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November 16, 2016 GZA File No: 01.00171521.15

Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup Northeast Regional Office 205B Lowell Street Wilmington, Massachusetts 01887

Re: Revised Release Abatement Measure Plan Modification

Construction-Related Remediation Activities

(Former) Everett Staging Yard

1 Horizon Way

Everett, Massachusetts

Release Tracking Number (RTN) 3-13341

Additional RTNs 3-17760 (38 Broadway, Everett, MA) and

RTN 3-1850 (3 Charlton Street, Everett, MA)

To Whom It May Concern:

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 NTP 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 tarps 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 air-borne 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.



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 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

ŋ .

Lawrence Feldman, LSP

Senior Principal

William R. Norman, LSP Consultant/Reviewer





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

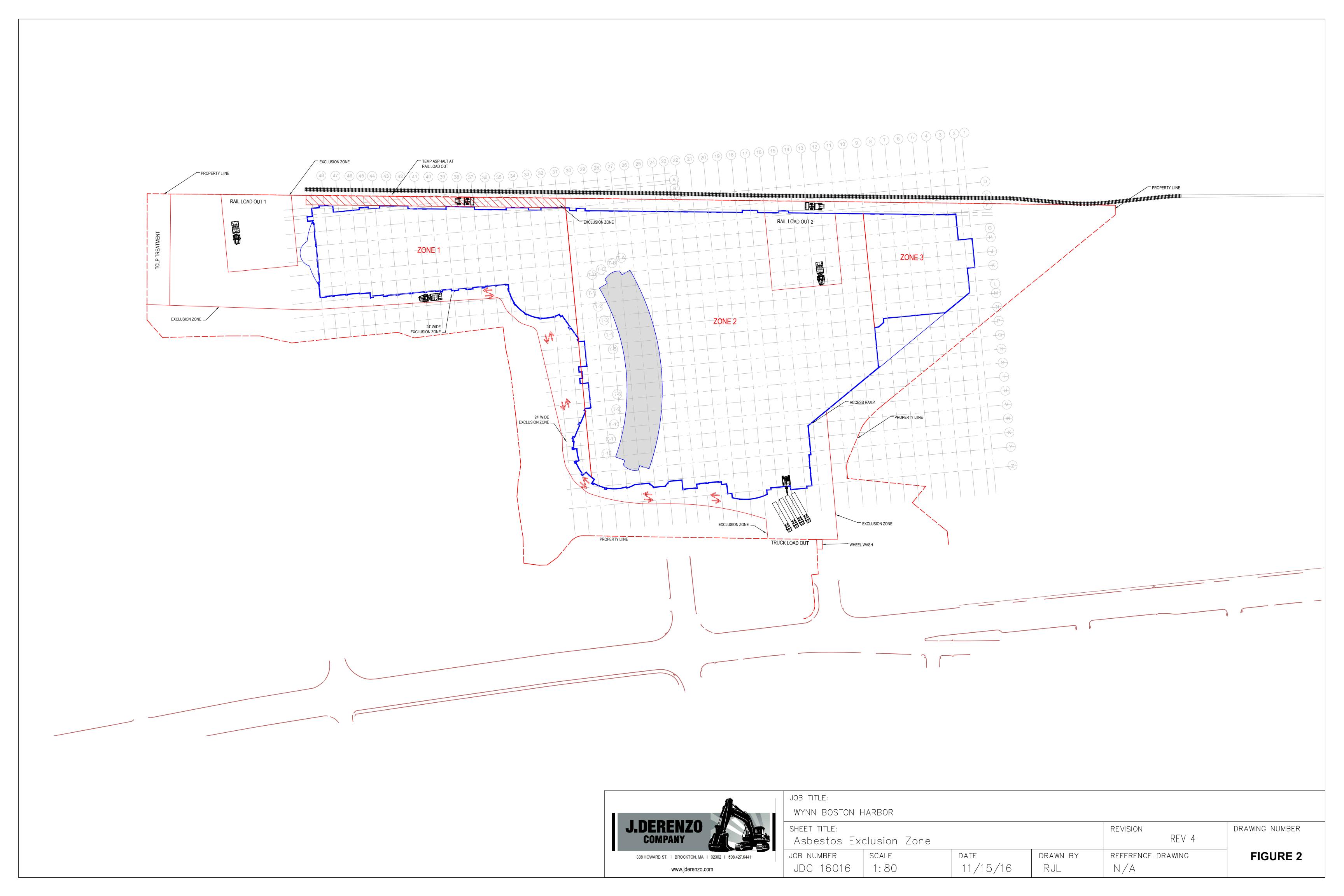
Appendix D NT Plan and Attachments

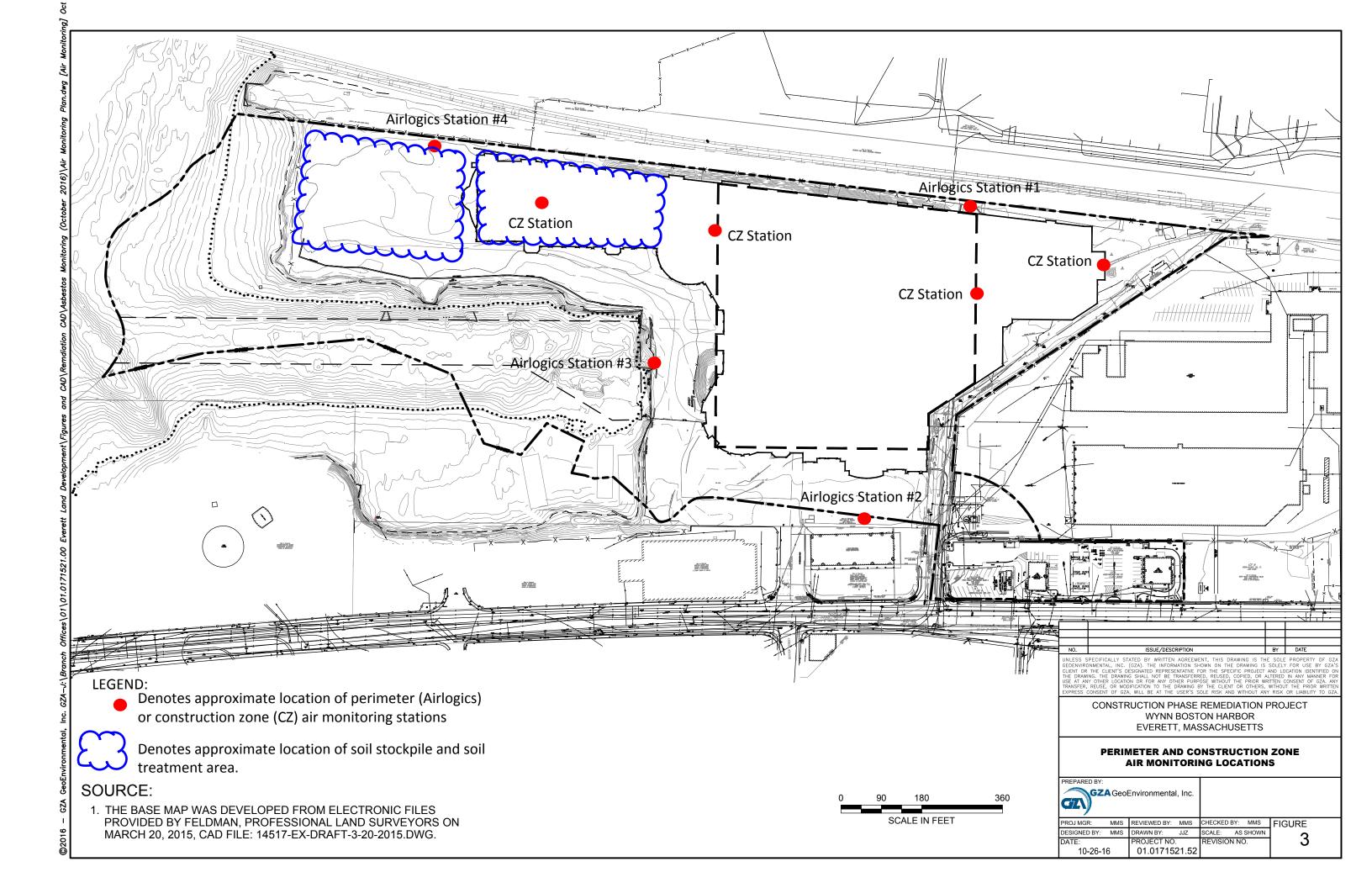
Appendix E Secondary Treatment System Information Provided by J. Derenzo Corporation

J:\170,000-179,999\171521\171521-52.MPS\Construction RAM Plan Modification\Wynn Construction RAM Plan Modification - 11-16-16 - FINAL.docx



FIGURES







Appendix A – Limitations

April 2012



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.

