via railroad to this facility.

- **Allied Niagara Landfill**, Niagara Falls, New York. This facility will be used for soils that require treatment for TCLP lead and/or arsenic and that contain asbestos at concentrations equal to or greater than 1%. These soils will be transported via tractor trailer.

Please note that soils transported via tractor-trailer or railroad will be placed inside sealable liner systems. Soils disposed of off-Site will be transported under a MassDEP form BWSC 112, Bill of Lading (BOL).

**TREATMENT OF SOIL FOR TCLP EXCEEDANCES**

Soil that precharacterization testing has shown to exceed TCLP levels for lead and arsenic is currently being treated on-Site to render it non-hazardous before it is shipped for off-Site disposal. If testing shows that the soil to be treated contains asbestos, it will be constantly wetted during the treatment process and it will be covered with GeoMatrix Permeable Fiber Mat or Gorilla Snot™ when stored in the Stockpile and Treatment area before it is removed from the Site.

The treatment chemical being used to stabilize the TCLP soils is a liquid-based agent, the SDS for which is attached to this revised RAM Plan Modification in Appendix C. As described in Appendix E of the May 3rd RAM Plan, soils classified as
Hazardous Material B require treatment for TCLP lead and/or arsenic to facilitate off-Site disposal. Treatment will be performed by uniform spray application of the treatment liquid. A dedicated piece of earthmoving equipment will work within the treatment area and move soil during soil treatment. This equipment will be decontaminated in accordance with the procedures outlined herein prior to leaving the treatment area and/or handling soils that do not contain asbestos.

HANDLING AND DISPOSAL OF ON-SITE GROUNDWATER TREATMENT SYSTEM WASTES

As described in the May 3 RAM Plan, groundwater from excavation dewatering operations and runoff into the excavation are pumped through an on-Site treatment system and discharged under an RGP NOI filed on May 25, 2016. Waste sludge generated during the operation of the water treatment system (backwashing materials, etc.) will be pumped to a frac tank to allow for fines to settle. After settling, the water will be pumped from the frac tank back through the treatment system. Solid materials (sediment) within the frac tank will placed within a bermed area to allow for remaining water to exfiltrate from the sediment and infiltrate back into the Site. After exfiltration, the sediment will be added to the soils undergoing TCLP treatment and disposed of along with these soils under the provisions of the May 3 RAM Plan. Waste carbon from the treatment system will be transported off-site for regeneration and recycling or disposal. To date there has not been any carbon breakthrough. The carbon in the treatment system has been changed out once. Carbon in the primary filter was replaced on October 19, 2016; carbon from the secondary filter was replaced on October 20. Resin replacement has not been required.

Backwashing of the water treatment system’s carbon filters will be conducted when there is a pressure differential from the influent to the effluent in any of the media vessels of more than 10 PSI. This is currently occurring approximately once every 4 to 5 days of treatment plant operation. Backwashing is completed by reversing the flow direction at a rate of 1.25 times the maximum typical flowrate for 0.5-1 hour per vessel (or until the backwash water is clear). Backwashing will be conducted using a dedicated diesel pump and treated effluent water; the treated effluent is collected by redirecting the discharge flow from the water treatment system to a dedicated 21,000-gallon backwash storage tank. When a backwash event occurs, water will be pumped from the treated effluent storage tank through the targeted media vessel to one of two backwash frac tanks. Backwashing will continue as long as necessary or until storage capacity is no longer available. Backwash water will be allowed to settle and the decant from the frac tanks will be pumped back through the water treatment system. Sludge material removed from the backwash frac tanks will be treated with the TCLP soils as discussed above. Each carbon filter will be backwashed with approximately 15,000 gallons of water; less than 500 gallons of sludge is generated.

Within the next week, the treatment system will be augmented with a secondary treatment train capable of treating up to 100 gallons per minute that will be used for the treatment of water generated from Site activities other than water from the main garage excavation dewatering system. Wastewater from tieback operations will be pumped to the secondary system due to the high concentration of polymers in that waste water stream. The secondary system will allow the TSS in the tieback waste stream to settle out, be treated, and discharged. Refer to the attached treatment system information in Appendix E that was provided by the Contractor for more details on this secondary treatment system.

Once the second system is operational, it is anticipated that the primary treatment system will need to be backwashed approximately every two weeks and the carbon will not need to be replaced again. The treatment systems are/will be operated by a licensed operator.

As previously noted, wastewater from the decon facilities at the Site will be processed through 5-micron filter bags and then either infiltrated into on-site soils, or directed through the on-Site treatment system. Used 5-micron filtration bags will be disposed of as asbestos-containing material.
LSP SEAL AND SIGNATURE (310 CMR 40.0444(1)(G))

The seal and signature of the Licensed Site Professional (LSP) for this revised RAM Plan Modification (Lawrence Feldman, LSP #8107) are provided on the attached transmittal form in Appendix B.

NT PLAN

The following sections contain the text of the NT Plan, as prepared by EH&E. EH&E prepared this revised NT Plan describing the measures to be implemented for the bulk loading, packaging, transport, and offsite disposal of soils that are asbestos-contaminated waste materials (ACWMs) during the Project. Figures and appendices from the NT Plan are included as Appendix D.

DOCUMENTATION

MassDEP Form AQ 36 Application for Non-Traditional Asbestos Abatement Work Practice Approval has already been submitted with this NT Plan along with the $600 fee (refer to Appendix A). After approval of this NT Plan, the contractor will file Asbestos Notification Form ANF-001 to the MassDEP Northeastern Regional Office (NERO) Asbestos Program. The contractor will not proceed with bulk loading or disposal of ACWMs before 10 business days after submitting ANF 001, unless a waiver to this waiting period is obtained from the MassDEP.

The contractor is New Roads Environmental Services, LLC (New Roads). New Roads will perform all asbestos-related activities required under this NT Plan, including waste packaging and vehicle decontamination. J. Derenzo Company will perform all earthwork (excavating/loading). Project monitoring and perimeter air sampling required by this plan will be performed by LBP Solutions, LLC (LBP).

MATERIALS MANAGED UNDER THIS PLAN

Asbestos-contaminated materials excavated during the Project that are designated for offsite disposal will be bulk loaded and disposed of in accordance with this NT Plan; the packaging, transport, storage, disposal, and waste shipment record requirements for ACWMs outlined in 310 CMR 7.15 (15-18);¹ and the RAM Plan Modification dated November 16, 2016. Dust control, decontamination, and air monitoring will be conducted as outlined in this NT Plan. Building materials that are asbestos-containing materials and encountered during excavation will be handled in accordance with traditional asbestos abatement methods in compliance with federal, state, and local regulations.

The determination of what excavated materials will be disposed of offsite will be made by GZA in accordance with the RAM Plan. Although testing is ongoing, samples from less than 10% of the precharacterization grids with visible debris tested by GZA to date (per MassDEP requirements transmitted via email on October 19, 2016) have detectable asbestos in the soil. The figures in Appendix B of the NT Plan show the current status of asbestos in soil testing. All excess ACWM soil excavated on the Project will be disposed of off site. The volume of ACWMs to be disposed of under this NT Plan is currently estimated at 20,000 tons (approximately 12,000 cubic yards).

The site plans in Appendix C shows approximate bulk loading, soil management, and stockpiling locations (locations shown may be subject to modification in the field based on conditions encountered). In areas of the Site where asbestos is

¹ MassDEP. 310 CMR 7.15. Air Pollution Control. Code of Massachusetts Regulations. Title 310, Part 7, Section 15, Asbestos. Boston, MA: Commonwealth of Massachusetts, Department of Environmental Protection.
detected in the soil, the following management procedures will be implemented in accordance with the RAM Plan Modification dated November 16, 2016:

- **During construction activities that have the potential to create dust, primarily excavation of soils identified as containing asbestos, the soil will be managed in such a way as to prevent the generation of visible dust and air monitoring will be performed. If dust is being generated by a specific activity involving disturbance of soil that activity will temporarily be halted until additional areas are wetted or misted with water. Temporary water lines or water trucks will be dedicated to each work area where soil with asbestos is disturbed.**

- **Excavated soil identified for off-Site disposal will either be live-loaded into tractor-trailers for off-Site disposal or will be stockpiled at the Stockpile and Soil Treatment Area. To maintain constructability, soil may need to be temporarily stockpiled near the work area while waiting for truck transport to the stockpile location area or off-Site disposal. Stockpiles will be covered with GeoMatrix Permeable Fiber Mat or Gorilla Snot™ for dust control. In addition polyethylene sheeting may be used to cover stockpiles. If necessary, polyethylene sheeting will consist of 10-mil thick material that is ballasted over the stockpile. Stockpiles will be kept continuously covered. Active faces of stockpiles being worked will be covered at the end of each work day. The stockpile area will be identified as containing asbestos by placement of placards at the stockpile area.**

- **Equipment and wheels of vehicles that contact asbestos-impacted soil will be decontaminated using a “wheel wash” prior to moving onto public streets.**

- **During on-Site truck transport of excavated soils identified as containing asbestos to the stockpile areas, the truck loads will be dampened as necessary for transport. If this is not effective in preventing generation of dust, the trucks will be covered with tarps to minimize potential dust generation during on-Site transport.**

Soil that is contaminated with asbestos and lead will also be managed in accordance with the RAM Plan Modification dated November 16, 2016 (Page 5). There are currently approximately 4,900 cubic yards of ACWM soils stockpiled and treated or awaiting treatment in accordance with the following protocol:

- **Soil that precharacterization testing has shown to exceed TCLP levels for lead and arsenic is currently being treated on-Site to render it non-hazardous before it is shipped for off-Site disposal. If testing shows that the soil to be treated contains asbestos, it will be constantly wetted during the treatment process and it will be covered with GeoMatrix Permeable Fiber Mat or Gorilla Snot™ when stored in the Stockpile and Treatment area before it is removed from the project Site.**

- **The treatment chemical being used to stabilize soils is a liquid-based agent, the SDS for which is attached to this RAM Plan Modification in Appendix C. As described in Appendix E of the May 3, 2016 RAM Plan, soils classified as Hazardous Material B require treatment for TCLP lead and/or arsenic to facilitate off-Site disposal. Treatment will be performed by uniform spray application of the treatment liquid. A dedicated piece of earthmoving equipment will work within the treatment area and move soil during soil treatment. This equipment will be decontaminated in accordance with the procedures outlined herein prior to leaving the treatment area and/or handling soils that do not contain asbestos.**
DUST CONTROL

Dust control will be implemented by the contractor during all ACWM bulk loading operations at the Project in accordance with the provisions of the RAM Plan described above. The contractor will provide all required measures to control the generation of dust from activities and to prevent visible dust emissions will be employed as necessary to control dust levels. Wetting techniques will be used, including the use of direct-sprayed water in active work zones. Clean (city) water sources will be used for dust control. Dust control will occur in accordance with the RAM Plan Modification dated November 16, 2016.

- Dust control will be performed by the Contractor during excavation, stockpiling, and all other earthwork operations at the Site. The Contractor will provide all required measures to control the generation of dust from Site activities and to prevent off-Site dust migration. Dust suppression techniques such as wetting, misting soil covering, ensuring the material is damp when excavated, loaded, and transported, strategic placement of wind barriers, and/or the application of temporary covering agents will be employed as necessary to reduce dust levels. Wetting techniques will be controlled so as not to cause runoff and soil erosion. Dust suppression techniques will be modified or enhanced if on-Site dust is visually observed or if monitoring indicates exceedances of maximum allowable dust levels in accordance with 310 CMR 6.00 or for the air-borne asbestos levels.

If visible dust is observed in an area of ACWM soils, or if monitoring indicates exceedances of the airborne fiber levels described below, work will temporarily halt in the applicable work zone, the MassDEP will be notified immediately, and dust suppression techniques will be modified or enhanced. Visible emissions from non-suspect sources such as vehicle exhausts, road dust from uncontaminated construction areas, pollen, etc. will not be considered cause for work stoppage.

DECONTAMINATION

After being loaded with ACWMs, road vehicles will pass through designated vehicle decontamination areas at the entrance/exit to the work area prior to entering areas accessible to the public. Railcars will not contact the ground. A vehicle wash pad will be established in each work zone. The Contractor will use the wash pad for the decontamination of equipment that contacts potentially asbestos contaminated materials. The vehicle wash pad will be constructed in accordance with the RAM Plan Modification dated November 16, 2016:

- Vehicles and other equipment used during soil disturbance in areas where asbestos is detected in soil will be decontaminated prior to leaving the Site (exclusion zone). One or more decontamination (decon) facilities will be constructed utilizing two layers of 0.45 mil rubber roof membrane sufficient in length and width to accommodate the cleaning of all heavy equipment, trailers and dumpsters prior to their exiting identified asbestos work zone areas. The rubber membrane will be formed over haybales and secured to the ground to form a damming barrier so that all wash water can be effectively collected to be processed through a 5-micron filtering system, either at the individual decon facilities or in the on-Site treatment plant. Following filtering, this water will be infiltrated into the on-site soils using recharge pits. If necessary, the water (after filtration) may be pumped to the currently operating on-Site water treatment system for additional treatment prior to discharge.

No mechanical processing (screening, crushing, milling) of ACWM will occur. Nonporous materials impacted by potentially asbestos-contaminated soils (e.g., onsite granite, curbing, benches, and revetment stones), and designated for offsite disposal, will be disposed of as ACWM, unless these materials are culled and decontaminated. The equipment decontamination facilities in the work areas will be used for this cleaning unless sequencing requires an additional facility,
which will be constructed in the same manner as the equipment decontamination facility. Nonporous material intended for disposal as non-asbestos waste will be cleaned and all adhered soil removed.

**WORK ZONE PERIMETER ASBESTOS MONITORING**

Air samples will be collected around the perimeter of ACWM bulk loading and, as described in the RAM Plan Modification, excavating, handling, and stockpiling operations for the Project:

- **Area air samples will be collected in at least four locations around each operation.** High flow pumps will be used to collect air samples with sufficient air volumes to achieve detection limits below 0.010 fibers per cubic centimeter (f/cc). During full workdays, two sets of samples will be collected around each location: one set for approximately half of the workday (morning) and a second set for the remainder of the workday (afternoon).

- **Samples will be analyzed for total airborne fibers, including but not specific to asbestos, using Phase Contrast Microscopy (PCM) on an immediate turn-around time basis.** Results from the first set of samples will be available quickly enough that corrective actions, if warranted, can be implemented the same workday. Results from the second set will be available such that corrective actions, if warranted, can be implemented by the morning of the next workday.

- **Any individual perimeter air sampling result that meets or exceeds 0.010 f/cc potentially related to Project work will result in the temporary stoppage of dust generating activities in the work area and the re-evaluation and improvement of work practices, engineering controls, and dust/fiber suppression methods, as warranted.**

- **Air sampling results will be provided on a daily basis to the MassDEP NERO Asbestos Program at NERO.asbestos@state.ma.us.** Notification will also be provided immediately to the MassDEP upon receipt of results meeting or exceeding 0.010 f/cc.

- **Air samples will be collected by LBP and analyzed via PCM onsite by LBP personnel.** Prior to commencing activities relative to excavation, handling, hauling, stockpiling, treating, and/or bulk loading soils that contain asbestos, the Contractor and GZA’s sub-consultant performing work zone monitoring (LBP) will coordinate the areas where activities will be performed and establish at least four high-flow pumps for collection of air samples in accordance with this plan. These work zone air samples will be appropriately spaced and located proximate to each area where the above described activities are being performed.

Additional air sampling will be performed in a consistent manner at four permanent air monitoring stations located at the perimeter of the site as described in the RAM Plan.

**BULK LOADING**

The contractor is responsible for managing potential ACWMs designated for offsite disposal on the Project in accordance with this NT Plan; with the packaging, transport, storage, disposal, and waste shipment record requirements for ACWMs outlined in 310 CMR 7.15 (15-18); and with other applicable federal, state, and local requirements. All work activities will also be conducted in accordance with the contractor site-specific health and safety plans. Bulk loading shall occur only in designated and controlled Project work areas as described below.
Bulk Loading for Rail Transport

ACWM designated for offsite disposal will be bulk loaded into railcars lined with one 6-mil RailPac polyethylene bag inside a 14-mil RailPac polyethylene bag, which are form-fitted for railcars. Once filled to acceptable load capacity, the 6-mil bags will be overlapped and sealed individually utilizing spray glue and duct tape. The 14-mil liners are made of woven polyethylene for durability and tear/puncture resistance, and are approved under current railroad regulations for this type of material. Once filled to acceptable capacity, the 14-mil bags will be zipped, buckled and strapped. Appendix D includes RailPac product data sheets, instructions for use, as well as a statement from the manufacturer regarding their leak-proof properties. Appropriate labels will be adhered to the bags including asbestos warning labels and waste generator labels. An asphalt access road will be installed along the rail tracks to facilitate loading of rail cars.

It is anticipated that the majority of offsite disposal of ACWM with less than 1% asbestos will be via railway transport, although some soils with less than 1% asbestos may be transported on roadways, depending on schedule.

Bulk Loading for Road Transport

ACWM designated for offsite disposal will be bulk loaded into trailers/dumpsters that have been lined with two 10-mil bladder bags. Once filled to acceptable load capacity, bladder bags will be overlapped and sealed individually utilizing spray glue and duct tape. Appropriate labels will be adhered to the bladder bags including asbestos warning labels and waste generator labels. The trucks or roll-off dumpsters will be in good condition with no holes or rusted out areas and with tailgates that close tightly and are lockable. U.S. Department of Transportation (DOT) Class 9 placards (2212) will be affixed to all exterior sides of each dumpster/truck onsite.

All ACWM with equal to or greater than 1% asbestos will be handled and disposed of through road transport. Current test results indicate the presence of only very limited volumes of soil containing greater than 1% asbestos (approximately 700 cubic yards). Only limited amounts of ACWM with less than 1% asbestos will be handled through road transport.

TRANSPORT

Contractor will transport ACWM generated during the Project and designated for offsite disposal to a landfill permitted to accept the waste. With each waste shipment, the contractor will complete a waste shipment record (WSR) with all information required by 40 CFR 61.150 and 310 CMR 7.15(18). The contractor will provide the owner with WSR within 30 days following waste disposal. The contractor shall submit copies of WSRs to MassDEP NERO on a daily basis via NERO.asbestos@state.ma.us. All packaged waste materials will include warning labels, waste generator labels, and waste shipment records as required by applicable regulations, including 310 CMR 7.15(15). Labels shall be printed in letters of sufficient size and contrast so as to be readily visible and legible.

Roadways

A DOT licensed hauler will transport and dispose of the waste at a landfill permitted to accept asbestos waste. Each truck shall display the orange placard indicating the transport of asbestos-containing materials (Special Waste). The contractor shall ensure that no water leaks from the waste trailers, open top roll-offs, or the asbestos contractor’s transport vehicles while onsite or during transport and that the waste is covered at all times during transport.
Once the railcar is filled, transportation shall be handled pursuant to U.S. Interstate Commerce Law and in compliance with Federal Railroad Regulations and Rail Tariffs. The contractor will ensure that no water leaks from the waste container on site or during transport to the landfill, and that the waste is covered at all times during transport.