April 2012



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



GEOHYDROLOGICAL LIMITATIONS

01.0171521.15 A | 3 April 2012

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:

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)

	B	W	SC	1	06
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Release Tracking Number

		_
3	-	13341

1. Site Name/Location Aid:	EVERETT STAGING YARD			
2. Street Address: 1	HORIZON WAY			
3. City/Town:	VERETT	4. Zip Code:	021490000	
5. Check here if the disp	osal site that is the source of the release	ase is Tier Classified.	Check the current Tier Classification	n Category.
a. Tier I	□ b. Tier ID	▼ c.	Tier II	
B. THIS FORM IS B	EING USED TO: (check all tha	t apply)		
1. List Submittal Date of In	itial RAM Plan (if previously submitt	zed): 5/3/2016	3	
2. Submit an Initial Rele	ase Abatement Measure (RAM) Pla	n.	(mm/dd/yyyy)	
	RAM is being conducted as part of the manent structure is to be erected in conducted as part of the manent structure is to be erected in conducted as part of the manent structure is to be erected in conducted as part of the manent structure is to be expected in conducted as part of the manent structure is to be expected in conducted as part of the manent structure is to be expected in conducted as part of the manent structure is to be expected in conducted as part of the manent structure is to be expected in conducted as part of the manent structure is to be expected in conducted as part of the manent structure is to be expected in conducted as part of the manent structure is to be expected in conducted as part of the manent structure is to be expected in conducted as part of the manent structure is to be expected in conducted as part of the manent structure is to be expected in conducted as part of the manent structure is to be expected as part of the manent structure is the manent structure is the manent structure is to be expected as part of the manent structure is t	-	· ·	
b. Specify type of perma	nnent structure: (check all that apply)	□ i. School	☐ ii. Residential ☐ iii. Comn	nercial
iv. Industrial	v. Other Specify:			
✓ 3. Submit a Modified R A	M Plan of a previously submitted R.	AM Plan.		
4. Submit a RAM Status	Report.			
5. Submit a Remedial M	onitoring Report. (This report can or	nly be submitted throu	igh eDEP, concurrent with a RAM S	Status Report.)
a. Type of Report: (chec	k one)	□ ii. Interim Rep	port \Box iii. Final Report	
b. Frequency of Submitt		i iii iii iii ii ii ii ii ii ii ii ii i	iii. I mai report	
	oring Report(s) submitted every six n oring Report(s) submitted annually, or		•	
c. Number of Remedial	Systems and/or Monitoring Programs	s:		
	RAM Remedial Monitoring Report, ram addressed by this transmittal for		each Remedial System	
6. Submit a RAM Comp	letion Statement.			
7. Submit a Revised RA	M Completion Statement.			
3. Provide Additional RTN:	3:			
to a Primary Tier Classis	RAM Submittal covers additional Rel fied RTN do not need to be listed her of show permanent linkage to a Prima	e. This section is inter	nded to allow a RAM to cover more	
b. Provide the additional covered by this RAM St	Release Tracking Number(s) Jubmittal.	17760	3 - 1850	
9. Include in the RAM F o 310 CMR 40.0046(3).	Plan or Modified RAM Plan a Plan fo	r the Application of R	emedial Additives near a sensitive	receptor, pursuan

Page 1 of 6 Revised: 8/5/2013

(All sections of this transmittal form must be filled out unless otherwise noted above)



Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup

BWSC 106

RELEASE ABATEMENT MEASURE (RAM) TRANSMITTAL FORM

Release Tracking Number

3 - 13341

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

\mathbf{EL}	
EASE OR	
RTHREAT	
OF RELEASE	
CONDITIONS	
THAT WARRANT RAM:	

1. Media Impacted and Receptors Affected: (check all that apply) a. Paved Surface b. 1	Basement
☐ d. Public Water Supply ☐ e. Surface Water ☐ f. Zone 2 ☐ g. Private Well ☐ h.	Residence 🔽 i. Soil
▼ j. Ground Water	Indoor Air 🔲 o. Air
\square p. Soil Gas \square q. Sub-Slab Soil Gas \square r. Critical Exposure Pathway \square s. N	NAPL t. Unknown
□ u. Others Specify:	
2. Sources of the Release or TOR: (check all that apply)	el Tank
☐ d. OHM Delivery ☐ e. AST ☐ f. Drums ☐ g. Tanker Truck ☐ h. Ho	se 🗆 i. Line
□ j. UST Describe: □ 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 Re	emoval d. Overfill
☐ e. Rupture ☐ f. Vehicle Accident ☐ g. Leak ☐ h. Spill ☐ i. Test Fai	lure
□ k. UST Removal Describe:	
☐ 1. Unknown	
4. Identify Oils and Hazardous Materials Released: (check all that apply) ✓ a. Oils ✓ b	. Chlorinated Solvents
✓ c. Heavy Metals ✓ d. Others Specify: PCBS, POTENTIAL ASBESTOS-CONTAINING MATERIAL	. Chiomiaca Sonona
D. DEGCOMPTION OF DEGDONGE ACTIONS	
D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply, for volumes list cumulation)	ative amounts)
□ DESCRIPTION OF RESPONSE ACTIONS: (check all that apply, for volumes list cumulation of the composition of	ative amounts)
	ative amounts)
☐ 1. Assessment and/or Monitoring Only ☐ 2. Temporary Covers or Caps	
☐ 1. Assessment and/or Monitoring Only ☐ 2. Temporary Covers or Caps ☐ 3. Deployment of Absorbent or Containment Materials ☐ 4. Temporary Water Supplies	
 ☐ 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 System 	
 ☐ 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 System ☐ 7. Product or NAPL Recovery ☐ 8. Fencing and Sign Posting 	
 ☐ 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 ☐ 7. Product or NAPL Recovery ☐ 8. Fencing and Sign Posting ☐ 9. Groundwater Treatment Systems ☐ 10. Soil Vapor Extraction 	ntion of Residents

Revised: 8/5/2013 Page 2 of 6



Describe:

Massachusetts Department of Environmental Protection *Bureau of Waste Site Cleanup*

BWSC 106

RELEASE ABATEMENT MEASURE (RAM) TRANSMITTAL FORM

3 - 13341

Release Tracking Number

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

D. DESCRIPTION OF RESPONSE ACTIONS (cont.): (check all that apply, for volumes list cumulative amounts) 17. Excavation of Contaminated Soils Estimated volume in cubic yards a. Re-use, Recycling or Treatment i. On Site ☐ ii. Off Site Estimated volume in cubic yards iia. Receiving Facility: State: Town: iib. Receiving Facility: Town: State: iii. Describe: □ b. Store i. On Site Estimated volume in cubic yards ☐ ii. Off Site Estimated volume in cubic yards iia. Receiving Facility: Town: State: iib. Receiving Facility: Town: State: i. Cover Estimated volume in cubic yards c. Landfill Receiving Facility: Town: State: Estimated volume in cubic yards ii. Disposal Receiving Facility: 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:



1. LSP#:

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)

BWSC 106

Release Tracking Number

	-	13341
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E. LSP SIGNATURE AND STAMP:

8107

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.

2. First Name:	LAWRENCE		3. Last Name:	FELDMAN
4. Telephone:	7812783700		5. Ext.:	6. Email:
7. Signature:	LAWRENCE FELDI	MAN		
8. Date:	11/18/2016	9. LSP Stamp:		ub of M
	(mm/dd/yyyy)			Electronic Seal

Revised: 8/5/2013 Page 4 of 6



Box 4062, Boston, MA 02211.

Massachusetts Department of Environmental Protection Rureau of Waste Site Cleanup

Bureau of Waste Site Cleanup RELEASE ABATEMENT MEASURE (RAM)

TRANSMITTAL FORMPursuant to 310 CMR 40.0444 - 0446 (Subpart D)

BWSC 106

Release Tracking Number

	-	13341
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F. PERSON UNDE	RTAKING RAM:				
1. Check all that apply:	a. change in contact name	□ b. chan	ge of address	c. change in tresponse action	the person undertaking
2. Name of Organization:	WYNN MA LLC				
3. Contact First Name:	ROBERT		4. Last Name:	DESALVIO	
5. Street:	101 STATION LANDING 2ND FLOO	or 6. T	Γitle:	PRESIDENT	
7. City/Town:	MEDFORD	8. State:	MA	9. ZIP Code:	021550000
10. Telephone:	8477707801	11. Ext.:		12. Email:	
G. RELATIONSHI	P TO RELEASE OR THE	REAT OF R	ELEASE OF P	ERSON UNDE	RTAKING 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 Exe	mpt Status (as	defined by M.G.L.	c. 21E, s. 2)	
☐3. Agency or Public U	tility on a Right of Way (as defin	ned by M.G.L.	c. 21E, s. 5(j))		
4. Any Other Person	Undertaking RAM	Specify Relation	onship:		
H. REQUIRED ATTACH	IMENT AND SUBMITTALS:				
	Remediation Waste, generated as sion of the RAM Completion St al form (BWSC108).				•
	esponse Action(s) on which this EP or EPA. If the box is checked				
3. Check here to certific Release Abatement Mea	fy that the Chief Municipal Offic sure.	eer and the Loc	cal Board of Health	have been notified	of the implementation of a
4. Check here if any number of the corrections to bwsc.edep	non-updatable information provi o@state.ma.us.	ded on this for	m is incorrect, e.g.	Release Address/Lo	ocation Aid. Send
☐ 5. If a RAM Compliar	nce Fee is required for this RAM,	, check here to	certify that a RAM	Compliance Fee wa	as submitted to DEP, P. O.

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▼ 6. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.



Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup

BWSC 106

RELEASE ABATEMENT MEASURE (RAM) TRANSMITTAL FORM Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

Release Tracking Number

3	-	13341

I. CERTIFICATION OF	F PERSON UNDERTAKING RAM:
---------------------	---------------------------

By:	ROBERT DESALVIO	3. Title:	PRESIDENT
	(Signature)	5 D .	
For:	WYNN MA LLC	5. Date:	11/19/2016
	(Name of person or entity recorded in Section F)		(mm/dd/yyyy)
	f the address of the person providing certification is different fr	om address recor	ded in Section F.
street:			
city/Town:	9. State:	10. ZII	P Code:
Telephone:	12. Ext.:	13. Email:	
ECTIONS OF T	YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE AS BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST THIS FORM OR DEP MAY RETURN THE DOCUMENT AS IN	LEGIBLY COM	PLETE ALL RELEVANT
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Revised: 8/5/2013 Page 6 of 6



Appendix C - SDS for Soil Treatment

Material Safety Data Sheet



Martrex, Inc.

Section I: Chemical Product and Company Information

Product name: Phosphoric Acid (75%) Reference Number: PhosAcid H75

Supplier/ Further Information: Martrex, Inc.

P. O. Box 1709 Phone: 952/933-5000 14525 Highway 7 Toll Free: 800/328-3627 Minnetonka, Minnesota 55345-3793 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

24 Hour Emergency Phone - Chemtrec Transport: 1-800-424-9300; Medical: 1-800-441-3637

Special Hazard For Rating Explanation see Section 16

Web: www.martrexinc.com

Section 2: Composition/Information on Ingredients

Component		SARA Listed Hazardous?	CAS#	%	RTECS#	Other Limits
1. Phosphoric Acid		Yes	7664-38-4	75%	no data	See Section 15
2. Water		No	7732-18-5	25%	no data	no data
Comp. OSHA PEL		OSHA STEL	OSHA CEIL	ACGIH TLV	ACGIH STEL	ACGIH CEIL
1. (above)	1 mg/m ³ 8-hr. TWA	no data	no data	1 mg/m³ 8-hr. TWA	3 mg/m³	no data
2. (above)	no data	no data	no data	no data	no data	no data

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.

2. (above)

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.

24 Hour Emergency Phone - Chemtrec: 1-800-424-9300 Transportation

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 safequards 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 **NFPA**_{SZX} 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

24 Hour Emergency Phone - Chemtrec: 1-800-424-9300 Transportation 1-800-441-3637 Medical

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.

Section 9: Physical and Chemical Properties

Chemical Name: Phosphoric Acid (75%) Percent Equivalent H₃PO₄: 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

Volatiles 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: H₃PO₄

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.

Section 10: Stability and Reactivity

Chemical Stability (under normal conditions of storage, handling, use): Stable \underline{X}	_ Unstable
Hazardous Polymerization: May Occur	
Will Not Occur_X_	
Conditions to Avoid: High temperatures.	
Chamical Incompatibility: Aluminum Copper Mild Stool Brace and Branzo Avoid	contact with materials

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 (PH₃) from thermal decomposition

Section II: 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 LD₅₀: (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

	USDOT	TDG - Canada	
Proper Shipping Name:	Phosphoric Acid	Phosphoric Acid	
Hazard Class:	8	8, 9.2	
Hazard Identification Number:	UN1805	UN1805	
Packing Group:	III	III	
Transport Labeling/Placarding:	Corrosive	Corrosive	
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/m³ 8-hr. TWA

ACGIH: TWA = 1 mg/m³ 8-hr. TWA, STEL = 3 mg/m³

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

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

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

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

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

24 Hour Emergency Phone - Chemtrec: 1-800-424-9300 Transportation

MSDS Issue Date: n/a Revised Date: 10-25-11 Supersedes: n/a
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Appendix D – NT Plan Attachments





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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 SnotTM for dust control. In

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 SnotTM 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 asbestoscontaining 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,

Massachusetts Certified

Asbestos Designer AD034163

William S. Wade, C.I.H.

Senior Scientist/Project Manager

BWP AQ 36 Application and Copies of Payment and Transmittals Appendix A

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

John MacAuley, Asbestos Enforcement Section Chief, MassDEP NERO [via email] cc: 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



Important:

completing

forms on a

computer, use only the tab key

to move your

cursor - do not use the return

When

key.

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 MA 02149 City/Town State ZIP Code Owner Wynn MA LLC Owner Name 101 Station Landing Owner Address Medford MA 02155 City/Town State ZIP Code 857-770-7801 Telephone Number **Email Address** Applicant - M 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 AD 034163 Department of Labor Standards (DLS) Project Designer Cert. Number Environmental Health & Engineering, Inc., 117 Fourth Avenue Address Needham MA 02494 City/Town State ZIP Code 781-247-4300 abisol@eheinc.com Telephone Number **Email Address Asbestos Abatement Contractor**

Brockton City/Town

Address

508-897-8007

Telephone Number

Contractor Name

338 Howard Street

New Roads Environmental Services, LLC.

Email Address

MA

State

AC 000822

Department of Labor Standards (DLS) Contractor License Number

02302

ZIP Code



Massachusetts Department of Environmental Protection Bureau of Waste Prevention

BWP AQ 36 Application for Non-Traditional Asbestos Abatement Work Practice Approval

Dei	molit	on Conti	ractor (If	Applicable)				
Cor	ntracto	r Name						
Add	iress							
City	//Town					State		ZIP Code
Tele	ephon	9 Number			-	Email Address		
		tances – Approval			oox(es) to indic	cate why a Non-Trac	litional A	Asbestos Abatement Work
						overnment order bee of the order to your		is structurally unsound and an proposal.)
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	Aba	tement ac	ctivity is I	eing conducted	as part of an	emergency renovat	on opera	ation.
	Asb whe		itement a	activity is being o	conducted to c	lean up and decont	aminate	a facility or portion of a facil
		Previous	asbesto	s abatement act	ivities were no	ot conducted in com	pliance y	with 310 CMR 7.15, or
		ACM det	erioratio	n, if not immedia	itely attended	to, would present a	safety o	r public health hazard.
	Wet	ting durin	g a facili	y renovation wo	ould unavoidab	oly damage equipme	nt or pre	esent a safety hazard.
\boxtimes	The	project re	equires b	ulk loading of A	CM and/or AC	WM.		
		LA VOILLE			icute unit and i	SOLUCIONA, And M	Text Market	ra cara.
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Pro	oject S	Start Date		10/31/2016 MM/DD/YYYY		Project End Dat	e:	12/31/2017 MM/DD/YYYY
Typ ⊠	oes & Friabl	е -	63,000	CY (100,000 to	ons)	Traditional Asbesto		ment Work Practice(s):
				n Cubic Meters (C	ubic Yards)		Quanti	ity in Cubic Meters (Cubic Yard
1 00	cation	(s) of ACI	vi in the	-acility:				



Massachusetts Department of Environmental Protection Bureau of Waste Prevention

BWP AQ 36 Application for Non-Traditional Asbestos Abatement Work Practice Approval

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
Robert Desalvio
Printed Name
President
Title
10/28/2016
Date (MM/DD/YYYY)

D. Submission of Application

Note: MassDEP review will begin only after your submissions have been received at both locations.

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/



ENVIRONMENTAL HEALTH & ENGINEERING, INC. 117 FOURTH AVENUE NEEDHAM, MA 02494

CITIZENS BANK 5-7017-2110

October 27, 2016

PAY

Six Hundred and 00/100 Dollars

AMOUNT

600.00

Commonwealth of Massachusetts TO

OVER \$10,000.00 TWO SIGNATURES REQUIRED

CHECK DATE

Security features. Details on back.

AUTHORIZED SIGNATURE

#039446# #211070175# 1107819013#

ENVIRONMENTAL HEALTH & ENGINEERING, INC.