**DISPOSAL FACILITIES**

Contractor will dispose of all ACWM generated during the Project and designated for offsite disposal in a landfill permitted to accept the waste. The following facilities will receive soils identified as containing asbestos in accordance with the requirements of the RAM Plan Modification dated November 16, 2016:

- **Waste Management Crossroads Landfill, Norridgewock, Maine.** This facility will be used for soils that do not require treatment for TCLP lead and/or arsenic and that contain asbestos at concentrations above 1%. Soils will be transported via tractor trailer to this facility.

- **Waste Management Turnkey (TREE) Landfill, Rochester, New Hampshire.** This facility will be used for soils that require treatment for TCLP lead and/or arsenic and that contain asbestos at concentrations both above and below 1%. Soils will be transported via tractor trailer to this facility.

- **Waste Industries Taylor County Disposal Landfill, Georgia.** This facility will be used for soils that do or do not require treatment for TCLP lead and/or arsenic and that contain less than 1% asbestos concentrations. Soils will be transported via railroad to this facility.

- **Allied Niagara Landfill, Niagara Falls, New York.** This facility will be used for soils that do require treatment for TCLP lead and/or arsenic and that contain asbestos at concentrations equal to or greater than 1%. These soils will be transported via tractor trailer.

If you should require any further information concerning the planned RAM activities, please do not hesitate to contact the undersigned at (781) 278-3700.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Matthew M. Smith, LSP
Associate Principal

William R. Norman, LSP
Consultant/Reviewer

Lawrence Feldman, LSP
Senior Principal
Attachments:

Figure 1  Site Locus
Figure 2  Asbestos Exclusion Zone Figure
Figure 3  Air Monitoring Figure
Appendix A  Limitations
Appendix B  Transmittal Forms BWSC106
Appendix C  SDS for Soil Treatment
Appendix D  NT Plan and Attachments
Appendix E  Secondary Treatment System Information Provided by J. Derenzo Corporation

J:\170,000-179,999\171521\171521-52.MPS\Construction RAM Plan Modification\Wynn Construction RAM Plan Modification - 11-16-16 - FINAL.docx
LEGEND:
- Denotes approximate location of perimeter (Airlogics) or construction zone (CZ) air monitoring stations
- Denotes approximate location of soil stockpile and soil treatment area.

SOURCE:
1. THE BASE MAP WAS DEVELOPED FROM ELECTRONIC FILES PROVIDED BY FELDMAN, PROFESSIONAL LAND SURVEYORS ON MARCH 20, 2015, CAD FILE: 14517-EX-DRAFT-3-20-2015.DWG.
Appendix A – Limitations
USE OF REPORT

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the agreement, for any use, without our prior written permission, shall be at that party’s sole risk, and without any liability to GZA.

STANDARD OF CARE

2. GZA’s findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Proposal for Services and/or Report and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).

3. GZA’s services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by GZA during its study. Additionally, GZA makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a local, state or federal agency.

4. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

SUBSURFACE CONDITIONS

5. The generalized soil profile(s) provided in our Report are based on widely-spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs. The nature and extent of variations between these explorations may not become evident until further exploration or construction. If variations or other latent conditions then become evident, it will be necessary to reevaluate the conclusions and recommendations of this report.

6. Water level readings have been made, as described in this Report, in and monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this report. Fluctuations in the level of the groundwater however occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The observed water table may be other than indicated in the Report.

COMPLIANCE WITH CODES AND REGULATIONS

7. We used reasonable care in identifying and interpreting applicable codes and regulations necessary to execute our scope of work. These codes and regulations are subject to various, and possibly contradictory, interpretations. Interpretations and compliance with codes and regulations by other parties is beyond our control.
SCREENING AND ANALYTICAL TESTING

8. GZA collected environmental samples at the locations identified in the Report. These samples were analyzed for the specific parameters identified in the report. Additional constituents, for which analyses were not conducted, may be present in soil, groundwater, surface water, sediment and/or air. Future Site activities and uses may result in a requirement for additional testing.

9. Our interpretation of field screening and laboratory data is presented in the Report. Unless otherwise noted, we relied upon the laboratory’s QA/QC program to validate these data.

10. Variations in the types and concentrations of contaminants observed at a given location or time may occur due to release mechanisms, disposal practices, changes in flow paths, and/or the influence of various physical, chemical, biological or radiological processes. Subsequently observed concentrations may be other than indicated in the Report.

INTERPRETATION OF DATA

11. Our opinions are based on available information as described in the Report, and on our professional judgment. Additional observations made over time, and/or space, may not support the opinions provided in the Report.

ADDITIONAL INFORMATION

12. In the event that the Client or others authorized to use this report obtain additional information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to GZA’s attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.

ADDITIONAL SERVICES

13. GZA recommends that we be retained to provide services during any future investigations, design, implementation activities, construction, and/or property development/ redevelopment at the Site. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.

CONCEPTUAL SITE MODEL

14. Our opinions were developed, in part, based upon a comparison of site data to conditions anticipated within our Conceptual Site Model (CSM). The CSM is based on available information, and professional judgment. There are rarely sufficient data to develop a unique CSM. Therefore observations over time, and/or space, may vary from those depicted in the CSM provided in this report. In addition, the CSM should be evaluated and refined (as appropriate) whenever significant new information and/or data is obtained.

RISK CHARACTERIZATION

15. Our risk evaluation was performed in accordance with generally accepted practices of appropriate Federal and/or state regulatory agencies, and of other consultants undertaking similar studies at the same time, for similar purposes, and under similar circumstances. The findings of the risk evaluation are dependent on the numerous assumptions and uncertainties inherent in the risk characterization process. Sources of the uncertainty may include Site conditions; Site use; the nature, extent, concentration and distribution of contaminants; and the available toxicity and/or health/risk based regulatory information. Consequently, the findings of the risk characterization are not an absolute
characterization of actual risks; but rather serve to highlight potential incremental risks associated with activities indicated in the Report. Actual risks may be other than indicated in the Report.
Appendix B – Transmittal Form BWSC106
**A. SITE LOCATION:**

1. Site Name/Location Aid: EVERETT STAGING YARD

2. Street Address: 1 HORIZON WAY

3. City/Town: EVERETT

4. Zip Code: 021490000

5. Check here if the disposal site that is the source of the release is Tier Classified. Check the current Tier Classification Category.

   - a. Tier I
   - b. Tier ID
   - c. Tier II

**B. THIS FORM IS BEING USED TO:** (check all that apply)

1. List Submittal Date of Initial RAM Plan (if previously submitted): 5/3/2016


   - a. Check here if the RAM is being conducted as part of the construction of a permanent structure. If checked, you must specify what type of permanent structure is to be erected in or in the immediate vicinity of the area where the RAM is to be conducted.

   b. Specify type of permanent structure: (check all that apply)
      - i. School
      - ii. Residential
      - iii. Commercial
      - iv. Industrial
      - v. Other

   Specify:


5. Submit a Remedial Monitoring Report. (This report can only be submitted through eDEP, concurrent with a RAM Status Report.)

   a. Type of Report: (check one)
      - i. Initial Report
      - ii. Interim Report
      - iii. Final Report

   b. Frequency of Submittal:
      - i. A Remedial Monitoring Report(s) submitted every six months, concurrent with a RAM Status Report.

   c. Number of Remedial Systems and/or Monitoring Programs:

   A separate BWSC106A, RAM Remedial Monitoring Report, must be filled out for each Remedial System and/or Monitoring Program addressed by this transmittal form.

6. Submit a RAM Completion Statement.

7. Submit a Revised RAM Completion Statement.

8. Provide Additional RTNs:

   - a. Check here if this RAM Submittal covers additional Release Tracking Numbers (RTNs). RTNs that have been previously linked to a Primary Tier Classified RTN do not need to be listed here. This section is intended to allow a RAM to cover more than one unclassified RTN and not show permanent linkage to a Primary Tier Classified RTN.

   b. Provide the additional Release Tracking Number(s) covered by this RAM Submittal.

   3 - 17760
   3 - 1850

9. Include in the RAM Plan or Modified RAM Plan a Plan for the Application of Remedial Additives near a sensitive receptor, pursuant to 310 CMR 40.0046(3).

   **(All sections of this transmittal form must be filled out unless otherwise noted above)**
C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT RAM:

1. Media Impacted and Receptors Affected: (check all that apply)  
   - a. Paved Surface  
   - b. Basement  
   - c. School  
   - d. Public Water Supply  
   - e. Surface Water  
   - f. Zone 2  
   - g. Private Well  
   - h. Residence  
   - i. Soil  
   - j. Ground Water  
   - k. Sediments  
   - l. Wetland  
   - m. Storm Drain  
   - n. Indoor Air  
   - o. Air  
   - p. Soil Gas  
   - q. Sub-Slab Soil Gas  
   - r. Critical Exposure Pathway  
   - s. NAPL  
   - t. Unknown  
   - u. Others Specify:  

2. Sources of the Release or TOR: (check all that apply)  
   - a. Transformer  
   - b. Fuel Tank  
   - c. Pipe  
   - d. OHM Delivery  
   - e. AST  
   - f. Drums  
   - g. Tanker Truck  
   - h. Hose  
   - i. Line  
   - j. UST  
   - k. Vehicle  
   - l. Boat/Vessel  
   - m. Unknown  
   - n. Other: HISTORIC FILL AND MANUFACTURING  

3. Type of Release or TOR: (check all that apply)  
   - a. Dumping  
   - b. Fire  
   - c. AST Removal  
   - d. Overfill  
   - e. Rupture  
   - f. Vehicle Accident  
   - g. Leak  
   - h. Spill  
   - i. Test Failure  
   - j. TOR Only  
   - k. UST Removal  
   - l. Unknown  
   - m. Other: HISTORIC FILL AND MANUFACTURING  

4. Identify Oils and Hazardous Materials Released: (check all that apply)  
   - a. Oils  
   - b. Chlorinated Solvents  
   - c. Heavy  
   - d. Others Specify: PCBS, POTENTIAL ASBESTOS-CONTAINING MATERIAL Metals  

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply, for volumes list cumulative amounts)  

- 1. Assessment and/or Monitoring Only  
- 2. Temporary Covers or Caps  
- 3. Deployment of Absorbent or Containment Materials  
- 4. Temporary Water Supplies  
- 5. Structure Venting System/HVAC Modification System  
- 6. Temporary Evacuation or Relocation of Residents  
- 7. Product or NAPL Recovery  
- 8. Fencing and Sign Posting  
- 9. Groundwater Treatment Systems  
- 10. Soil Vapor Extraction  
- 11. Remedial Additives  
- 12. Air Sparging  
- 13. Active Exposure Pathway Mitigation System  
- 14. Passive Exposure Pathway Mitigation System  
- 15. Monitored Natural Attenuation  
- 16. In-Situ Chemical Oxidation
D. DESCRIPTION OF RESPONSE ACTIONS (cont.): (check all that apply, for volumes list cumulative amounts)

☐ 17. Excavation of Contaminated Soils
   a. Re-use, Recycling or Treatment
      ☐ i. On Site
      ☐ ii. Off Site
      Estimated volume in cubic yards
         ____________________________

   iia. Receiving Facility: ____________________________
       Town: ____________________________
       State: ____________________________
   iib. Receiving Facility: ____________________________
       Town: ____________________________
       State: ____________________________
   iii. Describe:

   ☐ b. Store
      ☐ i. On Site
      ☐ ii. Off Site
      Estimated volume in cubic yards
         ____________________________

   iia. Receiving Facility: ____________________________
       Town: ____________________________
       State: ____________________________
   iib. Receiving Facility: ____________________________
       Town: ____________________________
       State: ____________________________

   ☐ c. Landfill
      ☐ i. Cover
      ☐ ii. Disposal
      Estimated volume in cubic yards
         ____________________________

      Receiving Facility: ____________________________
      Town: ____________________________
      State: ____________________________

☐ 18. Removal of Drums, Tanks or Containers:
   a. Describe Quantity and Amount:

      b. Receiving Facility: ____________________________
         Town: ____________________________
         State: ____________________________
      c. Receiving Facility: ____________________________
         Town: ____________________________
         State: ____________________________

☐ 19. Removal of Other Contaminated Media:
   a. Specify Type and Volume:

   b. Receiving Facility: ____________________________
      Town: ____________________________
      State: ____________________________
   c. Receiving Facility: ____________________________
      Town: ____________________________
      State: ____________________________

☐ 20. Other Response Actions:
   Describe: HANDLING, TRANSPORT AND DISPOSAL OF SOILS POTENTIALLY IMPACTED BY ASBESTOS-CONTAINING MATERIAL

☐ 21. Use of Innovative Technologies:
   Describe:
E. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> if Section B of this form indicates that a Release Abatement Measure Plan is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that a Release Abatement Measure Status Report and/or Remedial Monitoring Report is being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that a Release Abatement Measure Completion Statement is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: 8107
2. First Name: LAWRENCE
3. Last Name: FELDMAN
4. Telephone: 7812783700
5. Ext: 
6. Email: 
7. Signature: LAWRENCE FELDMAN
8. Date: 11/18/2016 (mm/dd/yyyy)
9. LSP Stamp: 

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup
RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM
Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

Revised: 8/5/2013 Page 4 of 6
F. PERSON UNDERTAKING RAM:

1. Check all that apply:  □ a. change in contact name  □ b. change of address  □ c. change in the person undertaking response actions

2. Name of Organization: WYNN MA LLC

3. Contact First Name: ROBERT  4. Last Name: DESALVIO

5. Street: 101 STATION LANDING 2ND FLOOR  6. Title: PRESIDENT


10. Telephone: 8477707801  11. Ext.:  12. Email: 

G. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON UNDERTAKING RAM:

□ Check here to change relationship

☐ 1. RP or PRP  □ a. Owner  □ b. Operator  □ c. Generator  □ d. Transporter

☐ e. Other RP or PRP  Specify: ELIGIBLE OWNER/OPERATOR

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ 4. Any Other Person Undertaking RAM  Specify Relationship: 

H. REQUIRED ATTACHMENT AND SUBMITTALS:

☐ 1. Check here if any Remediation Waste, generated as a result of this RAM, will be stored, treated, managed, recycled or reused at the site following submission of the RAM Completion Statement. You must submit a Phase IV Remedy Implementation Plan along with the appropriate transmittal form (BWSC108).

☐ 2. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

☐ 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the implementation of a Release Abatement Measure.

☐ 4. Check here if any non-updatable information provided on this form is incorrect, e.g. Release Address/Location Aid. Send corrections to bwsc.edep@state.ma.us.

☐ 5. If a RAM Compliance Fee is required for this RAM, check here to certify that a RAM Compliance Fee was submitted to DEP, P. O. Box 4062, Boston, MA 02211.

☐ 6. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.
I. CERTIFICATION OF PERSON UNDERTAKING RAM:

1. I, ROBERT DESALVIO, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: ROBERT DESALVIO
   Signature: ____________________________
   3. Title: PRESIDENT

4. For: WYNN MA LLC
   (Name of person or entity recorded in Section F)
   5. Date: 11/19/2016
   (mm/dd/yyyy)

6. Check here if the address of the person providing certification is different from address recorded in Section F.

7. Street: ____________________________

8. City/Town: ________________________
   9. State: ____________________________
   10. ZIP Code: _________________________
   11. Telephone: _______________________
   12. Ext.: ____________________________
   13. Email: ____________________________

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO $10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)

Received by DEP on
11/19/2016 9:15:56 AM
Appendix C - SDS for Soil Treatment
Section 1: Chemical Product and Company Information

**Product name:** Phosphoric Acid (75%)

**Reference Number:** PhosAcid_H75

**Supplier/ Further Information:** Martrex, Inc.

- P. O. Box 1709
- 14525 Highway 7
- Minnetonka, Minnesota 55345-3793

**Phone:** 952/933-5000

**Toll Free:** 800/328-3627

**FAX:** 952/933-1889

**EPA Registration Number:** n/a

**CAS#:** 7664-38-4 7732-18-5

**Chemical Name:** Phosphoric Acid (75%)

**Synonyms:** Phos Acid; Ortho-phosphoric Acid; Mono-phosphoric Acid

**Chemical Family:** Mineral Acid

**MSDS Number:** n/a

**Web:** [www.martrexinc.com](http://www.martrexinc.com)

Section 2: Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>SARA Listed Hazardous?</th>
<th>CAS#</th>
<th>%</th>
<th>RTECS#</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Phosphoric Acid</td>
<td>Yes</td>
<td>7664-38-4</td>
<td>75%</td>
<td>no data</td>
<td>See Section 15</td>
</tr>
<tr>
<td>2. Water</td>
<td>No</td>
<td>7732-18-5</td>
<td>25%</td>
<td>no data</td>
<td>no data</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comp.</th>
<th>OSHA PEL</th>
<th>OSHA STEL</th>
<th>OSHA CEIL</th>
<th>ACGIH TLV</th>
<th>ACGIH STEL</th>
<th>ACGIH CEIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. (above)</td>
<td>1 mg/m³ 8-hr. TWA</td>
<td>no data</td>
<td>no data</td>
<td>1 mg/m³ 8-hr. TWA</td>
<td>3 mg/m³</td>
<td>no data</td>
</tr>
<tr>
<td>2. (above)</td>
<td>no data</td>
<td>no data</td>
<td>no data</td>
<td>no data</td>
<td>no data</td>
<td>no data</td>
</tr>
</tbody>
</table>

Section 3: Hazards Identification

**WARNING:** DANGER! This is a Clear, Odorless, Colorless, syrupy liquid with no odor that Causes Eye and Skin Burns. May be harmful if swallowed. Corrosive to mild steel.

**Emergency Overview:** This material may not produce an immediate burning sensation upon skin contact, delaying the awareness of the worker that contact has occurred. Due to its acidity, this product is corrosive to the eyes and skin.

**NFPA:** Health: 3  Flammability: 0  Reactivity: 0

**Potential Health Effects:**
- **Primary Routes of Exposure / Entry:** Skin contact, Inhalation, Eye contact.
- **Target Organs:** liver, blood

**Acute Exposure Symptoms**
- **Inhalation:** Inhalation of vapors or mist may be irritating to the respiratory tract.
- **Eye Contact:** This product causes eye burns. Injury may be permanent.
- **Skin Contact:** This product causes skin burns, based on physical properties. It may not produce an immediate burning sensation upon skin contact, delaying the awareness of the worker that contact has occurred.
### Ingestion
This product may be harmful if swallowed; it may cause nausea, vomiting abdominal discomfort, burns and a burning sensation (burning behind the breast bone) based on physical properties.

### Chronic Exposure Symptoms:
- **Inhalation:** Long-term exposure may cause upper respiratory disease and irritation of the skin.
- **Skin:** Long-term exposure may cause irritation of the skin.
- **Medical Conditions Aggravated By Long-Term Exposure:** Respiratory Disease and Dermal related medical conditions.

### Carcinogenicity Data:
- **NTP:** No
- **OSHA:** No
- **IARC Monograph:** No
- **Not Listed:**

### Also See:
Section 11 for more Toxicological information

## Section 4: First Aid Measures

### Inhalation:
Remove to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. Observe for possible delayed reaction. **Get Medical Attention.**

### Eye Exposure:
Immediately flush eyes with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. If easy to do, remove contact lenses. **Get Medical Attention.**

### Skin Exposure:
Immediately flush skin with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. **Get Medical Attention.** Wash clothing and thoroughly clean shoes before reuse.

### Ingestion:
Do not induce vomiting. Drink large amounts of water to dilute acid. **Get Medical Attention.**

Immediately. Contact a poison control center. Never give anything by mouth to an unconscious person.