Check Date: 10/27/2016 39446

Invoice Number	Date	Voucher	Amount	Discounts	Previous Pay	Net Amount
102716.1	10/27/2016	000000064092	600.00			600.
Commonwealth of Massachus		TOTAL	600.00			600.0
Coch Operating Citizens	1	COMDEP				

LETTER OF TRANSMITTAL

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



To: MassDEP

Copy to:

P.O. Box 4062 Boston, MA 02211 Date: October 28, 2016

Project #: 21151

From: Adam Bisol and Will Wade, EH&E

No. of Copie	s	Description									
1		Wynn Boston Harbor Project: 1) BWP AQ 36 Application for Non-Traditional Asbestos Abatement Work Practice Approval 2) Application Fee Payment (\$600): EH&E Check									
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		Hand-delivered b	y:			Other					
ansmitted:	\boxtimes	For your review			☐ F	Per your request					
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vill Wade, CIH enior Scientis nvironmental wade@eheine 81-247-4300	t/Proj Healt	h & Engineering, I	nc.								

LETTER OF TRANSMITTAL

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



To:

Copy to:

MassDEP

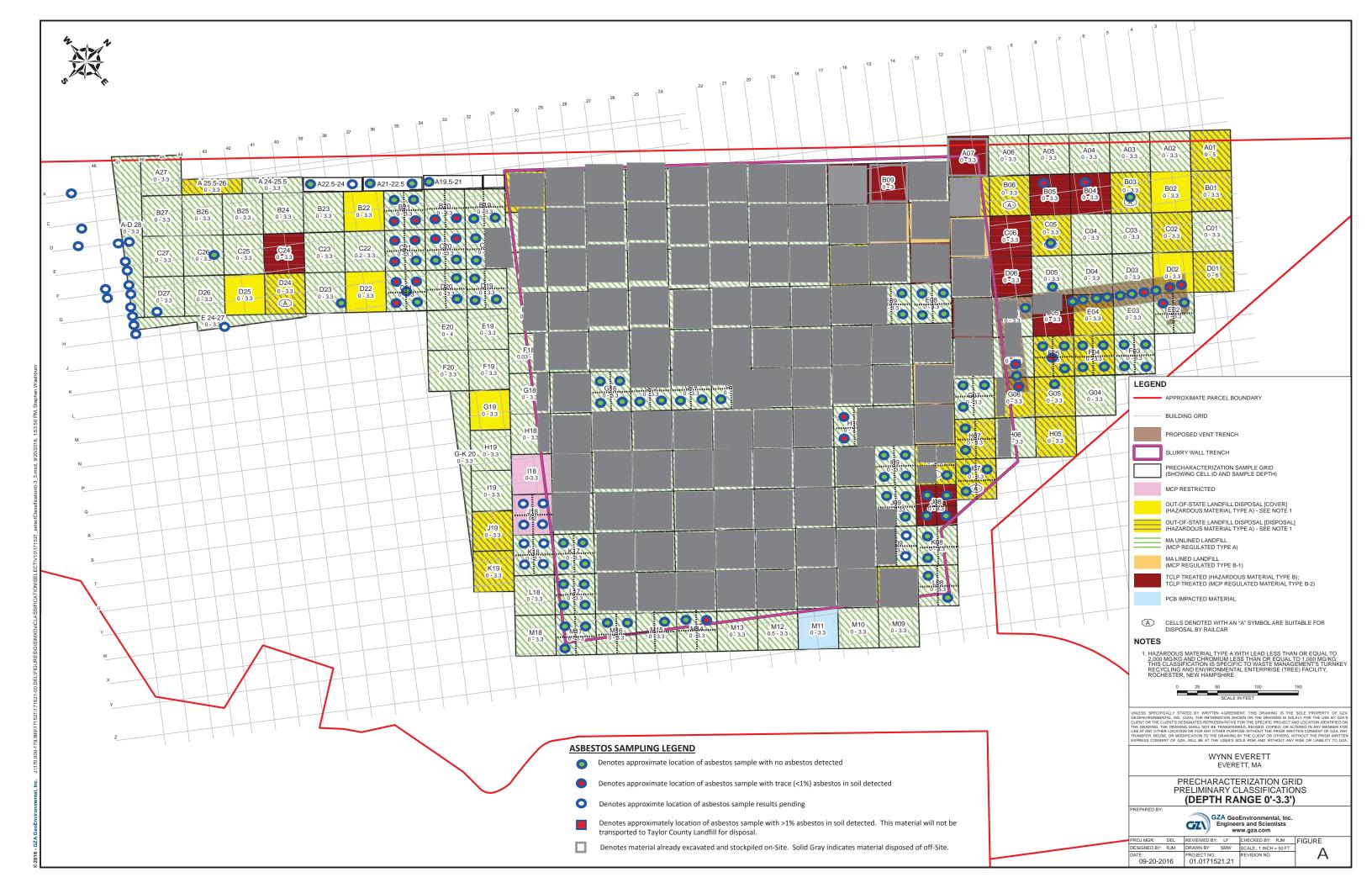
Northeast Regional Office Attention: Asbestos Section 205B Lowell Street Wilmington, MA 01887 Date: October 28, 2016

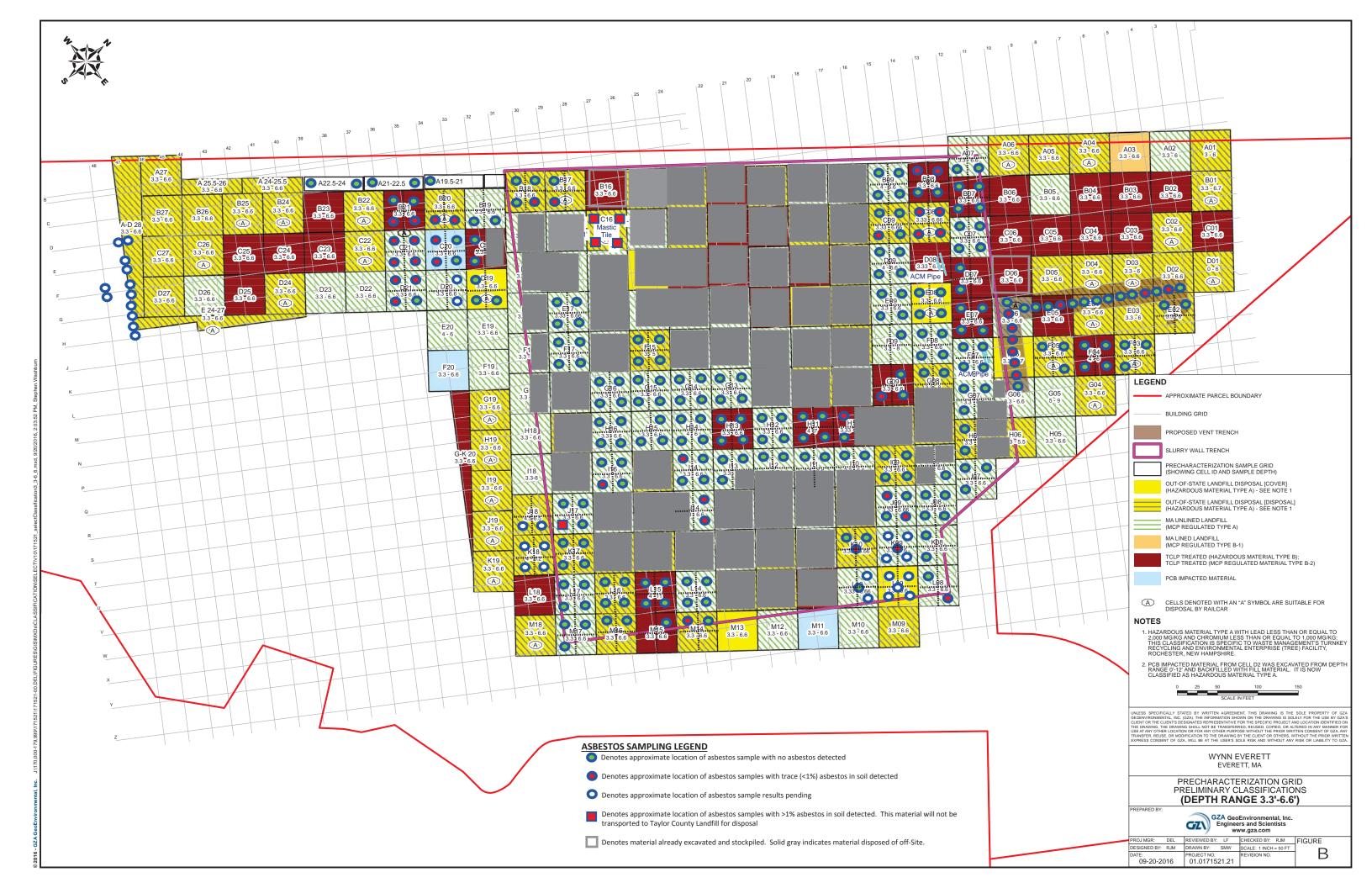
Project #: 21151

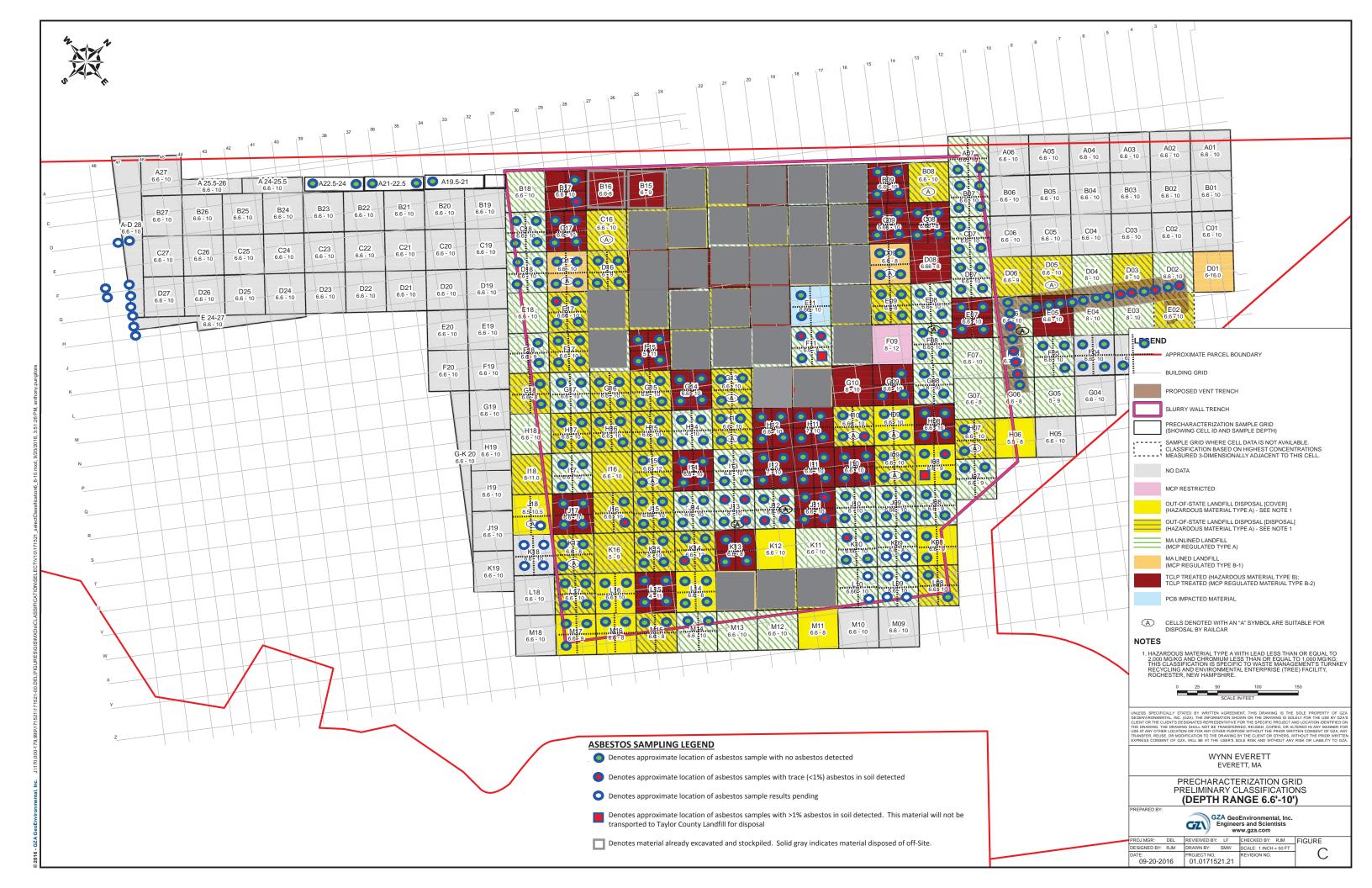
From: Adam Bisol and Will Wade, EH&E

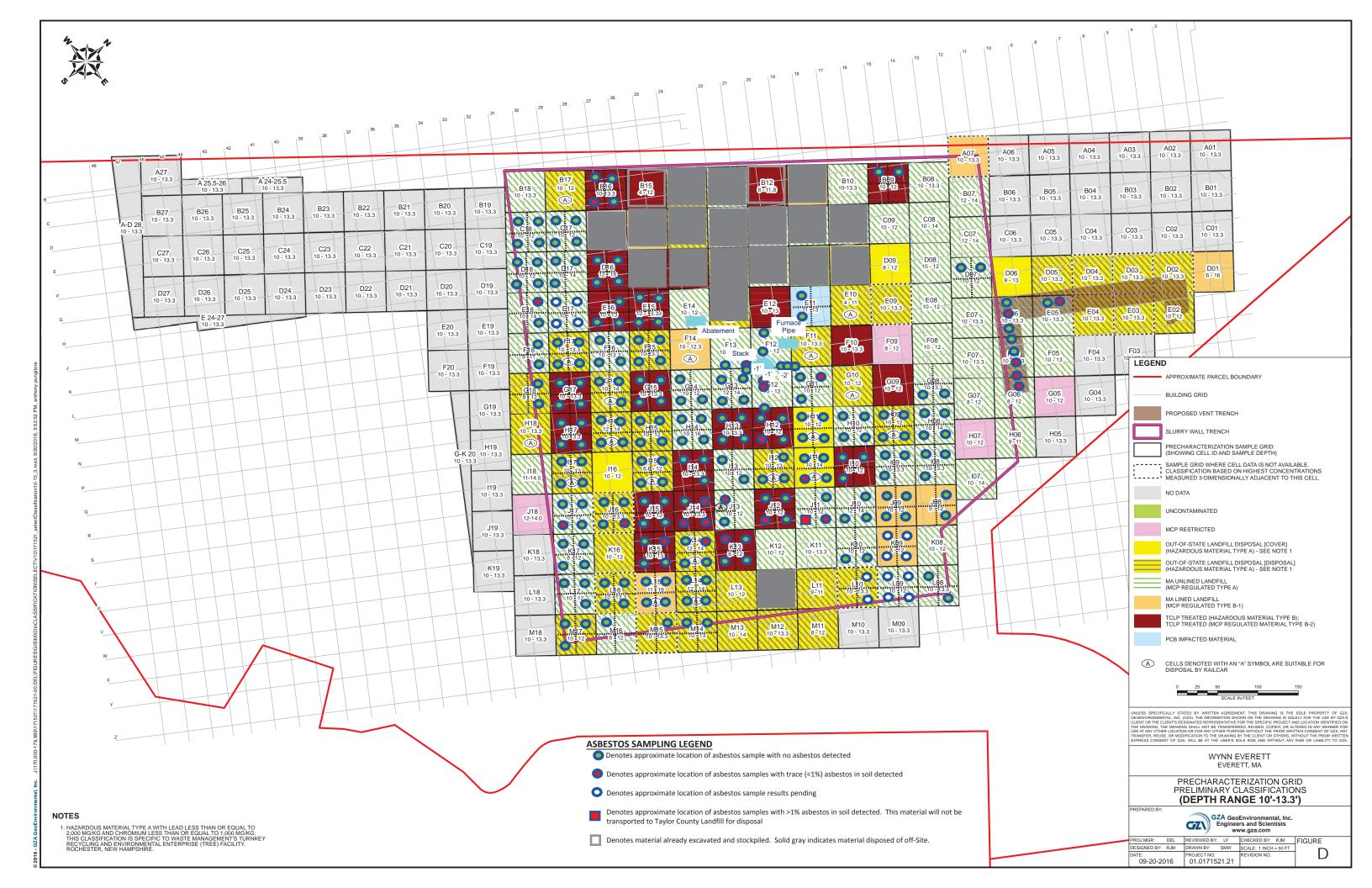
No. of Copie	s	Description									
1 1	Wynn Bost	Wynn Boston Harbor Project: BWP AQ 36 Application for Non-Traditional Asbestos Abatement Work Practice Approval Copy of fee payment Proposed NT Work Plan									
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Notes:											
Please direct a	ny questions to:										
	t/Project Manage Health & Engine										