### NOTE TO THE PHYSICIAN:
No data

## Section 5: Fire Fighting Measures

### Flammability Classification:
- **A Flash Point:** Non-flammable
- **Auto-ignition Temperature:** no data
- **Lower explosion limit (LEL):** no data
- **Upper explosion limit (UEL):** no data

### Extinguishing Media:
Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.

### Unusual Fire and Explosive Hazards:
Although Phosphoric Acid does not meet the parameters for flammability, **The following hazards can occur** during a fire: release of phosphorus oxides and/or phosphine (PH₃) from (thermal decomposition), and hydrogen (a flammable gas) from reaction with metals.

### Hazardous Decomposition Materials:
- phosphorus oxides, phosphine (PH₃)

### Special Procedures:
- **Fire-Fighting Instructions:** Keep personnel removed from and upwind of fire. Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).
- **Personal Protective Equipment:** Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

## Section 6: Accidental Release Measures

### Procedure to be Followed in Case of Leak or Spill:
Evacuate Area

### Spill and Leak Personal Procedures:
Wear appropriate protective chemical resistant clothing and chemical resistant gloves to prevent skin contact. Consult the glove/clothing manufacturer to determine the appropriate type glove/clothing for a given application. Wear chemical goggles, and a face shield; use of a NIOSH/MSHA approved respiratory protection equipment with full face piece (use of a full face piece replaces the need for face shield and/or goggles.)
Containment of Spill:

Small Spills: Neutralize acid spill with alkali (a base) such as soda ash or lime. Absorb material with an inert and place in chemical waste container to be disposed at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal. Adequate ventilation is required for soda ash due to the release of carbon dioxide gas. No Smoking In Spill Area.

Large Spills: Contain large spills with dikes and transfer the material to appropriate containers for reclamation or disposal. Absorb remaining spill material with an inert material and place in a chemical waste container to be disposed at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal. Neutralize residue and washings with alkali (a base) such as soda ash or lime. Flush residual spill area with large amounts of water. Adequate ventilation is required for soda ash due to the release of carbon dioxide gas. No Smoking In Spill Area.

Cleanup and Disposal of Spill: Dispose at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal.

Environmental and Regulatory Reporting: See Section 13 for disposal information and Sections 14 and 15 for regulatory requirements. Large and small spills may have a broad definition depending on the user's handling system. Therefore, the spill category must be defined at the point of release by technically qualified personnel.

Section 7: Handling and Storage

Minimum/maximum Storage Temperature: no data

Handling: *Do not get in eyes, on skin or on clothing.
*Avoid breathing mist or vapor.
*Do not taste or swallow.
*Keep container closed.
*Use only with adequate ventilation.
*Wash thoroughly after handling.
*Empty container retains vapor and residue.
*Observe all label safeguards until container is cleaned, reconditioned or destroyed.

Transfer product from drums to process in closed system (hermetically) if not possible use effective local exhaust ventilation. Empty drums as thoroughly as possible to facilitate disposal. For bulk transfer, purge lines with nitrogen to remove residual liquid before disconnect. When unloading bulk vehicles, personnel should wear chemical goggles and rubber or neoprene gloves. All fittings should be properly secured prior to energizing unloading system. Care should be taken to avoid acid contact when disconnecting lines/hoses after unloading.

Bulk Storage: For bulk storage TYPE 316L STAINLESS is recommended. Glass, polyethylene and FRP (depending on resin used) are satisfactory. Steel, aluminum and type 304 stainless are not recommended because of rapid or potential corrosion. Vessels should be vented and operated at ambient conditions. Maintenance heat (hot water preferred) may be used to prevent freezing. Dike area around storage tank with sufficient volume to hold entire tank contents.

Storage: Store in plastic, rubber-lined, or 316 stainless tanks designed for H₃PO₄. Store drums away from heat and out of direct sunlight. Store in a well ventilated, dry area away from Alkalis and most metals. Store above freezing point. Contact with reactive metals, i.e. mild steel and aluminum may generate hydrogen that may form an explosive mixture in storage vessels.

REGULATORY REQUIREMENTS: See Section 8 for employee exposure controls and Section 14 and 15 for other regulatory requirements.

Section 8: Exposure Controls / Personal Protection

Ventilation Protection: Provide natural or mechanical ventilation to minimize exposure. The use of local mechanical exhaust ventilation is preferred at sources of air contamination, such as open process equipment. Consult NFPA28 standard 91 for design of exhaust systems.

Respiratory Protection (specify type): Avoid breathing vapor or mist. Wear NIOSH/MSHA approved respiratory protective equipment (full face piece recommended) when airborne exposure limits are exceeded (see Section 2 for OSHA-PEL and ACGIH-TLV-STEL limits). If used, full face piece replaces the need for face...
shield and/or chemical goggles. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respiratory use limitations specifies by NIOSH/MSHA or the manufacturer. Respiratory protection programs must comply with 2.9 C.F.R. 1910.134. **Eye Protection:** Wear chemical goggles, face shield and chemical resistant clothing (if used, full face piece replaces the need for face shield and/or chemical goggles). **Have Eye Flushing Equipment Immediately Available.**

**Skin Protection:** Wear appropriate protective clothing and chemical-resistant gloves to prevent skin contact. Consult the glove/clothing manufacturer to determine the appropriate type glove/clothing for a given application. Wear chemical goggles, a face shield, and chemical resistant clothing. Wash immediately if skin is contaminated. Remove contaminated clothing promptly and launder before reuse. Clean all protective equipment before reuse. **Have a Safety Shower Immediately Available.**

**Other Protective Clothing and Equipment:** Provide a Safety Shower and Eye Wash Facility where skin or eye contact may occur.

**Hygienic Work Practices:** Clean protective equipment before reuse. Wash thoroughly after handling. Wash clothing and thoroughly clean shoes before reuse.

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**Section 9: Physical and Chemical Properties**

- **Chemical Name:** Phosphoric Acid (75%)
- **Percent Equivalent** $\text{H}_3\text{PO}_4$: 75.1%
- **Physical State:** Liquid.
- **Color and Appearance:** Clear, Colorless, Syrupy Liquid
- **Odor:** none
- **Odor Threshold:** no data
- **pH:** no data
- **Specific Gravity (@ 25°C/15.5°C):** 1.575
- **Vapor Pressure (100% acid):** 0.0285 mm Hg at 20°C
- **Vapor Density:** no data
- **Density (@ 25°C):** 13.17 lb./gal.
- **Bulk Density:** no data
- **Volatile by Volume:** no data
- **Boiling Point (°C):** 135°C
- **Softening Point:** no data
- **Freezing Point (°C):** -17.5°C
- **Evaporation Rate:** no data
- **Solubility in water:** complete
- **Viscosity (@ 25°C):** 12
- **Other Solubilities:** no data
- **Chemical Formula:** $\text{H}_3\text{PO}_4$
- **Formula Wt:** 98

**NOTE:** These physical data are typical values, based on material tested, and may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as a specification for the product.

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**Section 10: Stability and Reactivity**

- **Chemical Stability (under normal conditions of storage, handling, use):** Stable $\text{X}$ Unstable $\text{X}$
- **Hazardous Polymerization:** May Occur $\text{X}$ Will Not Occur $\text{X}$
- **Conditions to Avoid:** High temperatures.
- **Chemical Incompatibility:** Aluminum, Copper, Mild Steel, Brass and Bronze. Avoid contact with materials such as sulfides and sulfites which could release toxic gases. Be cautious in mixing with strong bases because the high heat of reaction can generate steam.
- **Hazardous Decomposition Products:** phosphorus oxides and/or phosphine ($\text{PH}_3$) from thermal decomposition

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24 Hour Emergency Phone - Chemtrec: 1-800-424-9300  Transportation 1-800-441-3637  Medical
**Section 11: Toxicological Information**

**Acute Data:** Data from ASTAIS single dose (acute) animal studies with this material are given below:
- **Eye Effects:** (Rabbit: 24 hr exp.): Corrosive
- **Skin Effects:** (Rabbit: 24 hr exp.): Corrosive
- **Acute Oral LD$_{50}$:** (Rat): = 4,400 mg/kg; slightly toxic
- **Acute Dermal LD$_{50}$:** (Rabbit): >3,160 mg/kg; slightly toxic
- **ADOT Skin Corrosion:** (Rabbit: 4 hr exp.): non-corrosive

**Additional Information:** The results of single exposure tests indicate that these concentrations of phosphoric acid are slightly toxic orally and no more than slightly toxic after skin application. Following a 24-hour exposure, irreversible eye and skin damage occurred at all tested concentrations of phosphoric acid.

**Chronic Data**
- **Chronic Effects:** See Section 3
- **Chronic Toxicity Studies:** no data
- **Mutagenicity Data:**
  - **Bacterial Genetic Toxicity:** Phosphoric Acid has produced no genetic changes in standard tests using bacterial cells.
  - **Non-Bacterial Genetic:** no data
- **Developmental Toxicity/Teratological Data:** no data
- **Toxicity to Reproduction:** no data
- **Carcinogenicity Data:** See NIOSH, RTECS BO 0875000 for additional information.
- **NTP:** No  **OSHA:** No  **IARC Monograph:** No  **Not Listed:**
- **Other Effects on Humans:** no data

**Section 12: Ecological Information**

**Eco-acute Toxicity:**
- **EPA Ecological Toxicity rating:** no data
- **Acute Toxicity to Fish:** Phosphoric Acid is practically nontoxic to one species of freshwater. No toxicity data was located for other freshwater species, algae, or daphnia magna in a search of the available scientific literature.
- **Aquatic Organism Toxicity** (European Economic Community (ECC): 96 hr. LC50 Mosquito Fish: 138 mg/L: Practically nontoxic.
- **Chronic Toxicity to Fish:** no data
- **Acute Toxicity to Aquatic Invertebrates:** no data
- **Acute Toxicity to Aquatic Plants:** no data
- **Toxicity to Bacteria:** no data
- **Toxicity to Soil Dwelling Organisms:** no data
- **Toxicity to Terrestrial Plants:** no data

**Environmental Fate:**
- **Stability in Water:** no data
- **Stability in Soil:** no data
- **Transport and Distribution:** Under acidic soil conditions, sparsely soluble phosphates tend to solubilize and may migrate to water.
- **Toxicity:** Inorganic phosphates have the potential to increase the growth of freshwater algae, whose eventual death will reduce the available oxygen for aquatic life.

**Degradation Products:**
- **Biodegradation:** No specific biodegradation test data was located in a search of the available scientific literature. It was reported in the literature that while acidity of this material may be reduced readily in natural waters, the phosphate may persist indefinitely.
- **Photo-degradation:** no data
Section 13: Disposal Considerations

Disposal Procedures: Due to its characteristic of corrosivity, this material, when discarded, is a hazardous waste as defined by the Resources Conservation and Recovery Act (RCRA).

RCRA Hazardous Waste Number: D002

Best demonstrated available treatment: BDAT-as defined by RCRA for D002 characteristic wastes: Deactivation plus must meet S277.48 (universal treatment standards) for NON-CWA/ NON/CWA Equivalent/Non-Class 1 SDWA Systems.

Container Cleaning And Disposal: Dispose of in accordance with local, state and federal regulations.

Disposal Regulatory Requirements: Dispose of in accordance with local, state and federal regulations. Consult your attorney or appropriate regulatory officials for information on such disposal.

Section 14: Transport Information

<table>
<thead>
<tr>
<th>Proper Shipping Name:</th>
<th>USDOT</th>
<th>TDG - Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric Acid</td>
<td></td>
<td>Phosphoric Acid</td>
</tr>
<tr>
<td>Hazard Class: 8</td>
<td>8, 9.2</td>
<td></td>
</tr>
<tr>
<td>Hazard Identification Number: UN1805</td>
<td>UN1805</td>
<td></td>
</tr>
<tr>
<td>Packing Group: III</td>
<td>III</td>
<td></td>
</tr>
<tr>
<td>Transport Labeling/Placarding: Corrosive</td>
<td>Corrosive</td>
<td></td>
</tr>
</tbody>
</table>

Reportable Quantity/Reportable Limit: Packages of >5,000 lb. containing a 5,000 RQ of Phosphoric Acid Packages of <230 kg containing a 230 kg RL of Phosphoric Acid

Notes: TDG Note (Canada): If product exceeds the CERCLA Reportable Quantity, the notation “RQ” shall be added before or after the basic shipping description

Section 15: Regulatory Information

TSCA: Listed

DSL (Canadian): Listed

WHMIS Classification D2(b) - (Material Causing Other Toxic Effects): E - Corrosive Material

EPA Regulations:

TSCA 8(b) inventory: Phosphoric Acid; Water

RCRA Hazardous Waste Number: D002

CERCLA Hazardous Substance: Yes

CERCLA Reportable Quantity (RQ): 5,000 lb. of Phosphoric Acid. Release of more than 5,000 lb. into the environment in a 24 hour period requires notification to the National Response Center (800-424-8802 or 202-426-2675). Since state and local laws vary, consult your attorney or appropriate regulatory officials for information relating to spill reporting.

SARA 311/312 Codes: No.

SARA (Hazard Categories Title III rules): Immediate

SARA 313 Toxic Chemical: Yes, Phosphoric Acid

SARA 302 EHS (Extremely Hazardous Substance): not applicable

SARA 302 EHS Threshold Planning Quantity: no data

OSHA Regulations:

OSHA: TWA = 1 mg/m^3 8-hr. TWA

ACGIH: TWA = 1 mg/m^3 8-hr. TWA, STEL = 3 mg/m^3

State Regulations: Since state and local laws vary, consult your attorney or appropriate regulatory officials for information relating to spill reporting.
### Section 16: Other Information

**NFPA Rating Explanation Guide**

<table>
<thead>
<tr>
<th>Rating Number</th>
<th>Health Hazard</th>
<th>Flamibility Hazard</th>
<th>Instability Hazard</th>
<th>Special Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Can be lethal</td>
<td>Will vaporize and readily burn at normal temperatures</td>
<td>May explode at normal temperatures and pressures</td>
<td>ALK Alkaline</td>
</tr>
<tr>
<td>3</td>
<td>Can cause serious or permanent injury</td>
<td>Can be ignited under almost all ambient temperatures</td>
<td>May explode at high temperature or shock</td>
<td>ACID Acidic</td>
</tr>
<tr>
<td>2</td>
<td>Can cause temporary incapacitation or residual injury</td>
<td>Must be heated or high ambient temperature to burn</td>
<td>Violent chemical change at high temperatures or pressures</td>
<td>BIO BioHazard</td>
</tr>
<tr>
<td>1</td>
<td>Can cause significant irritation</td>
<td>Must be preheated before ignition can occur</td>
<td>Normally stable. High temperatures make unstable</td>
<td>COR Strong Corrosive</td>
</tr>
<tr>
<td>0</td>
<td>No Hazard</td>
<td>Will not burn</td>
<td>Stable</td>
<td>CRYO Cryogenic</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OXY Oxidizer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Radioactive</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Reacts violently or explosively with water or oxidizer</td>
</tr>
</tbody>
</table>

This chart for reference only - For complete specifications consult the NFPA Standard.

**Glossary**

- **ACGIH** - American Conference of Governmental Industrial Hygienists
- **ANSI** - American National Standards Institute
- **CAS** - Chemical Abstracts Service
- **CERCLA** - Comprehensive Environmental Response, Compensation & Liability Act of 1980
- **CFR** - Code of Federal Regulations
- **CHEMTREC** - Chemical Transportation Emergency Center
- **DOT** - U.S. Department of Transportation
- **DSL** - Canadian Domestic Substance List
- **EHS** - Extremely Hazardous Substance
- **EPA** - U.S. Environmental Protection Agency
- **HMIS** - Hazardous Material Identification System
- **IARC** - International Agency for Research on Cancer
- **LEL/UEL** - Lower and Upper Explosive Limit
- **mg/m³** - Milligrams per cubic meter
- **MSDS** - Material Safety Data Sheet
- **NAERG** - North American Emergency Response Guidebook
- **NIOSH** - National Institute of Occupational Safety and Health
- **NFPA** - National Fire Protection Association
- **NTP** - National Toxicology Program
- **OSHA** - Occupational Safety and Health Administration
- **PEL** - Permissible Exposure Limit (set by OSHA)
- **PPE** - Personal Protective Equipment
- **RCRA** - Resource Conservation and Recovery Act of 1976
- **SARA** - Superfund Amendments and Reauthorization Act
- **TDG** (Canadian): Transport of Dangerous Goods Regulations
- **TLV** - Threshold Limit Value (set by ACGIH)
- **TWA** - Time weighted average
- **TSCA** - US Toxic Substance Control Act
- **WHMIS** - US Workplace Hazardous Material Information System

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24 Hour Emergency Phone - Chemtrec: 1-800-424-9300  Transportation 1-800-441-3637  Medical
**MSDS Issue Date:** n/a  
**Revised Date:** 10-25-11  
**Supersedes:** n/a

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Appendix D – NT Plan Attachments
November 16, 2016

Massachusetts Department of Environmental Protection
Northeast Regional Office
Attention: Asbestos Section
205B Lowell Street
Wilmington, MA 01887

RE: Revised Non-Traditional Asbestos Abatement Work Plan – Wynn Boston Harbor (EH&E 21151)

To Whom It May Concern:

On behalf of Wynn MA, LLC, Environmental Health & Engineering, Inc. (EH&E) prepared this revised non-traditional asbestos abatement work plan (NT Plan) describing the measures to be implemented for bulk loading, packaging, transport, and offsite disposal of soils that are asbestos-contaminated waste materials (ACWMs) during the Wynn Boston Harbor development project (the Project) located at 1 Horizon Way in Everett, Massachusetts. Activities described in this NT Plan are also subject to the Release Abatement Measure (RAM) Plan Modification (RTN: 3-0013341) for the Project prepared by GZA GeoEnvironmental, Inc. (GZA) dated November 16, 2016 and submitted to the Massachusetts Department of Environmental Protection (MassDEP) via eDEP on this date.

DOCUMENTATION

MassDEP Form AQ 36 Application for Non-Traditional Asbestos Abatement Work Practice Approval has already been submitted with this NT Plan along with the $600 fee (refer to Appendix A). After approval of this NT Plan, the contractor will file Asbestos Notification Form ANF-001 to the MassDEP Northeastern Regional Office (NERO) Asbestos Program. The contractor will not proceed with bulk loading or disposal of ACWMs before 10 business days after submitting ANF 001, unless a waiver to this waiting period is obtained from the MassDEP.

The contractor is New Roads Environmental Services, LLC (New Roads). New Roads will perform all asbestos-related activities required under this NT Plan, including waste packaging and vehicle decontamination. J. Derenzo Company will perform all earthwork (excavating/loading). Project monitoring and perimeter air sampling required by this plan will be performed by LBP Solutions, LLC (LBP).
MATERIALS MANAGED UNDER THIS PLAN

Asbestos-contaminated materials excavated during the Project that are designated for offsite disposal will be bulk loaded and disposed of in accordance with this NT Plan; the packaging, transport, storage, disposal, and waste shipment record requirements for ACWMs outlined in 310 CMR 7.15 (15-18);¹ and the RAM Plan Modification dated November 16, 2016. Dust control, decontamination, and air monitoring will be conducted as outlined in this NT Plan. Building materials that are asbestos-containing materials and encountered during excavation will be handled in accordance with traditional asbestos abatement methods in compliance with federal, state, and local regulations.