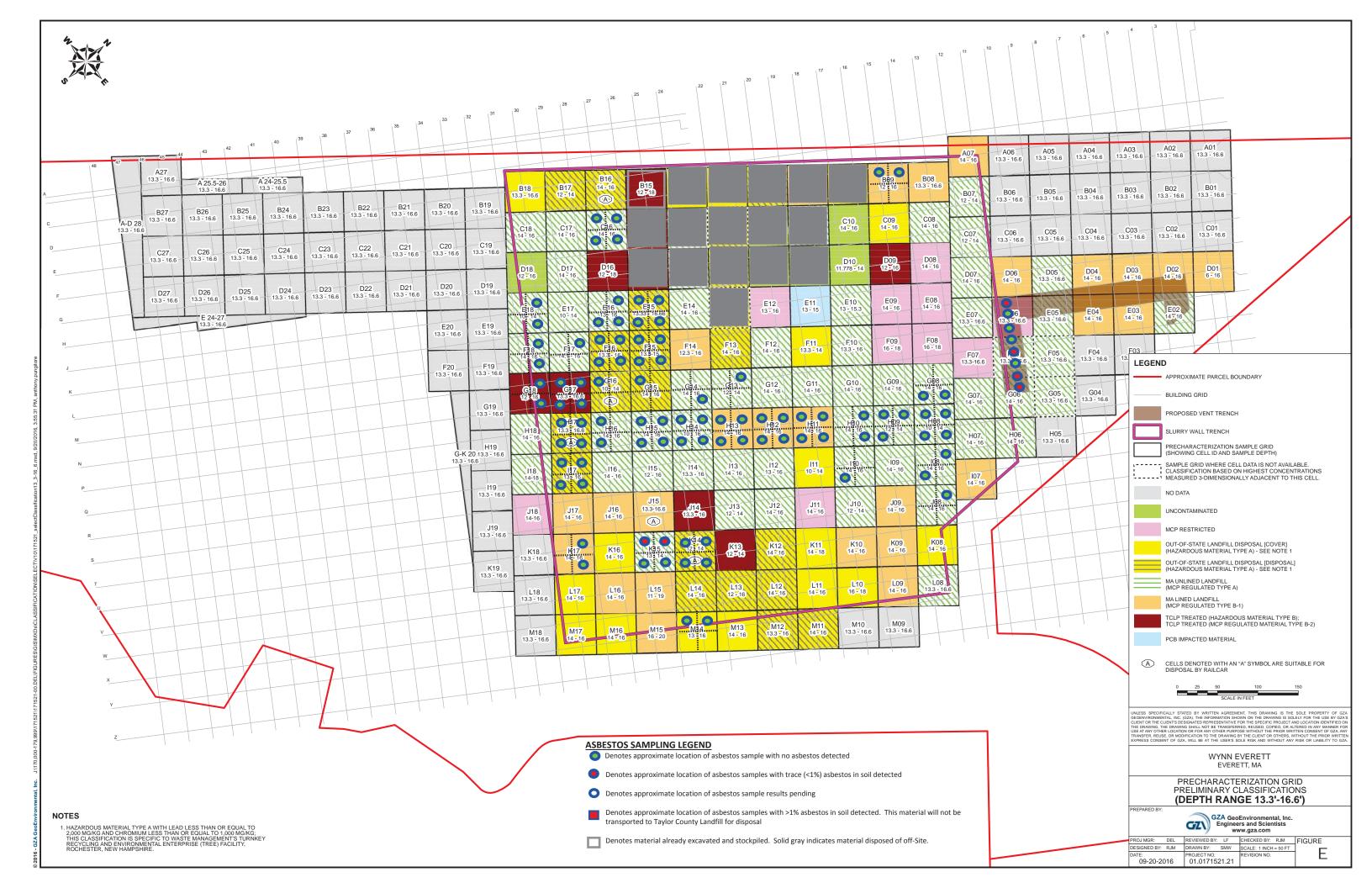
APPENDIX B CURRENT ASBESTOS IN SOIL TESTING RESULTS

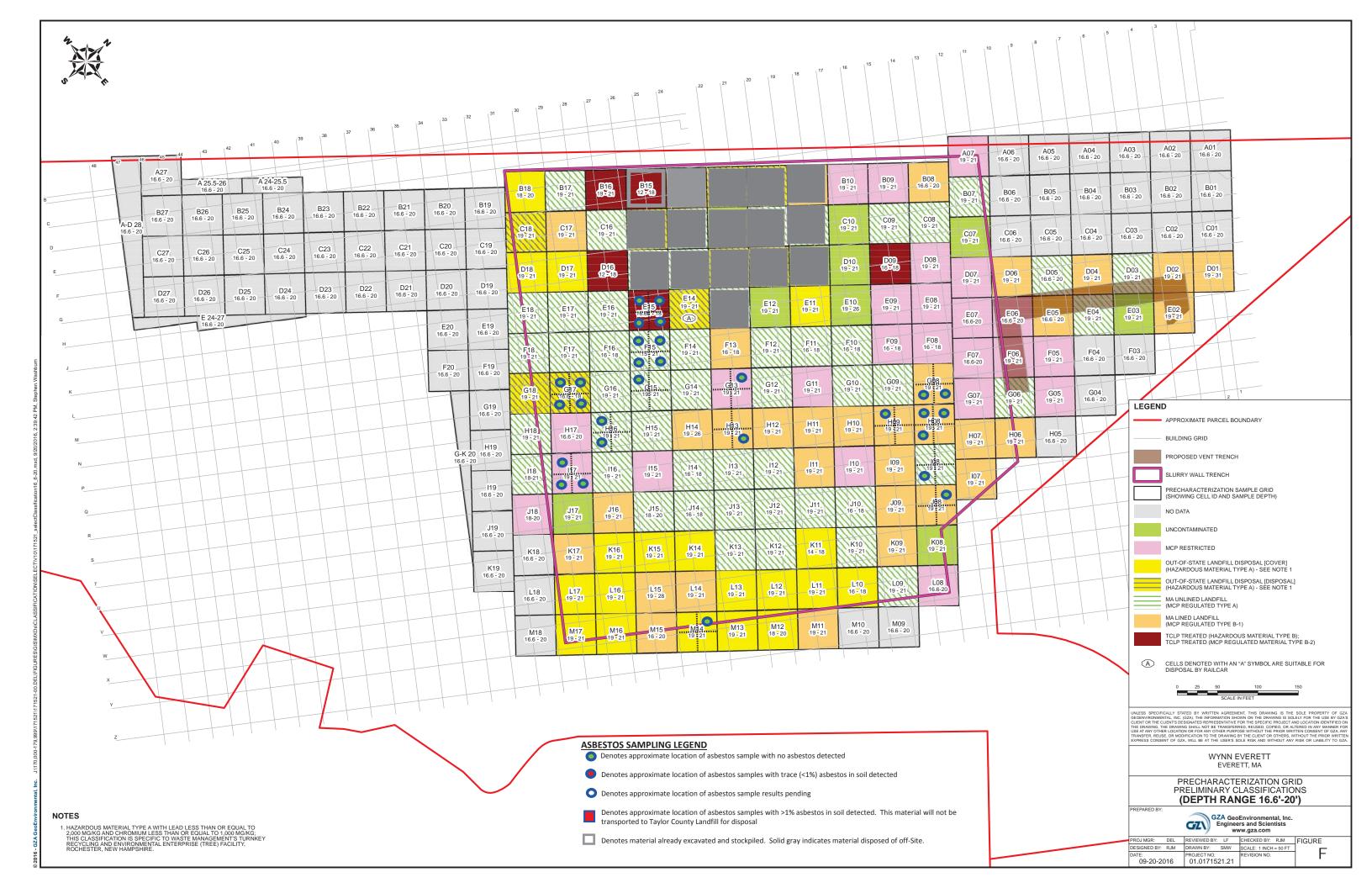




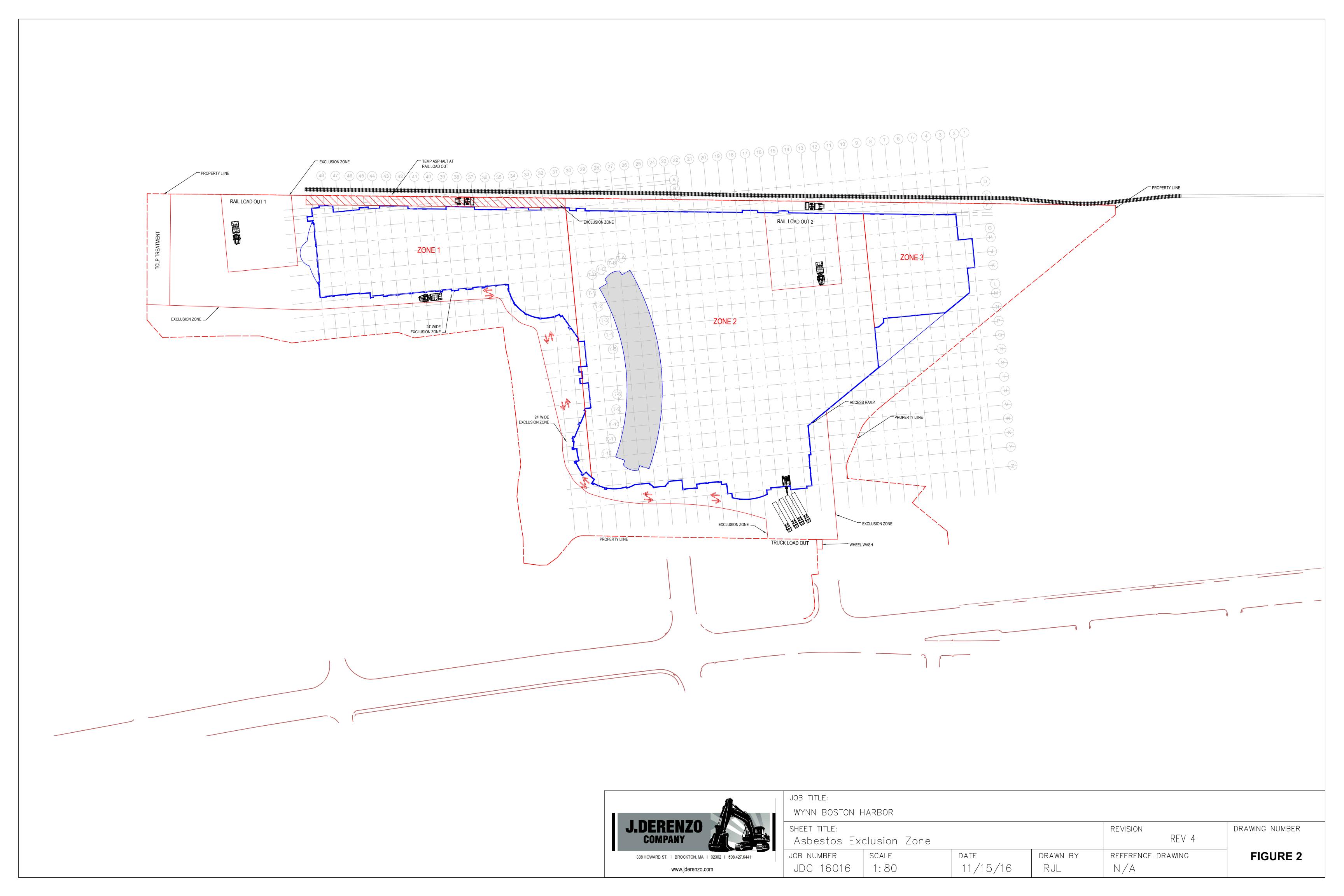


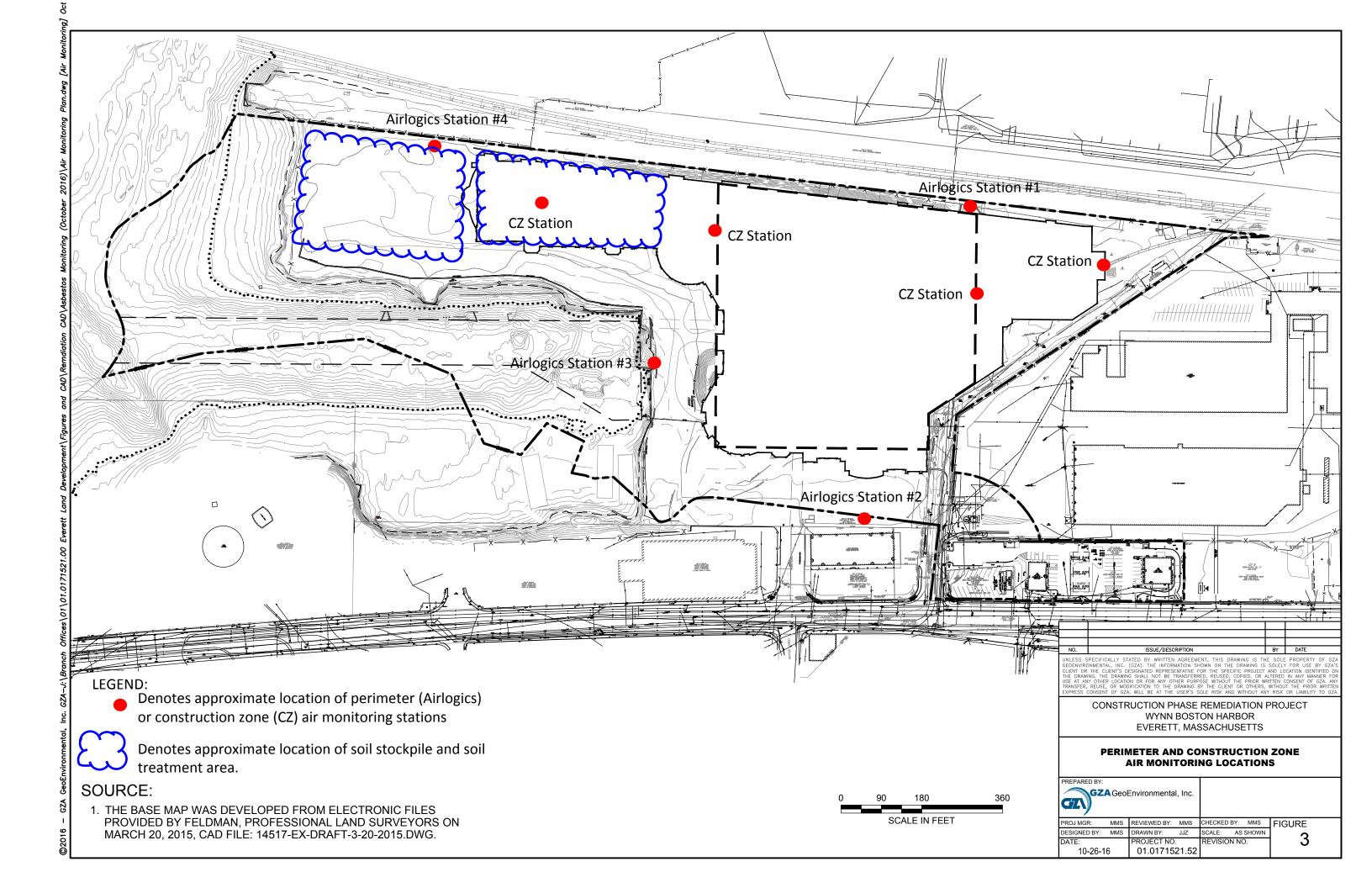






APPENDIX C SITE PLANS





APPENDIX D PRODUCT DATA SHEETS AND LEAK PROOF STATEMENT FOR RAILPAC RAILCAR LINERS

RailPac® Railcar Liners and Tarps



PACTEC We manufacture packaging.

We engineer solutions.

RailPac®

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 restistant 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.

PACTEC

1-800-272-2832
www.pactecinc.com



P.O. Box 8069 Clinton, LA 70722 (800) 272-2832 www.pactecinc.com

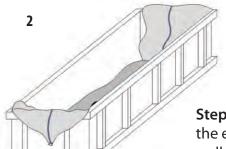
14 mil Woven Polyethylene

Product Properties	Specification (Metric)	Test Method (ASTM)		
Weight	6 oz/yd² (203 g/m²)	D5261		
Thickness	14.1 mils (0.36 mm)	D5199		
Puncture Resistance	170 lbs (756 N)	D4833		
Trap Tear	MD – 55 lbs (25 N) TD – 53 lbs (236 N)	D4533		
Tensile Property - Break Strength	MD – 228 lbs (1010 N) TD – 188 lbs (836 N)	D5034, Procedure G		
Tensile Property - Elongation	MD – 30% TD – 26%	D5034, Procedure G		
Strip Tensile - Break Strength	MD – 159 ppi (27.8 N/mm) TD – 124 ppi (21.7 N/mm)	D5035, 12ipm strain rate		