The determination of what excavated materials will be disposed of offsite will be made by GZA in accordance with the RAM Plan. Although testing is ongoing, samples from less than 10% of the precharacterization grids with visible debris tested by GZA to date (per MassDEP requirements transmitted via email on October 19, 2016) have detectable asbestos in the soil. The figures in Appendix B show the current status of asbestos in soil testing. All excess ACWM soil excavated on the Project will be disposed of offsite. The volume of ACWMs to be disposed of under this NT Plan is currently estimated at 20,000 tons (approximately 12,000 cubic yards).

The site plans in Appendix C shows approximate bulk loading, soil management, and stockpiling locations (locations shown may be subject to modification in the field based on conditions encountered). In areas of the Site where asbestos is detected in the soil, the following management procedures will be implemented in accordance with the RAM Plan Modification dated November 16, 2016 (Pages 2 and 3):

- **During construction activities that have the potential to create dust, primarily excavation of soils identified as containing asbestos, the soil will be managed in such a way as to prevent the generation of visible dust and air monitoring will be performed. If dust is being generated by a specific activity involving disturbance of soil that activity will temporarily be halted until additional areas are wetted or misted with water. Temporary water lines or water trucks will be dedicated to each work area where soil with asbestos is disturbed.**

- **Excavated soil identified for off-Site disposal will either be live-loaded into tractor-trailers for off-Site disposal or will be stockpiled at the Stockpile and Soil Treatment Area. To maintain constructability, soil may need to be temporarily stockpiled near the work area while waiting for truck transport to the stockpile location area or off-Site disposal. Stockpiles will be covered with GeoMatrix Permeable Fiber Mat or Gorilla Snot™ for dust control.**

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¹ MassDEP. 310 CMR 7.15. Air Pollution Control. *Code of Massachusetts Regulations*. Title 310, Part 7, Section 15, Asbestos. Boston, MA: Commonwealth of Massachusetts, Department of Environmental Protection.
addition polyethylene sheeting may be used to cover stockpiles. If necessary, polyethylene sheeting will consist of 10-mil thick material that is ballasted over the stockpile. Stockpiles will be kept continuously covered. Active faces of stockpiles being worked will be covered at the end of each work day. The stockpile area will be identified as containing asbestos by placement of placards at the stockpile area.

- **Equipment and wheels of vehicles that contact asbestos-impacted soil will be decontaminated using a “wheel wash” prior to moving onto public streets.**

- **During on-Site truck transport of excavated soils identified as containing asbestos to the stockpile areas, the truck loads will be dampened as necessary for transport. If this is not effective in preventing generation of dust, the trucks will be covered with tarps to minimize potential dust generation during on-Site transport.**

Soil that is contaminated with asbestos and lead will also be managed in accordance with the RAM Plan Modification dated November 16, 2016 (Page 5). There are currently approximately 4,900 cubic yards of ACWM soils stockpiled and treated or awaiting treatment in accordance with the following protocol:

- **Soil that precharacterization testing has shown to exceed TCLP levels for lead and arsenic is currently being treated on-Site to render it non-hazardous before it is shipped for off-Site disposal. If testing shows that the soil to be treated contains asbestos, it will be constantly wetted during the treatment process and it will be covered with GeoMatrix Permeable Fiber Mat or Gorilla Snot™ when stored in the Stockpile and Treatment area before it is removed from the project Site.**

- **The treatment chemical being used to stabilize soils is a liquid-based agent, the SDS for which is attached to this RAM Plan Modification in Appendix C. As described in Appendix E of the May 3, 2016 RAM Plan, soils classified as Hazardous Material B require treatment for TCLP lead and/or arsenic to facilitate off-Site disposal. Treatment will be performed by uniform spray application of the treatment liquid. A dedicated piece of earthmoving equipment will work within the treatment area and move soil during soil treatment. This equipment will be decontaminated in accordance with the procedures outlined herein prior to leaving the treatment area and/or handling soils that do not contain asbestos.**

**DUST CONTROL**

Dust control will be implemented by the contractor during all ACWM bulk loading operations at the Project in accordance with the provisions of the RAM Plan described above. The contractor will provide all required measures to control the generation of dust from activities and to prevent
visible dust emissions will be employed as necessary to control dust levels. Wetting techniques will be used, including the use of direct-sprayed water in active work zones. Clean (city) water sources will be used for dust control. Dust control will occur in accordance with the RAM Plan Modification dated November 16, 2016 (Page 3).

- Dust control will be performed by the Contractor during excavation, stockpiling, and all other earthwork operations at the Site. The Contractor will provide all required measures to control the generation of dust from Site activities and to prevent off-Site dust migration. Dust suppression techniques such as wetting, misting soil covering, ensuring the material is damp when excavated, loaded, and transported, strategic placement of wind barriers, and/or the application of temporary covering agents will be employed as necessary to reduce dust levels. Wetting techniques will be controlled so as not to cause runoff and soil erosion. Dust suppression techniques will be modified or enhanced if on-Site dust is visually observed or if monitoring indicates exceedances of maximum allowable dust levels in accordance with 310 CMR 6.00 or for the air-borne asbestos levels.

If visible dust is observed in an area of ACWM soils, or if monitoring indicates exceedances of the airborne fiber levels described below, work will temporarily halt in the applicable work zone, the MassDEP will be notified immediately, and dust suppression techniques will be modified or enhanced. Visible emissions from non-suspect sources such as vehicle exhausts, road dust from uncontaminated construction areas, pollen, etc. will not be considered cause for work stoppage.

**DECONTAMINATION**

After being loaded with ACWMs, road vehicles will pass through designated vehicle decontamination areas at the entrance/exit to the work area prior to entering areas accessible to the public. Railcars will not contact the ground. A vehicle wash pad will be established in each work zone. The Contractor will use the wash pad for the decontamination of equipment that contacts potentially asbestos contaminated materials. The vehicle wash pad will be constructed in accordance with the RAM Plan Modification dated November 16, 2016 (Page 4):

*Vehicles and other equipment used during soil disturbance in areas where asbestos is detected in soil will be decontaminated prior to leaving the Site (exclusion zone). One or more decontamination (decon) facilities will be constructed utilizing two layers of 0.45 mil rubber roof membrane sufficient in length and width to accommodate the cleaning of all heavy equipment, trailers and dumpsters prior to their exiting identified asbestos work zone areas. The rubber membrane will be formed over haybales and secured to the ground to form a damming barrier so that all wash water can be effectively collected to be processed through a 5-micron filtering system, either at the individual decon facilities or in the on-Site treatment plant. Following filtering, this water will be infiltrated into the on-site soils using*
recharge pits. If necessary, the water (after filtration) may be pumped to the currently operating on-Site water treatment system for additional treatment prior to discharge.

No mechanical processing (screening, crushing, milling) of ACWM will occur. Nonporous materials impacted by potentially asbestos-contaminated soils (e.g., onsite granite, curbing, benches, and revetment stones), and designated for offsite disposal, will be disposed of as ACWM, unless these materials are culled and decontaminated. The equipment decontamination facilities in the work areas will be used for this cleaning unless sequencing requires an additional facility, which will be constructed in the same manner as the equipment decontamination facility. Nonporous material intended for disposal as non-asbestos waste will be cleaned and all adhered soil removed.

**WORK ZONE PERIMETER ASBESTOS MONITORING**

Air samples will be collected around the perimeter of ACWM bulk loading and, as described in the RAM Plan Modification, excavating, handling, and stockpiling operations for the Project:

- Area air samples will be collected in at least four locations around each operation. High flow pumps will be used to collect air samples with sufficient air volumes to achieve detection limits below 0.010 fibers per cubic centimeter (f/cc). During full workdays, two sets of samples will be collected around each location: one set for approximately half of the workday (morning) and a second set for the remainder of the workday (afternoon).

- Samples will be analyzed for total airborne fibers, including but not specific to asbestos, using Phase Contrast Microscopy (PCM) on an immediate turn-around time basis. Results from the first set of samples will be available quickly enough that corrective actions, if warranted, can be implemented the same workday. Results from the second set will be available such that corrective actions, if warranted, can be implemented by the morning of the next workday.

- Any individual perimeter air sampling result that meets or exceeds 0.010 f/cc potentially related to Project work will result in the temporary stoppage of dust generating activities in the work area and the re-evaluation and improvement of work practices, engineering controls, and dust/fiber suppression methods, as warranted.

- Air sampling results will be provided on a daily basis to the MassDEP NERO Asbestos Program at NERO.asbestos@state.ma.us. Notification will also be provided immediately to the MassDEP upon receipt of results meeting or exceeding 0.010 f/cc.
Air samples will be collected by LBP and analyzed via PCM onsite by LBP personnel. Prior to commencing activities relative to excavation, handling, hauling, stockpiling, treating, and/or bulk loading soils that contain asbestos, the Contractor and GZA’s sub-consultant performing work zone monitoring (LBP) will coordinate the areas where activities will be performed and establish at least four high-flow pumps for collection of air samples in accordance with this plan. These work zone air samples will be appropriately spaced and located proximate to each area where the above described activities are being performed.

Additional air sampling will be performed in a consistent manner at four permanent air monitoring stations located at the perimeter of the site as described in the RAM Plan.

**BULK LOADING**

The contractor is responsible for managing potential ACWMs designated for offsite disposal on the Project in accordance with this NT Plan; with the packaging, transport, storage, disposal, and waste shipment record requirements for ACWMs outlined in 310 CMR 7.15 (15-18); and with other applicable federal, state, and local requirements. All work activities will also be conducted in accordance with the contractor site-specific health and safety plans. Bulk loading shall occur only in designated and controlled Project work areas as described below.

**Bulk Loading for Rail Transport**

ACWM designated for offsite disposal will be bulk loaded into railcars lined with one 6-mil RailPac polyethylene bag inside a 14-mil RailPac polyethylene bag, which are form-fitted for railcars. Once filled to acceptable load capacity, the 6-mil bags will be overlapped and sealed individually utilizing spray glue and duct tape. The 14-mil liners are made of woven polyethylene for durability and tear/puncture resistance, and are approved under current railroad regulations for this type of material. Once filled to acceptable capacity, the 14-mil bags will be zipped, buckled and strapped. Appendix D includes RailPac product data sheets, instructions for use, as well as a statement from the manufacturer regarding their leak-proof properties. Appropriate labels will be adhered to the bags including asbestos warning labels and waste generator labels. An asphalt access road will be installed along the rail tracks to facilitate loading of rail cars.

It is anticipated that the majority of offsite disposal of ACWM with less than 1% asbestos will be via railway transport, although some soils with less than 1% asbestos may be transported on roadways, depending on schedule.
Bulk Loading for Road Transport

ACWM designated for offsite disposal will be bulk loaded into trailers/dumpsters that have been lined with two 10-mil bladder bags. Once filled to acceptable load capacity, bladder bags will be overlapped and sealed individually utilizing spray glue and duct tape. Appropriate labels will be adhered to the bladder bags including asbestos warning labels and waste generator labels. The trucks or roll-off dumpsters will be in good condition with no holes or rusted out areas and with tailgates that close tightly and are lockable. U.S. Department of Transportation (DOT) Class 9 placards (2212) will be affixed to all exterior sides of each dumpster/truck onsite.

All ACWM with equal to or greater than 1% asbestos will be handled and disposed of through road transport. Current test results indicate the presence of only very limited volumes of soil containing greater than 1% asbestos (approximately 700 cubic yards). Only limited amounts of ACWM with less than 1% asbestos will be handled through road transport.

TRANSPORT

Contractor will transport ACWM generated during the Project and designated for offsite disposal to a landfill permitted to accept the waste. With each waste shipment, the contractor will complete a waste shipment record (WSR) with all information required by 40 CFR 61.150 and 310 CMR 7.15(18). The contractor will provide the owner with WSR within 30 days following waste disposal. The contractor shall submit copies of WSRs to MassDEP NERO on a daily basis via NERO.asbestos@state.ma.us. All packaged waste materials will include warning labels, waste generator labels, and waste shipment records as required by applicable regulations, including 310 CMR 7.15(15). Labels shall be printed in letters of sufficient size and contrast so as to be readily visible and legible.

Roadways

A DOT licensed hauler will transport and dispose of the waste at a landfill permitted to accept asbestos waste. Each truck shall display the orange placard indicating the transport of asbestos-containing materials (Special Waste). The contractor shall ensure that no water leaks from the waste trailers, open top roll-offs, or the asbestos contractor’s transport vehicles while onsite or during transport and that the waste is covered at all times during transport.

Railways

Once the railcar is filled, transportation shall be handled pursuant to U.S. Interstate Commerce Law and in compliance with Federal Railroad Regulations and Rail Tariffs. The contractor will ensure that no water leaks from the waste container onsite or during transport to the landfill, and that the waste is covered at all times during transport.
DISPOSAL FACILITIES

Contractor will dispose of all ACWM generated during the Project and designated for offsite disposal in a landfill permitted to accept the waste. The following facilities will receive soils identified as containing asbestos in accordance with the requirements of the RAM Plan Modification dated November 16, 2016 (Pages 4 and 5):

- **Waste Management Crossroads Landfill, Norridgewock, Maine.** This facility will be used for soils that do not require treatment for TCLP lead and/or arsenic and that contain asbestos at concentrations above 1%. Soils will be transported via tractor trailer to this facility.

- **Waste Management Turnkey (TREE) Landfill, Rochester, New Hampshire.** This facility will be used for soils that require treatment for TCLP lead and/or arsenic and that contain asbestos at concentrations both above and below 1%. Soils will be transported via tractor trailer to this facility.

- **Waste Industries Taylor County Disposal Landfill, Georgia.** This facility will be used for soils that do or do not require treatment for TCLP lead and/or arsenic and that contain less than 1% asbestos concentrations. Soils will be transported via railroad to this facility.

- **Allied Niagara Landfill, Niagara Falls, New York.** This facility will be used for soils that do require treatment for TCLP lead and/or arsenic and that contain asbestos at concentrations equal to or greater than 1%. These soils will be transported via tractor trailer.
If you have any questions, please feel free to contact us at 1-800-TALK-EHE (1-800-825-5343).

Sincerely,

[Signature]
Adam S. Bisol
Massachusetts Certified
Asbestos Designer AD034163

[Signature]
William S. Wade, C.I.H.
Senior Scientist/Project Manager

Appendix A  BWP AQ 36 Application and Copies of Payment and Transmittals
Appendix B  Current Asbestos in Soil Testing Results
Appendix C  Site Plans
Appendix D  Product Data Sheets and Leak Proof Statement for RailPac Railcar Liners
Appendix E  Information for the New York and Georgia Landfills

cc:  John MacAuley, Asbestos Enforcement Section Chief, MassDEP NERO [via email]
     Andrew Clark, MassDEP NERO [via email]
     Lawrence Feldman, LSP, Senior Principal, GZA GeoEnvironmental, Inc. [via email]
     Chris Gordon, Wynn MA, LLC. [via email]
APPENDIX A
BWP AQ 36 APPLICATION AND COPIES OF PAYMENT AND TRANSMITTALS
Massachusetts Department of Environmental Protection
Bureau of Waste Prevention
BWP AQ 36 Application for Non-Traditional Asbestos Abatement Work Practice Approval

A. Work Site Information

Facility

Wynn Boston Harbor
Facility Name or Site Description
1 Horizon Way
Facility Address
Everett
City/Town
MA
State
02149
ZIP Code

Owner

Wynn MA LLC
Owner Name
101 Station Landing
Owner Address
Medford
City/Town
MA
State
02155
ZIP Code

Applicant - Check here if same as Owner and skip to next section. Otherwise, complete fields below.

Applicant Name

Applicant Address

City/Town
State
ZIP Code

Telephone Number
Email Address

B. Project Information

Asbestos Abatement Project Designer

Adam S. Bisol
Name
Environmental Health & Engineering, Inc., 117 Fourth Avenue
Address
Needham
City/Town
781-247-4300
Telephone Number
AD 034163
Department of Labor Standards (DLS) Project Designer Cert. Number
MA
State
02404
ZIP Code
abisol@ehelinc.com
Email Address

Asbestos Abatement Contractor

New Roads Environmental Services, LLC.
Contractor Name
338 Howard Street
Address
Brookton
City/Town
508-897-8007
Telephone Number
AC 000822
Department of Labor Standards (DLS) Contractor License Number
MA
State
02302
ZIP Code

B. Project Information (continued)

Demolition Contractor (If Applicable)

<table>
<thead>
<tr>
<th>Contractor Name</th>
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Address

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<tr>
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Telephone Number

<table>
<thead>
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<th>Email Address</th>
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<tbody>
<tr>
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</tbody>
</table>

Circumstances – Check the appropriate box(es) to indicate why a Non-Traditional Asbestos Abatement Work Practice Approval is needed.

- [ ] Facility is being demolished under a state or local government order because it is structurally unsound and in danger of imminent collapse. (Please attach a copy of the order to your work plan proposal.)

- [ ] Asbestos Containing Material (ACM) or Asbestos Containing Waste Material (ACWM) was not accessible for testing, therefore not discovered until after demolition began and, as a result, the demolition, cannot be safely removed.

- [ ] Abatement activity is being conducted as part of an emergency renovation operation.

- [ ] Asbestos abatement activity is being conducted to clean up and decontaminate a facility or portion of a facility where:
  - [ ] Previous asbestos abatement activities were not conducted in compliance with 310 CMR 7.15, or
  - [ ] ACM deterioration, if not immediately attended to, would present a safety or public health hazard.
  - [x] Wetting during a facility renovation would unavoidably damage equipment or present a safety hazard.

- [x] The project requires bulk loading of ACM and/or ACWM.

List the requirements of 310 CMR 7.15 that you are unable to comply with and explain why:

Asbestos-contaminated soil will be bulk loaded for offsite disposal. Please see attached non-traditional asbestos abatement work plan.

Other Project Details

<table>
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<th>Project Start Date: 10/31/2016 MM/DD/YYYY</th>
<th>Project End Date: 12/31/2017 MM/DD/YYYY</th>
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Types & Amounts of ACM and/or ACWM Requiring Non-Traditional Asbestos Abatement Work Practice(s):

- [x] Friable

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<th>Quantity In Cubic Meters (Cubic Yards)</th>
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- [ ] Non-Friable

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Potential asbestos-contaminated soils associated with the project.
C. Certification

"I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment. I am aware that this permit application or notification shall not be deemed valid unless payment of the applicable fee is made."

Signature: [Signature]
Printed Name: [Printed Name]
Title: [Title]
Date (MM/DD/YYYY): [Date]

D. Submission of Application

STEP 1: Submit Fee Payment

Send the materials below to this address:

MassDEP
P.O. Box 4062
Boston, MA 02211

☒ A copy of this completed and signed form.
☒ Fee payment of $600* (check or money order payable to "Commonwealth of Massachusetts").

*The following entities are exempt from this fee:
- Cities, towns, counties or districts of the Commonwealth
- Federally recognized Indian tribe housing authorities
- Municipal housing authorities
- The Massachusetts Bay Transportation Authority (MBTA)

Is this a fee-exempt project? ☐ Yes ☐ No

NOTE: Entities that are exempt from the fee must still submit a copy of this completed and signed form, without payment, to the P.O. box above.

STEP 2: Submit Application

Send the following materials to the appropriate MassDEP Regional Office*, Attention: Asbestos Section:

☒ This original completed and signed form.
☒ A copy of the check or money order from Step 1.
☒ Your proposed work plan, describing work practices, duration and schedule. The proposal must:
  - Include signature of the Asbestos Project Designer who prepared it.
  - Demonstrate that the deviations from 310 CMR 7.15 and alternatives proposed will not cause any visible emissions to the outside air or pose significant risk to public health, safety or the environment.
☒ All supporting documentation.

*Find the MassDEP Regional Office for the community where this work will be done:
http://www.mass.gov/eea/agencies/massdep/about/contacts/
PAY       Six Hundred and 00/100 Dollars
TO         Commonwealth of Massachusetts

CITIZENS BANK
5-7017-2110

CHECK DATE       October 27, 2016

AMOUNT       600.00
OVER $10,000.00 TWO SIGNATURES REQUIRED

AUTHORIZED SIGNATURE

ENVIRONMENTAL HEALTH & ENGINEERING, INC.

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LETTER OF TRANSMITTAL

Environmental Health & Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494-2725
PH 781-247-4300  FAX 781-247-4305

To: MassDEP
P.O. Box 4062
Boston, MA 02211

Date: October 28, 2016
Project #: 21151

☑ Attached  ☐ Under separate cover, EH&E is sending you the items described below

<table>
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<tr>
<th>No. of Copies</th>
<th>Description</th>
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<td>1) BWP AQ 36 Application for Non-Traditional Asbestos Abatement Work Practice Approval</td>
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<tr>
<td></td>
<td>2) Application Fee Payment ($600): EH&amp;E Check</td>
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Transmitted via: ☐ Mail/Regular  ☑ Mail/Priority  ☐ Email  ☐ Fax
☐ FedEx O/N a.m.  ☐ FedEx O/N p.m.  ☐ FedEx 2-Day  ☐ Courier
☐ Hand-delivered by:  ☐ Other

Transmitted: ☑ For your review  ☐ Per your request
☑ For your use  ☐ For your reference  ☐ Other

Notes:

Please direct any questions to:

Will Wade, CIH
Senior Scientist/Project Manager
Environmental Health & Engineering, Inc.
wwade@eheinc.com
781-247-4300

Copy to: From: Adam Bisol and Will Wade, EH&E
LETTER OF TRANSMITTAL

Environmental Health & Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494-2725
PH 781-247-4300  FAX 781-247-4305

To:          MassDEP
Northeast Regional Office
Attention: Asbestos Section
205B Lowell Street
Wilmington, MA 01887

Date: October 28, 2016
Project #: 21151

☒ Attached  ☐ Under separate cover, EH&E is sending you the items described below

<table>
<thead>
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</tr>
<tr>
<td></td>
<td>1) BWP AQ 36 Application for Non-Traditional Asbestos Abatement Work Practice Approval</td>
</tr>
<tr>
<td></td>
<td>2) Copy of fee payment</td>
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<td>3) Proposed NT Work Plan</td>
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Transmitted via:  ☐ Mail/Regular  ☒ Mail/Priority  ☐ Email  ☐ Fax
☐ FedEx O/N a.m.  ☐ FedEx O/N p.m.  ☐ FedEx 2-Day  ☐ Courier
☐ Hand-delivered by:

Transmitted:  ☒ For your review  ☐ Per your request
☐ For your use  ☐ For your reference  ☐ Other

Notes:
Please direct any questions to:

Will Wade, CIH
Senior Scientist/Project Manager
Environmental Health & Engineering, Inc.
wwade@eheinc.com
781-247-4300

Copy to:  From: Adam Biaoi and Will Wade, EH&E
ASBESTOS SAMPLING LEGEND

- Denotes approximate location of asbestos sample with no asbestos detected
- Denotes approximate location of asbestos samples with trace (<1%) asbestos in soil detected
- Denotes approximate location of asbestos samples results pending
- Denotes approximate location of asbestos samples with >1% asbestos in soil detected. This material will not be transported to Taylor County Landfill for disposal
- Denotes material already excavated and stockpiled. Solid gray indicates material disposed of off-site.

CELLS DENOTED WITH AN "A" SYMBOL ARE SUITABLE FOR USE UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT.

LEGEND

APPROXIMATE PARCEL BOUNDARY
- BOUNDARIES SHOWN
PROPOSED SEEP TRENCH
- P S
SLURRY WALL TRENCH
- S W TRENCH SAMPLE GRID
- S W TRENCH SAMPLE GRID
- S W TRENCH SAMPLE GRID
- S W TRENCH SAMPLE GRID
- S W TRENCH SAMPLE GRID
NO DATA
- N D
UNCONTAMINATED
- U C
MCP RESTRICTED
- R S T
OUT-OF-STATE LANDFILL DISPOSAL (HAZARDOUS MATERIAL TYPE A) - SEE NOTE 1
- O S L D (H M T A) - S N 1
MA LINED LANDFILL (MCP REGULATED TYPE B-1)
- M L L (M C P R T B 1)
CELLS DENOTED WITH AN "A" SYMBOL ARE SUITABLE FOR USE UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT.

SCALE IN FEET
- S I F
UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR THE USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING.
ASBESTOS SAMPLING LEGEND

- Denotes approximate location of asbestos sample with no asbestos detected
- Denotes approximate location of asbestos samples with trace (<1%) asbestos in soil detected
- Denotes approximate location of asbestos samples results pending
- Denotes approximate location of asbestos samples with >1% asbestos in soil detected. This material will not be transported to Taylor County Landfill for disposal
- Denotes material already excavated and stockpiled. Solid gray indicates material disposed of off-site.

LEGEND

APPROXIMATE PARCELS BOUNDARY
- ROOFOIDS (RIP)
- PROPOSED SWIFT TRENCH
- SWIFT SWEEPER TRENCH
- PRECHARACTERIZATION SAMPLING (SMP) HORIZONED CELLS AND SAMPLE (DEPTH)
- NO DATA
- UNCONTAMINATED
- MCP RESTRICTED
- OUT OF NDR/UNLABELED DISPOSAL (COVER)
- HAZARDOUS MATERIAL TYPE A (MCP NOS 1)
- HAZARDOUS MATERIAL TYPE B (MCP NOS 2)
- UNLABELED LANDFILL
- MCP REGULATED TYPE B
- TCLP REGULATED TYPE B-1
- TCLP TREATED (HAZARDOUS MATERIAL TYPE B); TCLP TREATED (MCP REGULATED MATERIAL TYPE B-2)
- SLURRY WALL TRENCH
- PRECHARACTERIZATION GRID

NOTE:
1. UNCONTAMINATED MATERIAL A WITH LANDFILL (OR EQUAL TO
2. HAZARDOUS MATERIAL TYPE A (MCP NOS 1)
3. HAZARDOUS MATERIAL TYPE B (MCP NOS 2)
4. MCP RESTRICTED
5. OUT OF NDR/UNLABELED DISPOSAL (COVER)
6. UNLABELED LANDFILL
7. MCP REGULATED TYPE B
8. TCLP REGULATED TYPE B-1
9. TCLP TREATED (HAZARDOUS MATERIAL TYPE B); TCLP TREATED (MCP REGULATED MATERIAL TYPE B-2)

CELLS DENOTTED WITH AN "A" SYMBOL ARE SUITABLE FOR DISPOSAL BY RAILCAR.
APPENDIX C
SITE PLANS
LEGEND:
- Denotes approximate location of perimeter (Airlogics) or construction zone (CZ) air monitoring stations
- Denotes approximate location of soil stockpile and soil treatment area.

SOURCE:
1. THE BASE MAP WAS DEVELOPED FROM ELECTRONIC FILES PROVIDED BY FELDMAN, PROFESSIONAL LAND SURVEYORS ON MARCH 20, 2015, CAD FILE: 14517-EX-DRAFT-3-20-2015.DWG.
We manufacture packaging.
We engineer solutions.

RailPac®
Railcar Liners and Tarps

Patent# 7073676
**Railcar Liners / Tarps**

RailPac® ensures the safest transportation of contaminated waste materials with a form-fit design to keep our liners securely in place. Manufactured from your choice of extruded or woven polymeric fabrics, these liners and tarps are designed for your railcar’s exact specifications and custom sizes are always available. The patented zipper ensures quick and easy installation and closure and can be fitted with a tamper indication device to deter unauthorized access.

**Applications:**
- Construction Debris
- Contaminated Soil
- Sludges
- Ash wastes and powders

**Features:**
- Patented zipper closure
- Form fit design
- Made of woven polyethylene to handle a variety of waste streams

**Advantages:**
- Installs in minutes
- Ability to incorporate a tamper-resistant device
- Patented closure method saves time and money
- Top cover keeps out rain and snow

---

**Quality Assurance is a top priority for PacTec.**

*Our reputation is built on it. Our ISO 9001:2008 certification confirms it.*

Innovative design, customized solutions, and rigorous testing are a part of every thing we do at PacTec. Take advantage of our years of experience in packaging and transportation and call or connect with us online.

*We manufacture packaging. We engineer solutions.*
# 14 mil Woven Polyethylene

<table>
<thead>
<tr>
<th>Product Properties</th>
<th>Specification (Metric)</th>
<th>Test Method (ASTM)</th>
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<tbody>
<tr>
<td>Weight</td>
<td>6 oz/yd² (203 g/m²)</td>
<td>D5261</td>
</tr>
<tr>
<td>Thickness</td>
<td>14.1 mils (0.36 mm)</td>
<td>D5199</td>
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<tr>
<td>Puncture Resistance</td>
<td>170 lbs (756 N)</td>
<td>D4833</td>
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<tr>
<td>Trap Tear</td>
<td>MD – 55 lbs (25 N)</td>
<td>D4533</td>
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<td></td>
<td>TD – 53 lbs (236 N)</td>
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<tr>
<td>Tensile Property - Break Strength</td>
<td>MD – 228 lbs (1010 N)</td>
<td>D5034, Procedure G</td>
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<td></td>
<td>TD – 188 lbs (836 N)</td>
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<tr>
<td>Tensile Property - Elongation</td>
<td>MD – 30%</td>
<td>D5034, Procedure G</td>
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<tr>
<td></td>
<td>TD – 26%</td>
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<tr>
<td>Strip Tensile - Break Strength</td>
<td>MD – 159 ppi (27.8 N/mm)</td>
<td>D5035, 12ipm strain rate</td>
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<td></td>
<td>TD – 124 ppi (21.7 N/mm)</td>
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<tr>
<td>Strip Tensile - Elongation</td>
<td>MD – 30%</td>
<td>D5035, 12ipm strain rate</td>
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<td></td>
<td>TD – 25%</td>
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<td>Tongue Tear</td>
<td>MD – 49 lbs (218 N)</td>
<td>D2261</td>
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<td></td>
<td>TD – 48 lbs (214 N)</td>
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<tr>
<td>Mullen Burst Strength</td>
<td>402 psi (2770 kPa)</td>
<td>D3786 modified</td>
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<tr>
<td>Flash Point</td>
<td>716° F (380° C)</td>
<td>D93</td>
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<tr>
<td>Auto Ignition</td>
<td>662-770° F (350-410° C)</td>
<td>E659</td>
</tr>
<tr>
<td>Water Vapor Permeance</td>
<td>4350 Gurley seconds</td>
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The information contained herein is typical and to the best of our knowledge accurate and indicative of the results that can be obtained by testing in an accredited laboratory. The buyer or user of these products is solely responsible for determining whether these products are suitable for any intended use and for its proper installation and use.

REV 082015
Step 1. Center the folded liner at one end of the railcar. Unfold the liner to the opposite end, ensuring that the liner is evenly centered in the railcar. Unfold the width toward the sidewalls, while keeping the zipper centered. Secure each end of the liner by aligning the defined bottom corners of the liner with the respective container corners.

Step 2. Pull the top layer of the liner over the end walls allowing it to hang over the walls approximately 5 to 6 feet.

Step 3. Pull the top layer of the liner up and over the sidewalls leaving an equal external overlap around the perimeter of the railcar. Be sure that the grommeted webbing is in alignment with the top edge of the railcar. Additionally, you can secure the liner in place by attaching bungee cords to the grommets on the liner and to the outer walls of the railcar.

Step 4. Once the materials have been loaded, remove all bungee cords or straps securing the liner to the outer walls. Pull the liner’s sidewalls up and toward the center of the railcar.

Step 5. Locate the zipper pull and zip the liner closed. When zipping the liner, be sure that the teeth of the zipper are aligned properly. Next, fold the ends of the zipper toward the center of the liner so that they lay flat on top of the liner. Next, locate the straps attached to the grommets. Connect the straps to the grommets on the opposite side of the liner using a criss-cross method as shown. The straps on both ends should go through the loops that are attached to the ends of the zipper (See picture). Cinch the straps and buckles tightly across the width of the container to secure the liner. Finally, verify that the zipper is closed properly and that the straps are secure.
Leak Proof Statement

11/4/16

To Whom It May Concern:

PacTec Inc. hereby certifies our Item RVP5410.56-14WPECZL is manufactured utilizing leak proof materials of construction. The primary material of construction is woven polyethylene coated with a nonporous polyethylene film. The polyethylene film is uniformly distributed across the woven polyethylene tapes in order to fill any void spaces or openings. The material is heat welded together and folded to form a leak proof liner.

Sincerely,

[Signature]

Troy Town
Vice President of Engineering / PacTec Inc.

"Providing Solutions for the Environment"
### 6 Mil Polyethylene Liner

<table>
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<th>Product Properties</th>
<th>Specifications (metric)</th>
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<td>Strength</td>
<td>MD – 3502 psi (20700 kPa)</td>
<td>D882, 2ipm strain rate</td>
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<tr>
<td>Strength</td>
<td>TD – 3269 psi (20700 kPa)</td>
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<tr>
<td>Elongation</td>
<td>MD – 672%</td>
<td>D882, 2ipm strain rate</td>
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<td>Elongation</td>
<td>TD – 877%</td>
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<tr>
<td>Impact Resistance</td>
<td>11.3 oz (321 g)</td>
<td>D1709, Method B</td>
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<td>Tear Resistance</td>
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<td>Resistance</td>
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<td>Resistance</td>
<td>TD – 49.7 oz (1408 g)</td>
<td></td>
</tr>
<tr>
<td>Melting Point</td>
<td>248°F (120°C)</td>
<td>Industry Average</td>
</tr>
<tr>
<td>Cold Crack</td>
<td>-25.6°F (-32°C)</td>
<td>Industry Average</td>
</tr>
</tbody>
</table>

The information contained herein is typical and to the best of our knowledge accurate and indicative of the results that can be obtained by testing in an accredited laboratory. The buyer or user of these products is solely responsible for determining whether these products are suitable for any intended use and for its proper installation and use.
TransLiner®

Roll-off containers
End dump trailers
Lugger boxes
Rail gondolas

Disposable polyethylene liners
The TransLiner® is a disposable polyethylene container liner with a customizable design that ensures a form fit, every time. Designed to help transport solids and sludge wastes safely and securely. The design positions the liner seals outside of the container to provide exceptional leak protection. The TransLiner may also be fitted to cover the load which aids in dust and odor control.

Applications:

Features:

- Seals outside the container for leak protection
- Available in many standard sizes and different mil thicknesses
- Patented, form-fit design

Advantages:

- Easy installation
- Reduced washout costs
- Odor and freeze control
- Extended container life

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Our reputation is built on it. Our ISO 9001:2008 certification confirms it. Innovative design, customized solutions, and rigorous testing are a part of every thing we do at PacTec. Take advantage of our years of experience in packaging and transportation and call or connect with us online.

We manufacture packaging. We engineer solutions.

Exceeding Expectations, One Customer at a Time...
ALLIED WASTE NIAGARA FALLS LANDFILL FACILITY
NIAGARA FALLS, NEW YORK
FACILITY INFORMATION SHEET - REVISED JULY 2010

GENERAL
The Niagara Falls Sanitary Landfill Facility is owned and operated by Allied Waste Niagara Falls Landfill, LLC which is a wholly owned subsidiary of Republic Services, Inc. corporate offices in Phoenix, Arizona. Republic Services is a waste service company primarily involved with the full service management of non-hazardous solid waste and is a publicly traded corporation which is listed on the NY Stock Exchange (symbol RSG).

The Niagara Falls Landfill Facility is located on roughly 380 acres of property which is within the Town of Niagara Falls and the City of Niagara Falls, New York. All operating landfills meet or exceed both New York State Part 360 and Federal Subtitle D landfill design criteria and are operated under New York State Department of Environmental Conservation Permit No. 9-2911-00119/00005-0. This permit was last issued December 14, 2005 and will expire November 30, 2015.

This facility routinely receives between 500 to 3,000 tons of non-hazardous, solid wastes per day, 6 days per week, and is permitted to accept an average of 200,000 tons of waste per calendar quarter.

LOCATION
The entrance to the Niagara Falls facility is located at the intersection of 56th Street and Niagara Falls Boulevard, 1/2 mile west of the Interstate 190 and Niagara Falls Blvd. exit ramp. The facility is predominantly surrounded by heavy industry on the north, west and south boundaries. Interstate 190 runs along the entire eastern boundary.

PRESENT, AND FUTURE DEVELOPMENT
The current operational areas are Landfill V and the newly constructed Landfill VIII. Landfill V occupies roughly 50 acres and is at roughly 95% of capacity. Most of the landfill operation takes place in Areas A and B of Landfill VIII. These areas are approximately 30 acres. Construction of an addition 10 acres of Area B is almost complete.
Continued construction of all additional areas within the central area of the site will be part of the Landfill VIII development. The entire development of Landfill VIII will take approximately 15 years, occupy approximately 84 acres, and provide for a capacity of approximately 10 million cubic yards.

LANDFILL CAP DESIGN
The cap design currently being utilized, from the bottom up, is composed of the following components:
♦ 12 inches of stone gas venting layer
♦ 24 inches low permeability compacted (clay) soil or 18 inches of compacted (clay) soil
♦ A 60 mil. HDPE (High Density Poly Elthylene) geomembrane is installed in areas with less than a 15% slope
♦ 24 inches of protective soil barrier
♦ 6 inches of top soil for vegetative growth

LANDFILL LINER SYSTEM DESIGN
Current New York State and Federal regulations require composite liner systems for all solid waste landfills. These requirements are either met or exceeded by the landfills at the Niagara Falls facility.

The liner systems in Sanitary Landfill V are constructed, from the bottom up, as follows:
♦ 5 to 10 feet of compacted soil sub-base
♦ 2 feet of compacted, low permeability (clay) soil
♦ 60 mil HDPE (high density polyethylene) geomembrane
♦ Protective geotextile fabric cushion
- 1 foot of drainage stone (The secondary drainage layer in Landfill V, Area C and Landfill VIII are composed of a "sandwiched" geo-composite material which is composed of both HDPE membrane and geotextiles.)
- Geotextile fabric
- 2 feet of compacted, low permeability (clay) soil
- 60 mil HDPE geomembrane
- Protective geotextile fabric cushion
- 2 feet of drainage stone

Note that the sub-base and liner system have a combined thickness of 11 to 15 feet. This thickness raises the top of the liner above the surrounding ground elevation. Therefore, wastes deposited in this facility are actually deposited above the existing ground surface. This feature eliminates the potential for the below-ground migration of landfill gases.

ENVIRONMENTAL MONITORING AND CONTROL SYSTEMS

Wells for operating areas are sampled quarterly and wells for all closed facilities are sampled semi-annually. For example, the groundwater monitoring system for Sanitary Landfill V and VIII is currently a combination of 43 monitoring wells. These wells are installed in the bedrock, top of bedrock, and top of clay geologic zones. 12 wells are in up-gradient locations and 31 wells are in down-gradient locations.