Strip Tensile - Elongation	MD – 30% TD – 25%	D5035, 12ipm strain rate		
Tongue Tear	MD – 49 lbs (218 N) TD – 48 lbs (214 N)	D2261		
Mullen Burst Strength	402 psi (2770 kPa)	D3786 modified		
Flash Point	716° F (380° C)	D93		
Auto Ignition	662-770° F (350-410° C)	E659		
Water Vapor Permeance	4350 Gurley seconds	E96		

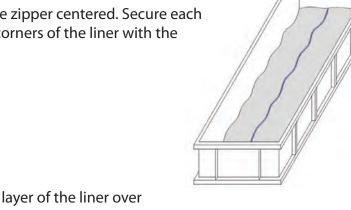
The information contained herein is typical and to the best of our knowledge accurate and indicative of the results that can be obtained by testing in an accredited laboratory. The buyer or user of these products is solely responsible for determining whether these products are suitable for any intended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

REV 082015

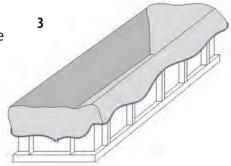
Step 1. Center the folded liner at one end of the railcar. Unfold the liner to the opposite end, ensuring that the liner is evenly centered in the railcar. Unfold the width toward the sidewalls, while keeping the zipper centered. Secure each end of the liner by aligning the defined bottom corners of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

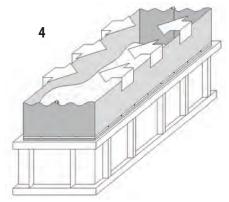


Step 2. Pull the top layer of the liner over the end walls allowing it to hang over the walls approximately 5 to 6 feet.