Landfill V and VIII are constructed with a double contained leachate collection and transfer systems. This double contained system is also equipped with leak detection/sampling access. These systems are also sampled periodically.

Surface water run-off from the site flows through engineered structures and is channeled to exit the site at one specific point along the south property boundary. Surface water is monitored for assigned daily and monthly parameters as specified in the site SPDES Permit No. NY-009-4251.

The facility discharges leachate from the Subtitle D landfills to the sanitary sewer system under Sewer Use Permit #67, issued by the Niagara Falls Water Board. This permit authorizes the direct discharge of the leachate collected from the landfills to be discharged directly to the Niagara Falls Waste Water Treatment Plant. This discharge is monitored continuously as specified by the permit. This permit was last issued March 03, 2007 and is renewed every 5 years.

TYPES OF WASTES ACCEPTED

The Niagara Falls Landfill Facility primarily receives non-hazardous, industrial solid wastes for disposal which are delivered by truck and rail. Approximately 40% of the wastes received at the landfill are generated by industrial sources. Industrial wastes which are received include municipal sewage treatment sludges, treated hospital wastes, various types of ashes, contaminated soils and debris, industrial process sludges, various manufacturing wastes and asbestos waste. Roughly 40% of wastes received are construction-demolition debris, and trash which does not contain food or bird attracting wastes.

Due to the proximity of the landfill to the Niagara Falls International Airport, wastes which may attract sea gulls and other types of birds are prohibited. All industrial or special wastes accepted at the Landfill are subject to analytical testing requirements, New York State disposal authorization, and Allied Waste Industries environmental review.
December 14, 2006

Mr. David Granier, General Manager
Allied/BFI Waste Systems of North America, Inc.,
5800 Niagara Falls Boulevard
P.O. Box 344
Niagara Falls, New York 14304-0344

Attn: Mr. David Hanson, Environmental Manager

Dear Mr. Granier:

PERMIT TRANSMITTAL LETTER
ALLIED/BFI WASTE SYSTEMS
PERMIT NO. 9-2011-00119/00005
SOLID WASTE MANAGEMENT NO. 32811

Enclosed is your permit which was issued in accordance with applicable provisions of the Environmental Conservation Law. The permit is valid for only that project, activity or operation expressly authorized. If modifications or changes are desired after permit issuance, you must submit the proposed revisions and receive written approval from the Permit Administrator prior to initiating any change. If the Department determines that the modification represents a material change in the scope of the authorized project, activity, operation or permit conditions, you will be required to submit a new application for permit.

PLEASE REVIEW ALL PERMIT CONDITIONS CAREFULLY. IN PARTICULAR, IDENTIFY YOUR INITIAL RESPONSIBILITIES UNDER THIS PERMIT IN ORDER TO ASSURE TIMELY ACTION IF REQUIRED. SINCE FAILURE TO COMPLY PRECISELY WITH PERMIT CONDITIONS MAY BE TREATED AS A VIOLATION OF THE ENVIRONMENTAL CONSERVATION LAW, YOU ARE REQUESTED TO PROVIDE A COPY OF THE PERMIT TO THE PROJECT CONTRACTOR, FACILITY OPERATOR, AND OTHER PERSONS DIRECTLY RESPONSIBLE FOR PERMIT IMPLEMENTATION (IF ANY).

If you have any questions regarding the administrative processing of this permit or request for modification, please contact this office at the above address. Technical questions relating to the specific conditions should be directed to Mr. Mark Hans, Regional Solid Materials Engineer at 716/851-7220.

Respectfully,
Steven J. Doleski
Regional Permit Administrator

JED/vam
Endsorus

cc: Mr. Mark Hans, NYSDEC, Division of Solid and Hazardous Materials/Attn: Mr. James Sacco
Mr. Scott Marrath, NYSDEC, Division of Solid and Hazardous Materials, Albany
Mr. James Devauld, Niagara County Health Department
Hon. Steven Richards, Supervisor, Town of Niagara/Attn: Mr. Fred Ciark, Building Inspector
Mr. Ernest Hanna, GZA GeoEnvironmental of New York/Attn: Mr. Bart Klettke
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

PERMIT
Under the Environmental Conservation Law

TYPE OF PERMIT: Article 27, Title 7: 6NYCRR Part 360: Solid Waste Management

PERMIT ISSUED TO
Allied/BFI Waste Systems of North America, Inc.

ADDRESS OF PERMITTEE
5600 Niagara Falls Boulevard, P.O. Box 344 LPO, Niagara Falls, New York 14304-0344

CONTACT PERSON FOR PERMITTED WORK
Mr. David L. Hamon, Environmental Manager

NAME AND ADDRESS OF PROJECT/FACILITY
NRI/Newco-Pine Avenue/Packard Road Site

LOCATION OF PROJECT/FACILITY
56th Street and Niagara Falls Boulevard, Niagara Falls

COUNTY	CITY	REGULATED RESOURCE (if applicable)
Niagara	Niagara

DESCRIPTION OF AUTHORIZED ACTIVITY
Construction and operation of the 51 acre Sanitary Landfill V, and the 84 acre Sanitary Landfill VIII for the disposal of non-bird attracting waste; and post-closure monitoring and maintenance of Sanitary Landfills I-IV and VI.

By acceptance of this permit, the permittee agrees that continuance of and compliance with the permit is dependent upon strict compliance with NYS Environmental Conservation Law (ECL), all applicable regulations, the specified General Conditions (pages 2 and 3) and all Special Conditions contained herein.

REGIONAL PERMIT ADMINISTRATOR
Steven J. Dojeski

AUTHORIZED SIGNATURE
Steven J. Dojeski

DATE OF ISSUANCE
12/14/2005
GENERAL CONDITIONS

Inspection

1. The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SARA 403(3). A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

Permit Changes and Renewals

2. The Department reserves the right to modify, suspend or revoke this permit when:
   a) the scope of the permitted activity is expected or a violation of any condition of the permit or provisions of the ECL and pertinent regulations is found;
   b) the permit was obtained by misrepresentation or failure to disclose relevant facts;
   c) new material information is discovered; or
   d) environmental conditions, relevant technology, or applicable law or regulation have materially changed since the permit was issued.

3. The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any fees, fees or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

4. The permittee must submit a renewal application at least:
   a) 180 days before expiration of permits for State Pollutant Discharge Elimination System (SPDES), Hazardous Waste Management Facilities (HWMF), major Air Pollution Control (APC) and Solid Waste Management Facilities (SWMF); and
   b) 30 days before expiration of all other permit types.

5. Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or restrict any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

Other Legal Obligations of Permittee

6. The permittee has accepted, expressly, by the execution of the application, the full legal responsibility for all damages, direct or indirect, of whatever nature and by whatever cause, arising out of the project described in this permit and has agreed to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from this project.

7. This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

8. The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required for this project.

DEC PERMIT NO. 92911-00119/00695 PAGE 2 OF 17
SPECIAL CONDITIONS

Approved Documents and Wastes

1. Construction and operation of Sanitary Landfills V and VIII and the railroad spur, and post-closure monitoring and maintenance of Sanitary Landfills IV and VI shall be in conformance with 6 NYCRR Part 360 and the plans and reports (except as modified by the special conditions in this permit) consisting of:
   b. "Sanitary Landfill Area V, Subarea A and B Permit Drawings" prepared by GZA GeoEnvironmental of New York. The approved plan sheets are listed on permit page 12 of 17.
   c. "Sanitary Landfill Area V, Subarea C Permit Drawings" prepared by GZA GeoEnvironmental of New York. The approved plan sheets are listed on permit page 13 of 17.
   e. "Sanitary Landfill VIII DEIS Permit Drawings" prepared by GZA GeoEnvironmental of New York. The approved plan sheets are listed on permit page 14 of 17 and page 15 of 17.
   f. "Sanitary Landfill VIII, Subareas A & B Permit Drawings" prepared by GZA GeoEnvironmental of New York. The approved plan sheets are listed on permit page 16 of 17 and page 17 of 17.

2. The only wastes permitted for disposal at this facility shall be asbestos, and non-hazardous industrial/commercial waste, construction and demolition (C&D) debris, contaminated soils and sludges. Wastes which attract birds are prohibited from disposal in the landfill. Treated regulated medical waste (RMW) and/or treated and destroyed RMW sharps accompanied by a NYS Department of Health approved certificate of treatment form that evidences such treatment and is signed by an authorized person at the generating facility may also be received for disposal. All asbestos, industrial wastes, contaminated soils, sludges and medical waste are to be received only upon written acceptance from the Department's Region 9 Solid Materials Engineer (RSME) except those waste streams less than 100 tons per year. Those wastes may be received by the permittee upon review and written approval of the permittee. All requests for acceptance shall be submitted on form 47-19-7, Application for Disposal of an Industrial Waste Stream. Neither liquids nor wastes containing free liquids or sludges with a solid content of less than 20% shall be received at the landfill. No hazardous waste (as defined in 6 NYCRR Part 371, which is subject to regulation under 6 NYCRR Part 370 through 374) and no radioactive waste (as defined and regulated in 6 NYCRR Part 380) may be received at this facility.
SPECIAL CONDITIONS

3. No ash (i.e., flyash, bottom ash, and combined ash) containing free liquids or hazardous waste shall be received at the landfill. Prior to accepting municipal solid waste incinerator ash, the permittee shall obtain a certification from the generator that the ash has been tested in accordance with appropriate laboratory analytical methods and frequency protocols and it is not hazardous waste as defined under 6 NYCRR Part 371.2 through 4 and regulated under 6 NYCRR Part 372, 374-2.15 and any other applicable subpart. Additionally, as long as municipal solid waste incinerator ash is being accepted at the landfill, the permittee must require the generator to provide copies of the analyses used to confirm the certification. Copies of the certifications and analyses shall be maintained at the landfill for the duration of the landfill's operation and post-closure period, as defined in Part 360-2.15(h).

4. The approved design capacity for this landfill is 3,077 tons per day. The approved design capacity is not a daily limit. The maximum waste receipts at the landfill during any Quarter shall not exceed 240,000 tons. Annual waste receipts shall not exceed 800,000 tons per year.

5. The permittee shall not receive at the facility, solid waste which was generated within a municipality that has either not completed a comprehensive recycling analysis (CRA) or is not included in another municipality's CRA satisfying the requirements of 6 NYCRR Part 360-19(f) which has been approved by the Department and implemented the recyclables recovery program determined to be feasible by the analysis. A list of municipalities serviced by the facility shall be submitted to the RSME with the Annual Report required by Special Condition No. 49 of this permit.

Variances (All references are 6 NYCRR Part 360, effective November 24, 1999)

6. The following variances are approved as noted and conditioned. In the event that nuisance or other detrimental conditions develop as a result of these variance approvals, the RSME may suspend the approval until the modification procedures of 6 NYCRR Part 621.14 are concluded:

   a. Variance request No. 1 from 6 NYCRR Part 360-2.12(e)(1)(v) which requires a landfill expansion to be built with at least 20 feet of unconsolidated deposits between the landfill liner and bedrock. This variance is approved provided that the permittee follows the Quality Assurance/Quality Control Plan in the construction of the approved double composite liner system.

   b. Variance request No. 2 from 6 NYCRR Part 360-2.13(d) which requires a minimum 5-foot separation between the base of the constructed liner system and the seasonal high groundwater table is approved. Construction of the liner system shall be in accordance with the approved plans (see Special Condition Nos. 1.e. and 1.f.).

Compliance Schedule

7. Prior to removal of any groundwater monitoring wells that are monitored as part of the CECOS Part 373 Permit, CECOS must obtain a permit modification that provides for adequate replacement of the wells to be removed.

8. For each stage of landfill construction after construction of subarea A, the permittee shall submit, for Department approval, a design rationale report, specifications, updated CQA/QC Plan and drawings at least 90 days prior to beginning construction. Construction of these subareas may not begin until a permit modification is issued to cover this construction.

9. A construction schedule for any phase of construction shall be submitted to the RSME before the start of construction of that subarea.

10. Prior to operation of any subarea of Sanitary Landfill Area VIII, the permittee shall submit a revised Environmental Monitoring Plan (if necessary) to the Department which includes the monitoring required for the subarea being operated.
SPECIAL CONDITIONS

11. Prior to operation of any subarea in Sanitary Landfill Area VIII, the permittee shall provide a revised closure and post-closure cost estimate that includes the subareas to be operated.

12. Prior to operation of any subarea in Sanitary Landfill Area VIII, the permittee shall submit a revised financial surety instrument (if needed) to provide security for the revised closure and post-closure cost estimates provided in accordance with Special Condition No. 11 of this permit.

13. Prior to operation of any subarea in Sanitary Landfill Area VIII, the permittee shall receive the RSME acceptance of the record drawings and Construction Certification Report (see Special Condition No. 22 of this permit). No authorization to operate will be granted until leakage into the secondary collection system, after completion of construction, has dropped below 20 gallons per acre per day (gad) and has stabilized. Data confirming the leakage rate must be submitted to the RSME.

14. Prior to the closure of any portion of Sanitary Landfill Area V or Sanitary Landfill Area VIII, the permittee shall submit closure plans, specifications and a CQA/CQC Plan to cover the areas to be closed. In addition, if any design changes are proposed to the conceptual closure plan, the appropriate design calculations shall be presented to justify the changes. This information shall be submitted to the Department, for review and approval, at least 60 days prior to the anticipated beginning of construction.

15. Prior to final closure of Sanitary Landfill Area V or Sanitary Landfill Area VIII, the Post-Closure Monitoring and Maintenance Operations Manual shall be revised to include the Sanitary Landfill Area being closed.

16. Prior to final closure of the facility, a Closure Site Investigation (CSI) shall be completed and a report prepared in accordance with 6 NYCRR Part 360-2.15. The CSI Report and a Final Closure Plan shall be submitted to the Department within 180 days before receipt of the last waste, within 180 days before the last day of the operating permit, or in accordance with any permit condition or schedule of an Order on Consent, whichever is sooner.

17. Prior to final closure of the facility, a final Closure Plan, including all design calculations as well as a CQA/CQC Plan and specifications, must be prepared in accordance with 6 NYCRR Part 360-2.15(c). The final Closure Plan shall be submitted to the Department within 60 days before receipt of last waste, within 60 days before the last day of the operating permit, or in accordance with any permit condition or schedule of an Order on Consent, whichever is sooner.

Construction and Final Cover Installation

18. All geotextile, geomats, geosynthetic drainage composites, GCL's and geomembrane shall be tested to ensure that the appropriate design standards (friction angle, cohesion, transmissivity, permeability, tensile strength) are met. The testing shall be done to simulate actual landfill conditions using the appropriate adjacent materials and expected loadings that would be found in the landfill. All testing must be completed prior to installation of the appropriate materials. The results of the testing shall be included in the Construction Certification Report (see Special Condition No. 22 of this permit).

19. A log shall be maintained on-site during each construction and final closure phase to record all approved changes. Changes materially altering the permitted design and/or approved specifications must be approved by the RSME before they are implemented. The Construction Certification Report (see Special Condition No. 22 of this permit) shall incorporate the Field Change Log for the respective construction/final closure phase.

20. Per the requirement of 6 NYCRR Part 360-1.4(b), the Department reserves the right to inspect landfill construction and final cover installation at any time. The Department requests notification to the RSME within at least 24 hours before any scheduled final inspection of the final lift of clay and the geomembranes liner so that Department staff have the ability to accompany the permittee or their designated representative performing the Construction Quality Assurance when performing these inspections prior to installation of the next overlying layer.
SPECIAL CONDITIONS

21. The upper surface of the clay liner must be free of stones greater than one inch in diameter and stones having angular surfaces.

22. A Construction Certification Report for any landfill construction or final cover installation shall be submitted to the RSME within 45 days of work completion. The permittee's Supervising Engineer shall certify in writing that the construction of the facility, subcell, leachate system or monitoring system was in accordance with this permit and tested in accordance with generally accepted engineering practice. The Construction Certification Report shall also include "As-Built" Plans and a report documenting the results of all testing. The Construction Certification Report shall be signed by a New York State Licensed Professional Engineer. Confirmation of the integrity of the landfill liner and detection system, if part of the construction, must be provided as part of the certification.

Landfill Operation

23. The landfill shall only receive waste from 6:00 A.M. to 7:00 P.M. daily to allow for proper daily cover and inspection. However, waste specifically approved in writing by the RSME may be landfilled from 6:00 A.M. to 4:00 A.M. the next day, 7 days a week, with adequate lighting provided.

24. Operation of the facility shall be controlled to prevent exceedance of ambient air quality standards, as specified in 6 NYCRR Part 257.

25. Landfill personnel shall be on duty at all times to ensure that only Department approved wastes are deposited at the landfill. In the event that hazardous wastes are received at the landfill, the permittee's personnel shall refuse to accept these wastes for disposal in the landfill and shall immediately notify the DEC Environmental Monitor (Monitor) and the RSME of the incident. In other instances, when non-hazardous, unauthorized wastes are received at the landfill, a report summarizing these occurrences shall be submitted to the Department with the Quarterly Report required by Special Condition No. 48 of this permit.

26. Prior to operation of any subsites in Sanitary Landfill Area VIII, the integrity of the primary leachate collection pipes in the landfill must be verified by passing a cleaning device through them. After placement of two lifts (15 feet) of waste, the integrity of the pipes shall be re-verified by passing a cleaning device through them. These results shall be forwarded to the RSME, in writing, within 30 days. The Monitor shall be advised at least three days in advance of the verification activities.

27. The first layer of refuse placed above the leachate collection layer must be a minimum of five feet in compacted thickness, and be of a select nature containing no large, rigid objects or other waste which could penetrate the liner system. During placement of this select lift, personnel must be situated on the liner system to continuously observe the select waste as it is being placed. All unacceptable material shall be removed. No sludge or other waste which could blind the drainage layer shall be placed within 15 feet of the top of the drainage layer.

28. All waste shall be placed in 2-foot lifts, maximum, and compacted. The waste shall be placed at no greater than a 1 (V) to 3 (H) slope. A minimum of 6 inches of compacted soil or an alternate daily cover (ADC) shall be placed at the completion of each day's (24 hour) operation on the top surface of the waste. At least 12 inches of compacted soil shall be applied for intermediate cover and shall be placed over any area that will not receive waste material in the next 30 days. Ash may be substituted for the daily and intermediate soil cover. If the RSME determines that this creates dusting which the site's fugitive dust control plan cannot control, the permittee shall return to using compacted soil.

29. No drummed waste shall be placed in the landfill without prior written approval from the RSME.

30. The permittee shall not excavate wastes, except for asbestos disposal or fire control, without prior written approval from the RSME.
SPECIAL CONDITIONS

31. In addition to soil, the Department may approve on a case-by-case basis, the use of wastes and contaminated soils for ADC. All ADCs must be transported by Department permitted Part 364 waste haulers. Requests for use of ADCs shall be submitted in writing to the RSME. In the event that nuisances develop from the use of ADCs, the RSME can rescind this approval without the need to modify this permit. The use of ADCs is prohibited. Any storage of ADCs is limited to areas where runoff can be collected as leachate and where windblown materials will not land on intermediate and final cover areas. On an annual basis, the amount of approved waste used for ADC cannot exceed 20% of the annual waste receipts unless otherwise approved by the Department. Any ADC in excess of the 20% amount must be counted as waste, even if it is utilized as daily cover.

32. Temporary fencing shall be provided on the downwind control berm before accepting waste in the landfill area.

33. The permits shall prevent standing water from accumulating in the active landfill area. An active landfill area is any area which does not have an intermediate or final cover. This water shall be handled as leachate.

34. A minimum of 100 cubic yards of clean, above-ground cover soil or ash shall be stockpiled in the operational area of the landfill for fire control and other emergency uses.

35. The entrance road must be cleared and maintained to prevent tracking of material onto public roads.

36. All leachate transfer pipe systems from Sanitary Landfill VII to the Connecting Road pump station shall be cleaned annually. Additionally, force main portions of the active leachate transfer lines shall be pressure tested annually and a record documenting both operations shall be submitted to the Department with the Quarterly Report (covering the period during which the leachate transfer pressure testing was accomplished) required by Special Condition No. 48 of this permit. The force main to be pressure tested is between MH-1 and the pump station. Furthermore, the force mains between MH-C6U and MH-C9U and MH-B12 and MH-C10 when active, shall also be pressure tested annually and reported.

37. The primary leachate collection lines in Sanitary Landfills V, VI and VIII shall be cleaned on an annual basis. The Monitor shall be notified at least two days in advance of the flushing. A report summarizing the flushing activities shall be included with the Quarterly Report (covering the period during which the leachate line flushing was accomplished) required by Special Condition No. 48 of this permit.

Landfill Monitoring

38. Weekly inspections of incoming waste loads for unacceptable wastes shall be conducted. The results of the inspection shall be logged and maintained on file at the landfill. Additional random inspections shall be performed as requested by the Monitor.

39. Exterior landfill side slopes shall be inspected weekly for slope failure, erosion and other structural problems. The results of the inspection shall be logged and maintained on file at the landfill. All observed problems shall be reported, within seven days, to the RSME, with a schedule for repairs.

40. The permits shall, on a weekly basis, record in a log the leachate level in the following manholes:
   a. Sanitary Landfill V manholes A-2U and C-4U.
   b. Sanitary Landfill VI manholes 10-B, 11-U, C-5U, C-6U and D-6U.

The log shall also show the permitted maximum elevation (see table on next page) of leachate in the manholes. A copy of this log shall be submitted to the RSME, with the Quarterly Report required by Special Condition No. 48 of this permit.
SPECIAL CONDITIONS

<table>
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<th>maximum elevation</th>
<th>maximum level in manhole (feet)</th>
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<td>C</td>
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</table>

41. The secondary leachate flow rates for each subarea in Sanitary Landfills V, VI and VIII shall be measured and recorded, in a log, whenever the manholes are checked. This log shall be completed at a minimum frequency of once per week. A tabular summary of the recorded data shall be submitted with the Quarterly Report required by Special Condition No. 48 of this permit.

42. The Action Leakage Rate (ALR) for the landfill shall not exceed 20 gpd, except during initial filling of the cell (an average of 40 feet of solid waste has been deposited across the floor of each subarea). When the 20 gpd limit (as defined by 6 NYCRR Part 360-2.10(b)(2)) is exceeded, the contingency plan shall be immediately implemented. In addition, the collected liquid shall be tested for pH, specific conductivity, alkalinity, chloride, sulfate, manganese, iron and ammonia. The analytical results shall be compared to the most recent primary and secondary leachate analytical data to assist in determining if the flow in the secondary system is attributable to leakage through the primary liner system.

43. For Sanitary Landfills V, VI and VIII, the permittee shall conduct the Detection Monitoring Program described in the “Proposed Sanitary Landfill VIII Environmental Monitoring Plan” (see Special Condition No. 1, g. of this permit). Under Detection Monitoring, whenever the permittee determines groundwater quality, the permittee must determine whether there has been a statistically significant increase in any indicator parameter when compared against established background values. That determination must be made for each indicator parameter except ammonia in wells 87-127, 87-128-3 and 88-131-3A. Ammonia data from these wells shall be evaluated using the confidence interval procedure that was proposed in the November 1985 report. The method for this determination shall be as specified in the “Proposed Sanitary Landfill VIII Environmental Monitoring Plan” (see Special Condition No. 1, g. of this permit). Any changes to this procedure will require a modification to this permit. The Detection Monitoring Program shall be implemented during the operation of the landfill and shall continue for a period of no less than 30 years beyond the final closure of Sanitary Landfill Areas V, VI and VIII.

44. If waste constituents are consistently present in the groundwater monitoring wells described in this permit below the statistical “trigger” levels, the Department may require the permittee to perform additional sampling and install additional wells to determine whether the constituents originate in the landfill.

45. If the permittee or the RSME determines that the groundwater monitoring program required by this permit no longer satisfies the requirements of 6 NYCRR Part 360, the permittee must, within 90 days, submit an application for a permit modification which describes the change(s) that will be necessary to maintain regulatory compliance at the site.

Closure

46. The facility shall be properly closed in accordance with 6 NYCRR Part 360-2.15 and the approved Closure Plan to be submitted in accordance with Special Condition No. 17 of this permit. The final elevation of Sanitary Landfill Areas V and VIII shall not exceed 730 feet above sea level.
SPECIAL CONDITIONS

Post-Closure

47. Post-closure monitoring and maintenance of Sanitary Landfills I, II, III, IV and VI (Subareas A, B, C, and D) shall be in accordance with the manual entitled "Sanitary Landfills I through VI Post-Closure Monitoring and Maintenance Operations Manual" (see Special Condition No. 1.h.). The manual shall be updated, as needed, to reflect any operational modification.

Quarterly/Annual Report

48. A Quarterly Report shall be prepared on activities occurring during the Quarter in question (January 1 to March 31, April 1 to June 30, July 1 to September 30, October 1 to December 31) and must be submitted no later than 60 days after the last day of the Quarter in question. All Quarterly Reports shall be submitted on forms provided by the Department (see attached) or electronically, as specified by the Department and shall also contain the following:

a. Amounts of waste, for each type of waste listed in the most recent edition of the NYSDEC Active Landfill Annual/Quarterly Report, received.

b. The amount of each type of ADC received during the Quarter.

c. Report on receipt of unauthorized non-hazardous waste received during the Quarter (see Special Condition No. 25 of this permit).

d. Amount of leachate collected from the primary and secondary leachate collection systems for each subarea of Sanitary Landfills V, VI and VIII on a monthly basis.

e. The monthly Action Leakage Rate (ALR) for the secondary collection system of each stage of the landfills.

f. Weekly leachate level logs (see Special Condition No. 40 of this permit).

g. Calibration and maintenance logs for leachate flowmeter/totizers in manholes MB-10A, MB-11L, MB-8, C-5L, C-8L, D-5L, A-2L and C-4L.

h. Results of the annual leachate transfer line cleaning and pressure testing (see Special Condition No. 36 of this permit).

l. Results of the annual primary leachate collection system line cleaning (see Special Condition No. 37 of this permit).

49. An Annual Report must be prepared on activities occurring during the calendar year and must be submitted no later than March 1 of the following year. The Annual Report must be submitted on forms provided by the Department (see attached) or electronically, as specified by the Department. The Annual Report shall contain all the information required in Part 360-2.17(Q) and the following:

a. An updated topographic map.

b. Any changes to the fill progression plan.

c. An updated cost estimate for closure/post-closure activities to reflect inflation and/or any changes that may impact closure or post-closure.
SPECIAL CONDITIONS

d. Unusual events or accidents at the landfill and responses taken by landfill personnel.

e. Any changes in water quality which have occurred throughout the report year and a summary of the water quality information.

f. Any changes from the approved plans, reports and specifications or permit, along with a justification for the change.

g. A list of municipalities serviced by the facility (see Special Condition No. 5 of this permit).

50. All Quarterly and Annual Reports shall be submitted to the following agencies:

   NYSDEC
   Division of Solid & Hazardous Materials
   625 Broadway
   Albany, NY 12233

   NYSDEC
   270 Michigan Avenue
   Buffalo, NY 14203-2999
   Attn: Regional Solid Materials Engineer (RSME)

   Niagara County Health Department
   5467 Upper Mountain Road
   Lockport, NY 14094
   Attn: Director of Environmental Health

Financial Surcharge

51. In accordance with 6 NYCRR Part 360-1.12 and Part 360-2.19, the permittee shall maintain a financial surcharge acceptable to the RSME for closure and for 30 years of post-closure monitoring and maintenance.

52. Within 60 days of Department approval of the annual revised closure and post-closure estimates provided in accordance with Special Condition No. 51 of this permit, a revised financial surcharge(s) shall be submitted (if needed) to the RSME.

DEC Environmental Monitor (Monitor)

53. The previously established account to fund Environmental Monitoring activity at the permitee's facilities shall be maintained with the Department. This funding shall be used to monitor the Niagara Recycling Landfill Facility.

The Monitor will monitor the above-noted facility for compliance with its Solid Waste Management Facility Permit, 6 NYCRR Part 360, and other Department permits and regulations applicable to the facility. As required, the Monitor will assist in any legal enforcement activities resulting from the monitoring activities. The Monitor will also review permit applications, engineering reports, construction certifications, and applications for waste stream approval. Funding for the Monitor will be determined based on the Monitor being assigned to the facility for one-half of his/her time.
SPECIAL CONDITIONS

The requirements of the environmental monitoring account are as follows:

a. Funds as required to support the monitoring requirements shall be provided to the Department for funding of environmental monitoring activities related to the operation of the permittee's facility. This sum is based on annual monitoring service costs and is subject to annual revisions. Subsequent annual payments shall be made for the duration of this Permit to maintain an account balance sufficient to meet the next year’s anticipated expenses. The permittee shall be billed annually for each fiscal year beginning April 1. The permittee shall make payment 30 days in advance of April 1.

b. The Department may revise the required payment on an annual basis to include all costs of monitoring to the Department. The annual revision may take into account factors such as inflation, salary increases, changes in operating hours and procedures, and the need for additional Monitors and supervision of such Monitors by full-time Monitor Supervisors. Upon written request by the permittee, the Department shall provide that entry a written explanation of the basis for any modification. If such a revision is required, the Department will notify the permittee of such revision no later than 60 days in advance of any such revision.

c. Prior to making its annual payment, the permittee will receive and have an opportunity to review an annual work plan that the Department will undertake during the year.

d. Payments are to be in advance of the period in which they will be expended.

Other Conditions

54. The permittee agrees, by acceptance of this permit, that authorized Department representatives have a full right of entrance, inspection, and review of records pertaining to landfill operation and maintenance and all information pertaining to waste receipts during normal operating hours, and following 48 hours notice, such other hours as may be deemed necessary by the Department.

55. This permit does not relieve the permittee from the responsibility of complying with other Federal, State and/or local laws, rules and regulations.

56. Upon transfer of ownership of this facility, provisions shall be included in the property deed during the period of time during which the property was used as a landfill and a description of the waste contained therein. The fact that records including the limits of the landfill waste within the property and describing the length of time the property was used as a landfill and a description of wastes disposed of on-site are on file with this Department shall also be noted on the deed. This deed shall be filed with the Niagara County Clerk's Office.

57. If any condition of this permit conflicts with the approved reports and plans identified in Special Condition No. 1, the permit conditions shall prevail over the plans unless specific written approval for such a change is obtained from the Department prior to the implementation.

58. Where there are conflicts between elements of the approved plans, the most recently dated approved element shall prevail with respect to the conflicting material.

59. This permit supersedes all previously issued Solid Waste Management Permits and Permit Modifications for this facility.

60. In the event of an emergency, including but not limited to fires, explosions, waste spills on-site or known waste spills en route to the landfill, the RSME or the Monitor shall be notified of the emergency immediately. The details of the incident and the remediation or corrective action(s) taken shall be described in writing to the RSME within five working days of the incident.

cc: Mr. Mark Huns, NYSDEC, Division of Solid and Hazardous Materials, Buffalo/Attn: Mr. James Sacco
    Mr. Scott Matusz, NYSDEC, Division of Solid and Hazardous Materials, Albany
    Mr. James Devold, Niagara County Health Department
## SPECIAL CONDITIONS

**APPROVED PLAN SHEETS FOR NIAGARA RECYCLING LANDFILL**  
SANITARY LANDFILL, AREA V, SUBAREAS A AND B  
PREPARED BY GZA GEOENVIRONMENTAL OF NEW YORK, INC.

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# SPECIAL CONDITIONS

APPROVED PLAN SHEETS FOR NIAGARA RECYCLING LANDFILL
SANITARY LANDFILL AREA V, SUBAREA C
PREPARED BY GZA GEOENVIRONMENTAL OF NEW YORK, INC.

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<td>55597.1-C-018</td>
<td>Option 2, Excavation Plan</td>
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<td>55597.1-C-019</td>
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<td>55597.1-C-020</td>
<td>Option 2, Approximate Separation Top of Subgrade Fill from Top of Bedrock</td>
<td>December 2004</td>
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<tr>
<td>55597.1-C-021</td>
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<td>55597.1-C-022</td>
<td>Option 2, Approximate Separation Top of Subgrade Fill from Top of Clay Groundwater</td>
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<tr>
<td>55597.1-C-023</td>
<td>Option 2, Cross-Section A-A</td>
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<td>55597.1-C-024</td>
<td>Option 2, Cross-Section B-B</td>
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<tr>
<td>55597.1-C-025</td>
<td>Option 2, Leachate Collection/Transfer Lines and Surface Drainage Plan</td>
<td>December 2004</td>
<td>none</td>
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<tr>
<td>55597.1-C-026</td>
<td>Option 3, Top of Landfill Liner</td>
<td>December 2004</td>
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<td>55597.1-C-027</td>
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<td>55597.1-C-028</td>
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<tr>
<td>55597.1-C-030</td>
<td>Option 3, Approximate Separation Top of Subgrade Fill from Top of Rock Groundwater</td>
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<tr>
<td>55597.1-C-031</td>
<td>Option 3, Approximate Separation Top of Subgrade Fill from Top of Clay Groundwater</td>
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<td>55597.1-C-032</td>
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<td>55597.1-C-033</td>
<td>Option 3, Cross-Section B-B</td>
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<tr>
<td>55597.1-C-034</td>
<td>Option 3, Leachate Collection/Transfer Lines and Surface Drainage Plan</td>
<td>December 2004</td>
<td>none</td>
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<tr>
<td>55597.1-C-035</td>
<td>Option 4, Top of Landfill Liner</td>
<td>December 2004</td>
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<td>55597.1-C-036</td>
<td>Option 4, Excavation Plan</td>
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<td>55597.1-C-037</td>
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<td>55597.1-C-038</td>
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<tr>
<td>55597.1-C-039</td>
<td>Option 4, Approximate Separation Top of Subgrade Fill from Top of Rock Groundwater</td>
<td>December 2004</td>
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</table>
## SPECIAL CONDITIONS

### APPROVED PLAN SHEETS FOR NIAGARA RECYCLING LANDFILL

SANITARY LANDFILL VIII DEIS PERMIT DRAWINGS

PREPARED BY GZA GEOENVIRONMENTAL OF NEW YORK, INC.

<table>
<thead>
<tr>
<th>Drawing #</th>
<th>Title</th>
<th>Date</th>
<th>Last Revised Date</th>
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<tr>
<td>55597.1-C-040</td>
<td>Option 4, Cross-Section A-A</td>
<td>December 2004</td>
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<td>55597.1-C-041</td>
<td>Option 4, Cross-Section B-B</td>
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<tr>
<td>55597.1-C-042</td>
<td>Option 4, Leachate Collection/Transfer Lines and Surface Drainage Plan</td>
<td>December 2004</td>
<td>none</td>
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<tr>
<td>55597.1-C-043</td>
<td>Connection of Clean-Out Access Pipes to Existing Sanitary Landfill VI Leachate Transfer Lines</td>
<td>December 2004</td>
<td>none</td>
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<tr>
<td>55597.1-C043.1</td>
<td>Details for Secondary Lift Station Manhole for Tie-In to San VI Landfill</td>
<td>June 2005</td>
<td>none</td>
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<tr>
<td>55597.1-C-044</td>
<td>Cross-Sections of Liner Tie-In from Sanitary Landfill VIII to Existing Sanitary Landfill VI</td>
<td>December 2004</td>
<td>none</td>
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<tr>
<td>55597.1-C-045</td>
<td>Cross-Sections of Liner Tie-In from Sanitary Landfill VIII to Existing Sanitary Landfill V</td>
<td>December 2004</td>
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<tr>
<td>55597.1-C-046</td>
<td>Modifications &amp; Abandonment of Existing Manholes and Leachate Transfer Lines Landfill VI</td>
<td>December 2004</td>
<td>none</td>
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<tr>
<td>55597.1-C-047</td>
<td>Details for Sanitary Landfill VIII Floor &amp; Leachate Collection System &amp; Clean-Out Access Pipes for Liner Constructed on Existing Sanitary Landfill VI Sidewalks</td>
<td>December 2004</td>
<td>none</td>
</tr>
<tr>
<td>55597.1-C-048</td>
<td>Leachate Collection System/Cleanout Access Pipe Details (Applicable to Option 1 Only)</td>
<td>December 2004</td>
<td>none</td>
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<tr>
<td>55597.1-C-049</td>
<td>Typical Secondary Leachate Collection System Manhole Details</td>
<td>December 2004</td>
<td>8/2005</td>
</tr>
<tr>
<td>55597.1-C-050</td>
<td>Typical Primary Leachate Collection System Manhole Details</td>
<td>December 2004</td>
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</tr>
<tr>
<td>55597.1-C-051</td>
<td>Details of Primary Pipe Bedding</td>
<td>December 2004</td>
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<tr>
<td>55597.1-C-052</td>
<td>Leachate Collection/Transfer Pipe Details &amp; Geomembrane Boot Details &amp; Anchor Trench Details</td>
<td>December 2004</td>
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<tr>
<td>55597.1-C-053</td>
<td>Top of Final Cover System</td>
<td>December 2004</td>
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<tr>
<td>55597.1-C-054</td>
<td>Final Cover System Cross Sections</td>
<td>December 2004</td>
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<tr>
<td>55597.1-C-055</td>
<td>Typical Final Cover System Tie-In Sanitary Landfill VIII to Sanitary Landfill VI</td>
<td>December 2004</td>
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<tr>
<td>55597.1-C-056</td>
<td>Typical Final Cover System Details for Sanitary Landfill VIII</td>
<td>December 2004</td>
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## SPECIAL CONDITIONS

**APPROVED PLAN SHEETS FOR NIAGARA RECYCLING LANDFILL SANITARY LANDFILL VIII, SUBAREAS A & B PERMIT DRAWINGS PREPARED BY GIA GEOENVIRONMENTAL OF NEW YORK, INC.**

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<td>55597.1-C-101</td>
<td>Cover Sheet and Drawing Index</td>
<td>December 2004</td>
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<td>55597.1-C-102</td>
<td>Site Plan</td>
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<td>55597.1-C-103</td>
<td>General Existing Site Conditions &amp; Fill Descriptions</td>
<td>December 2004</td>
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<td>55597.1-C-104</td>
<td>Top of Bedrock Surface Elevations</td>
<td>December 2004</td>
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<td>55597.1-C-105</td>
<td>Top of Rock Groundwater Elevations</td>
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<td>55597.1-C-107</td>
<td>Subarea A Top of Landfill Liner Grading Plan</td>
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<td>55597.1-C-108</td>
<td>Subarea A Secondary Leachate Collection/Transfer System</td>
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<td>55597.1-C-109</td>
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<td>55597.1-C-110</td>
<td>Subareas A &amp; B Top of Landfill Liner Grading Plan</td>
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<td>55597.1-C-111</td>
<td>Subareas A &amp; B Secondary Leachate Collection/Transfer System</td>
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<tr>
<td>55597.1-C-112</td>
<td>Subareas A &amp; B Primary Leachate Collection/Transfer System</td>
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<td>June 2005</td>
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<tr>
<td>55597.1-C-113</td>
<td>Subarea A &amp; B Excavation Plan</td>
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<tr>
<td>55597.1-C-114</td>
<td>Subarea A &amp; B Top of Subgrade Fill</td>
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<tr>
<td>55597.1-C-115</td>
<td>Subarea A &amp; B Approximate Separation Top of Subgrade Fill from Top of Bedrock</td>
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<tr>
<td>55597.1-C-116</td>
<td>Subarea A &amp; B Approximate Separation Top of Subgrade Fill from Top of Rock Groundwater</td>
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<tr>
<td>55597.1-C-117</td>
<td>Subarea A &amp; B Approximate Separation Top of Subgrade Fill from Top of Clay Groundwater</td>
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<tr>
<td>55597.1-C-118</td>
<td>Subareas A &amp; B Cross-Sections A-A &amp; B-B</td>
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<td>55597.1-C-119</td>
<td>Subareas A &amp; B Cross-Section C-C</td>
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<tr>
<td>55597.1-C-120</td>
<td>Typical Containment Berm Cross-Sections</td>
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<tr>
<td>55597.1-C-121</td>
<td>Subarea A Temporary Leachate Removal System Cross-Sections</td>
<td>December 2004</td>
<td>June 2005</td>
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<tr>
<td>55597.1-C-121.1</td>
<td>Cross-Section of Leachate Transfer System Through Subarea A/Subarea B Internal Berm</td>
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<td>55597.1-C-121.2</td>
<td>Typical Cross-Section of Sanitary Landfill VIII</td>
<td>December 2004</td>
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<tr>
<td>55597.1-C-122</td>
<td>Cross-Section of Subarea A B Connections from San LF VIII, Sub. A to Future San LF VIII, Sub. F</td>
<td>December 2004</td>
<td>June 2005</td>
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<tr>
<td>55597.1-C-123</td>
<td>Cross-Sections of Liner Tie-In to San LF V, Subareas A &amp; C</td>
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<td>55597.1-C-124</td>
<td>Cross-Sections of Liner Tie-In to San LF V, Subarea B</td>
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<tr>
<td>55597.1-C-125</td>
<td>Details of Landfill Floor Cross-Section &amp; Leachate Collection System Detail and Primary Leachate Collection System Cleanout/Access Pipes</td>
<td>December 2004</td>
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<tr>
<td>55597.1-C-126</td>
<td>Typical Secondary Leachate Collection System Manhole Details</td>
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<td>B/2005</td>
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<tr>
<td>55597.1-C-126.1</td>
<td>Details for Lift Station Manhole AB1-1, Typical Geomembrane/Manhole Boot Detail</td>
<td>June 2005</td>
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### SPECIAL CONDITIONS

**APPROVED PLAN SHEETS FOR NIAGARA RECYCLING LANDFILL SANITARY LANDFILL VIII SUBAREAS A & B PERMIT DRAWINGS PREPARED BY GZA GEOENVIRONMENTAL, INC.**

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<td>55597.1-C-127</td>
<td>Typical Primary Leachate Collection System Mahoole Details</td>
<td>December 2004</td>
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<td>55597.1-C-128</td>
<td>Leachate Collection/Transfer Pipe Detail, Pipe Bedding Detail, Geomembrane Boot Detail &amp; Anchor Trench Detail</td>
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<td>Subareas A &amp; B Top of Final Cover System</td>
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<tr>
<td>55597.1-C-132</td>
<td>San LF VIII Flume Leachate Collection System Coverage Area</td>
<td>August 2005</td>
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<tr>
<td>55597.1-C-133</td>
<td>San LF VIII Flume Plan &amp; Profile</td>
<td>August 2005</td>
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</tbody>
</table>
## Application for Treatment or Disposal of an Industrial Waste Stream

### 1. Name of Project/Facility
- **Allied Niagara Falls Landfill Facility**

### 2. County
- **Niagara County**

### 3. Site Number
- **32S11**

### 4. Name of Owner
- **Allied Waste Systems**

### 5. Address
- **5600 Niagara Falls Blvd., Niagara Falls, New York 14304-0354**

### 6. Telephone No.
- **(716) 285-3344**

### 7. Name of Operator
- **Allied Waste Systems**

### 8. Address
- **Same as Section 5 above**

### 9. Telephone No.
- **(716) 285-3344**

### 10. Method of Treatment or Disposal
- **Sanitary Landfill**
  - **Disposal Code D90**

### 11. Company Generating Waste
- **Wynn MA, LLC**

### 12. Address of Facility Generating Waste
- **One Horizon Way, Everett, MA 02149**

### 13. Representative of Waste Generator
- **Robert Desalvio**

### 14. Mailing Address of Representative
- **101 Station Landing, Medford, MA 02155**

### 15. Telephone No.
- **(857) 770-7801**

### 16. Description of Process Producing Waste
- **Excavation for building construction**

### 17. Expected Annual Waste Production
- **Tons/Year**
- **Gallons/Year**

### 18. Waste Hauled In
- **Drums**
- **Bulk Tank**
- **Roll-Off Container**
- **Other**

### 19. Waste Composition
- **19a. Average Percent Solids**
- **19b. Physical State**
- **19c. pH Range**

### 20. Is an Analysis of Waste Attached?
- **Yes**
- **No**

### 21. Was a TCLP Test Conducted on the Waste?
- **Yes**
- **No**

### 22. Material is:
- **Hazardous**
- **Non-Hazardous**

### 23. Detail all hazard and nuisance problems associated with the wastes. List necessary safety, handling, treatment, and disposal precautions.

### 24. Where was material disposed of previously? Not Applicable

### 25. Name of Waste Transporter
- **Boston Environmental Corp.**

### 26. Address
- **338 Howard Street, Brockton, MA 02302**

### 27. NYSDEC Permit No.
- **(508) 897-8025**

### 28. Telephone No.
- **(508) 897-8025**

### 29. Certification
- I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

### Signature and Title
- **a. Signature and Title of Representative of Waste Generator**
- **Date**

- **b. Signature and Title of Representative of Treatment or Disposal Facility**
- **Date**
August 29, 2013

Mr. Richard Johnson  
WI Taylor County Disposal, LLC  
208 Southern States Road  
Mauk, Georgia 31058

SUBJECT: Solid Waste Handling Permit No. 133-003D(SL)  
Taylor County – WI Taylor County Disposal, LLC Landfill  
Municipal Solid Waste Landfill

Dear Mr. Johnson:

Your application to transfer the solid waste handling permit for the subject facility, including the necessary supplemental data, has been reviewed and approved.

Your permit [133-003D(SL)] is attached and includes conditions and limitations for your operation. Georgia Environmental Protection Division (EPD) personnel will make periodic inspections of your operation. These inspections will be discussed with you or your personnel.

This permit is now in effect; however, under Georgia Law it is subject to appeal for thirty (30) days following issuance and is subject to modification or possible vacation if appealed. Should EPD receive an appeal within the 30-day appeal period, you will be immediately notified and further construction or operation under this permit may not be undertaken until such time as the appeals process is concluded.

If you have any questions regarding the permit, please contact Mike Kemp at (404) 362-4918.

Sincerely,

Jeffrey W. Cown, Chief  
Land Protection Branch

Attachment: Permit with conditions

cc: Randall F. Nelson, Chairman, Taylor County Board of Commissioners  
Michael Stubbs, P.E., HHNT  
West Central District EPD  
Mike Kemp, Billy Cox  
File (PER) Taylor Co - WI Taylor Co Disposal LF [133-003D(SL)]
State of Georgia
Department of Natural Resources
ENVIRONMENTAL PROTECTION DIVISION

SOLID WASTE HANDLING PERMIT

Permit No: 103-003D(SL)                                          Date: August 29, 2013

Permittee: Name: WI Taylor County Disposal, LLC

Address: 208 Southern States Road
Mauk, Georgia 31068

In accordance with the provisions of the Georgia Comprehensive Solid Waste
Management Act, and the Rules promulgated pursuant thereto, this permit is issued for the
following operation:

Taylor County – WI Taylor County Disposal, LLC Landfill located
approximately 1.5 miles southwest of Charing, Georgia and 1.3
miles east of the intersection of State Route 90 and State Route
137 (Lat. 32°27'00", Long. 84°23'15"

This permit is conditioned upon the permittee complying with the attached conditions of
operation, which are hereby made a part of this permit.

All statements and supporting data submitted to the Environmental Protection Division of the
Department of Natural Resources have been evaluated, considered and relied upon in the
issuance of this permit.

This permit is now in effect; however, under Georgia Law it is subject to appeal for thirty (30)
days following issuance, and is subject to modification or revocation on evidence of
noncompliance with any of the provisions of the Georgia Comprehensive Solid Waste
Management Act, or any of the Rules promulgated pursuant thereto; or with any representation
made in the above mentioned application or the statements and supporting data entered therein
or attached thereto; or with any condition of this permit.

Judson H. Turner, Director
Environmental Protection Division
**WASTE INDUSTRIES LANDFILL**

**GENERATOR WASTE PROFILE WORKSHEET**

---

**Area To be completed by Waste Industries (WI) – Representative**

<table>
<thead>
<tr>
<th>SW Designee Number:</th>
<th>Profile Number:</th>
<th>Approval Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Landfill (Check):**

- Sampson County Disposal, Roseboro, NC 910-525-4132 Veronica Lee, Sales 919-422-9057 Mobile
- Grady Road Landfill, Rockmart, GA 770-748-8276 Julie Brookshire, Sales
- Taylor County Landfill, Mauk, GA 478-862-2610 Rhonda Poston, Sales
- Waste Services of Decatur, Bath Springs, TN 731-549-3567
- Lakeway Landfill and Recycling, Lowland, TN 423-581-1053 Dan Winters/Amy Bridges

---

**GENERATOR INFORMATION**

- Frequency: (Check One)  ✗ One Time Event  ☐ Continuous Waste Stream  ☐ Weekly  ☐ Monthly  ☐ Other
- Generator Name: Wynn MA, LLC Phone No:
- Generator’s Physical Address: One Horizon Way City: Everett
- State: MA Zip Code: 02149 Fax No:
- Generator’s Mailing Address: 101 Station Landing City: Medford
- State: MA Zip Code: 02155 State I.D. No: 3-13341 SIC Code: NA
- Generator/Generator Designee Contact Name: Robert Desalvio Email Address:
  robert.desalvio@wynnmass.com
- Physical (Site) Address of Waste Stream Profiled: One Horizon Way
  City: Everett State: MA County: Suffolk

---

**BILLING CUSTOMER INFORMATION**

- Customer Name: J. Derenzo Co Contact Person: John Cole
- Address: 338 Howard Street City: Brockton State: MA Zip: 02302
- Phone No: 508-897-8025 Fax No.: 508-897-8525 Email Address: jcole@bostonenvcorp.com

---

**TRANSPORTER INFORMATION**

- Transporter Name: Tunnel Hill Partners, L.P. Contact Person: Michael Kozak
- Address: 390 N.Broadway, Ste 220 City: Jerico State: NY Zip: 11753
- Phone No: 516-806-6232 Fax No.: Email Address: mkozak@tunnelhillpartners.com

---

**WASTE STREAM INFORMATION**

- Common Name of Waste: Non-haz Construction Derived Soil Containing <1% ACM
- Process Generating Waste: Excavation for Building Construction
- Type of Waste: ☐ INDUSTRIAL PROCESS ☐ POLLUTION CONTROL WASTE
- Physical State at 70 degrees F: ☒ SOLID ☐ SEMI-SOLID ☐ POWDER ☐ LIQUID ☐ OTHER
- Method of Shipment: ☒ BULK ☐ DRUM ☐ BAGGED ☐ OTHER/explain:
- Estimated Volume: Cubic Yards 10,600 Tons 17,000 Other Permanent Waste Stream? ☐ Yes ☒ No
- Special Handling Instructions:

---

**COMPOSITION BREAKDOWN**

- Color: Brown
- Odor (describe): None
- Free Liquids: ☐ Yes ☒ NO
- % Solids: 100
- pH: __________
- Flash Point: >150 Degrees F
- Phenol: _____ ppm

- Physical Description/Characteristics of Waste: Brown, fine to coarse SAND, some Gravel, little Silt, little Clay, little Organics, trace debris
REPRESENTATIVE SAMPLE CERTIFICATION

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA § 40 CFR 261.20 © guidelines or equivalent rules? YES ☐ NO ☐

Sample Date: ☐ Composite Sample ☐ Grab Sample

Sample’s Employer: Date: Signature: 

Sampler’s Name (printed): Analytical testing performed and MSDS sheets submitted with this profile worksheet: (please circle)

☐ TCLP ☐ Paint Filter Test ☐ MSDS Sheets ☒ Other (describe): Full soil characterization testing, see attached lab reports

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Required Parameters for this Profile

| Does this waste or generating process contain regulated concentrations of the following Pesticides and/or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2, 4-D, 2, 4, 5, -TP Silvex as defined in § 40 CFR 261.33? | ☐ Yes ☒ No |
| Does this waste or the generating process cause it to exceed OSHA exposure limits from high levels of Hydrogen Sulfide or Hydrogen Cyanide as defined in § 40 CFR 261.23? | ☐ Yes ☒ No |
| Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCB’s) as defined in § 40 CFR Part 761? | ☐ Yes ☒ No |
| Does this waste contain regulated concentrations of listed hazardous wastes defined by § 40 CFR 261.31, 261.32, 261.33, Including RCRA F-Listed Solvents? | ☐ Yes ☒ No |
| Does this waste contain regulated concentrations of 2, 3, 7, 8-Tetrachlorodibenzo-p-dioxin (2, 3, 7, 8-TCCD), or any other Dioxin as defined in § 40 CFR 261.31? | ☐ Yes ☒ No |
| Is this a regulated Toxic Material as defined by Federal and/or State Regulations? | ☐ Yes ☒ No |
| Is this a regulated Radioactive Waste as defined by Federal and/or State Regulations? | ☐ Yes ☒ No |
| Is this a regulated Medical or Infectious Waste as defined by Federal and/or State Regulations? | ☐ Yes ☒ No |
| Is this waste generated at a Federal Superfund Clean Up Site? | ☐ Yes ☒ No |

GENERATORS CERTIFICATION

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true and accurate description of the waste material being offered for disposal. I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste, medical or infectious waste, or any other waste material this facility is prohibited from accepting by law. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue. I understand that Waste Industries, Inc. Sampson County Disposal can only receive Non-Hazardous Waste.

The generator will notify Waste Industries, Sampson County Disposal of any changes in character or quantity of the waste prior to delivery. An annual, updated analytical report (if applicable) will be submitted to Waste Industries, Sampson County Disposal each year for the length of time the waste is disposed of in the above-mentioned disposal site.

Robert Desalvio, President Wynn MA, LLC

AUTHORIZED REPRESENTATIVE NAME AND TITLE (PRINTED) COMPANY NAME

AUTHORIZED REPRESENTATIVE SIGNATURE DATE

The Generator is responsible for completing the Signature Authorization and/or Third Party Signature Authorization for Disposal, if applicable. Only, when Generator of the Waste is not authorizing designee(s) to sign in their behalf and will sign all documents and manifests, page 3 will not required.
Approved permanent special waste profiles are subject to the Renewal Process Knowledge Certification process to remain active for disposal of waste. Generator will be notified by the disposal facility/landfill designee 60 days prior to expiration date and all requested information for recertification must be received 10 days before expiration date for processing to prevent inactivation status.

**Signature Authorization and/or Third Party Signature Authorization**

The Signature Authorization and/or Third Party Signature Authorization form must be completed by the Generator of the Waste to represent Generator’s Designee(s), when the Generator of the Waste Stream is NOT signing documents for special waste approval and Waste Industries preprinted manifest. NO EXCEPTIONS.

As generator of the waste stream, I hereby certify that I am authorized to approve the names of personnel and/or authorized agents that will sign on behalf of the Generator.

<table>
<thead>
<tr>
<th>Generator of Waste Stream</th>
<th></th>
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<tbody>
<tr>
<td>(Company or Individual)</td>
<td></td>
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</tbody>
</table>

**Generator’s Signature**

**Print Signature & Title**

**Generator’s Address**

**Telephone Number**

**Date**

The following individuals/broker designees are authorized to sign as a representative(s) of the generator or as an agent for the generator for the following purposes (check those that apply):

- [ ] 2. Sign contracts to dispose and/or transport material.
- [ ] 3. Sign certifications necessary to comply with landfill requirements.
- [ ] 4. Sign manifests to initiate shipment to disposal facility.
- [ ] 5. Other, _____

When applicable, the authorized designee will be responsible for all notification or information requested by the generator.

Approved List of Authorized Individuals/Broker Designees by Generator:

| Name of Individual | Title | Name Of Company | Telephone No. |
|--------------------|-------|-----------------|---------------|---------------|
|                    |       |                 |               |
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Appendix E - Secondary Treatment System Information Provided by J. Derenzo Corporation
Stand Alone Waste Stream
Wynn Casino

The plan contains a water treatment system rated for 100 gallons per minute (gpm). The purpose of this system is to treat all water originating from the Wynn project except for water pumped from the deep dewatering wells installed by LRT. A separate system onsite is currently treating the water from the deep wells.

Baseline Assumptions

1. Primary contaminants of concern in the waste stream include total suspended solids (TSS), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and metals. If additional analytes are encountered (i.e. cyanide or dissolved metals not associated with the TSS) modification to the treatment system may be required which could affect the system budget.
2. Discharge will be regulated via the current NPDES permit provided by others.
3. Influent to the water treatment system will not exceed 100 gpm.
4. Power will be supplied from generator currently on site.

Water Treatment System – 100 gpm

1. One (1) 18,000-gallon weir tank.

2. One (1) three-inch submersible transfer pump with level controls capable of pumping 100 gpm.

3. One (1) triple bag filter skid with three (3) single bag filters plumbed in parallel such that one bag filter vessel can be operated while the other remains in standby. During a bag filter change-out, the opposite vessel is opened while the other is closed so that water treatment never needs to be shut down. Bag filter skid includes isolation valves, sample ports and pressure gauges on the influent and effluent piping so that it is clear when a bag filter change-out is required. Bag filter housings are stainless steel and rated for maximum flow rate of 100 gpm and 125 PSI.

4. Two (2) high pressure, steel carbon vessels plumbed in series. Each vessel is filled with 2,000 pounds of reactivated liquid phase carbon. Each vessel is rated for a max flow rate of 100 gpm and a maximum pressure of 75 PSI and includes isolation valves, sample ports and pressure gauges on the influent and effluent piping so that it is clear when backwashing is required.

5. One (1) high pressure, steel carbon vessel filled with 30 cuft of ion exchange resin. The vessel is rated for 100 gpm and a maximum pressure of 75 PSI and includes isolation valves, sample ports and pressure gauges on the influent and effluent piping so that it is clear when backwashing is required.

6. One (1) 3-inch flow meter w/ totalizer.

7. Hoses and all interconnecting hose throughout the treatment system.