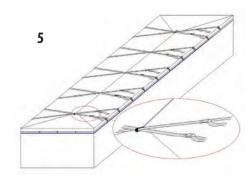
Step 3. Pull the top layer of the liner up and over the sidewalls leaving an equal external overlap around the perimeter of the railcar. Be sure that the grommeted webbing is in alignment with the top edge of the railcar. Additionally, you can secure the liner in place by attaching bungee cords to the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





12365 Haynes St. Clinton, LA 70722 800-272-2832 Fax: 225-683-8711 www.pactecinc.com

Leak Proof Statement

11/4/16

To Whom It May Concern:

PacTec Inc. herby 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,

Troy/Town

Vice President of Engineering / PacTec Inc.



P.O. Box 8069 Clinton, LA 70722 (800) 272-2832 www.pactecinc.com

6 Mil Polyethylene Liner

Product Properties	Specifications (metric)	Test Method (ASTM)		
Thickness	5.8 mil (0.15 mm)	D5199		
Tensile Property - Strength	MD – 3502 psi (20700 kPa) TD – 3269 psi (20700 kPa)	D882, 2ipm strain rate		
Tensile Property - Elongation	MD – 672% TD – 877%	D882, 2ipm strain rate		
Impact Resistance	11.3 oz (321 g)	D1709, Method B		
Tear Resistance	MD – 15.8 oz (448 g) TD – 49.7 oz (1408 g)	D1922		
Melting Point	248°F (120°C)	Industry Average		
Cold Crack	-25.6°F (-32°C)	Industry Average		

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®

Disposable Container Liners



PACTEC We manufacture pack

We manufacture packaging. We engineer solutions.

TransLiner®



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:

- Roll-off containers
- ▶ End dump trailers
- Lugger boxes
- Rail gondolas

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

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.

PACTEC

1-800-272-2832 www.pactecinc.com

APPENDIX E INFORMATION FOR THE NEW YORK AND GEORGIA LANDFILLS

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 <u>above</u> 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.

New York State Department of Environmental Conservation

Division of Environmental Permits, Region 9 270 Michigan Avenue, Buffalo, New York, 14203-2999

270 Michigan Avenue, Buffalo, New York, 14203-299 Phone: (716) 851-7165 - FAX: (716) 851-7168

Website; www.dec.state.ny.us

Danise M. Shoahan Commissioner



Mr. David Grenier, 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. Grenier:

PERMIT TRANSMITTAL LETTER
ALLIED/BFI WASTE SYSTEMS
PERMIT NO. 9-2911-00119/00005
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 are desired after permit lesuance, 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.

December 14, 2005

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 716/651-7220.

Respectfully, Steven J. Doleski Regional Permit Administrator

JED/vam Englosures

Mr. Mark Hans; NYSĎEČ, Division of Soild and Hazardous Materials/Attn; Mr. James Saç∞

Mr. Scott Menrath, NYSDEC, Division of Solid and Hazardous Materials, Albany

Mr. James Devaid, Niagara County Health Department

Hon. Steven Richards, Supervisor, Town of Niagara/Attn: Mr. Fred Clark, Building Inspector

Mr. Ernest Hanna, GZA GeoEnvironmental of New York/Attn; Mr. Bart Klettke

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DEC PERMIT NUMBER

9-2911-00119/00005

PACILITY/PROGRAM NUMBER(S)

32811



PERMIT

Under the Environmental Constitution Law

EXPIRATION DATE

November 30, 2015

NEW

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

PREMIT ISSUED TO	PERMIT ISSUED TO		TELEPHONE NUMBER	
Allied/BFI Waste Systems of North America, Inc.			(716) 285-3344	
ADDRESS OF PERM	OTTEE		<i>y-1</i> -	
5600 Ningaru Fali	s Houlevard, P.O. Box 344	LPO, Niegera Falls, New York 1	1304-0344	
CONTACT PERSON	FOR PERMITTED WORK		TELEPHONE NUMBER	
Mr. David L. Hai	1802, Environmental Manag	ger	(716) 285-3344	
NAME AND ADDRE	SS OF PROJECT/FACILITY			
NRL/Newco-Pine	Avenue/Packard Road Site			
LOCATION OF PRO	SECT/FACILITY	······································		
Soth Street and N	iagara Falls Boulevard, Nis	igara Falla		
COUNTY	CITY	REGULATED RESOURCE	NYTM COORDINATES	
	Niagara	(if applicable)	E 175.2 N 4779.5	
Ni <u>ngara</u>	I MINESOLM			

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	DIVISION OF ENVIRONMENTAL P	ermits, 270 Michigan Ave.,
Steven J. Doleski	BUFFALO, NY 14203-2999, (716) 851-7165	
AUTHORIZED SIGNATURE Stewar J. Dolaski	DATE OF ISSUANCE 12/14/2005	Page 1 OF 17

4

GENERAL CONDITIONS



Laspections

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 permitted is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(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 Renowals

- 2. The Department reserves the right to modify, suspend or revoke this permit when:
 - a) the scope of the permitted activity is exceeded 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, rejevant 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 forms, 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 pentil types.
- 5. Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind 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 whomever suffered, 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, tide, or interest in real or personal property hold 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.

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Approved Documents and Wastes

- Construction and operation of Sanitary Landfills V and VIII and the railroad spur, and post-closure menturing and
 paintenance of Sanitary Landfills I-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:
 - a. "Railroad Spur Reinstallation", dated November 1992 and prepared by Engineering-Science and Fraser Group, and supplemented by the "Railroad Spur Operations Update Summary" prepared by David Hanson, dated June 9, 1994.
 - b. "Sanitary Landfill Area V, Subareas A and B Fermit Drawings" prepared by GZA GeoEnvironmental of New York. The approved plan sheets are listed on permit page 12 of 17.
 - e. "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.
 - d. "Draft Environmental Impact Statement Proposed Sanitary Landfill VIII Solid Waste Management Facility Volume 2: Engineering Report", dated March 7, 2005 and prepared by GZA GeoEnvironmental of New York.
 - "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, Subarens 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.
 - g. "Proposed Sanitary Landfill VIII Environmental Monitoring Plan", dated January 2005 and prepared by GZA.

 GeoEnvironmental of New York.
 - h. "Sanitary Landfill Area V Operation & Sanitary Landfills I, II, IV and VI Post-Closure Monitoring and Maintenance - A Part 360 Solid Waste Management Facility Application for a Permit Renewal to the Facilities Existing Operation Permit Number 9-2911-00119/00005-0", dated September 2004 and prepared by GZA. GeoEnvironmental of New York.
 - i. "BFI/GZA Response to CRA Infrastructure & Engineering, Inc. (Town of Niagara Engineer) Comments (Dated May 13, 2005) Concerning the Draft Environmental Impact Statement", dated September 16, 2005 and prepared by GZA GeoEnvironmental of New York.
- 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.

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- 3. No ash (ie. flysch, 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(k).
- 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 300,000 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 medification procedures of 6 NYCRR Part 621.14 are concluded:
 - S. Variance request No. 1 from 6 NYCRR Part 360-2.12(a)(I)(v) which requires a landfill expension 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 Fart 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 subares B, the permittee shall submit, for Department approval, a design rationale report, specifications, updated CQA/CQC Plan and drawings at least 90 days prior to beginning construction. Construction of these subgress may not begin until a permit modification is issued to cover this construction.
- A construction schedule for any phase of construction shall be submitted to the RSME before the start of construction
 of that subsrca.
- 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.

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- 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 subarea to be operated.
- 12. Prior to operation of any subarea in Sanitary Landfill Area VIII, the parmittee shall submit a revised financial surety instrument (if needed) to provide surety for the revised closure and post-closure cost estimates provided in accordance with Special Condition No. 11 of this permit.
- Prior to operation of any subarea in Sanitary Landfill Area VIII, the permittee shall receive the RSME acceptance of the record drawings and Construction Cartification 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 sere per day (gpad) 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 my 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 Fort-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 clusure 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

- All geotextile, geomets, geosynthetic drainage composites, GCL's and geomembrane shall be tested to ensure that the appropriate design standards (friction angle, cohesion, transmissivity, permittivity, tensile strength) are use. 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 proposed field changes. Changes materially altering the permitted design and/or approved specifications must be approved by the RSME before they are implemented. The Construction Cartification 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 geomembrane 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.

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

Landfil 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.
- 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 Bavironmental 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 subares in Sanitary Landfill Area VIII, the integrity of the primary leachate collection pipes in the landfill must be verified by passing a cleaning device tarough 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 thall be forwarded to the RSMB, 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 sludges or other wastes 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 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 excevate waste, except for asbestos disposal or fire control, without prior written approval from the RSME.

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- 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 resolved this approval without the need to modify this permit. The reuse 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 an 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 permittee 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 cleaned and maintained to prevent tracking of material onto public roads.
- 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.
- 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 three 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 wasto 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 permittee shall, on a weekly basis, record in a log the leachate level in the following manholes:
 - Sanitary Landfill V manholes A-2U and C-4U.
 - b. Sanitary Landfill VI manholes 10-B, 11-U, C-5U, C-8U and D-6U.

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

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Landfill	Subarea	as measured in manhole	maximum clevation	maximum level in manhole (feet)
V	A/B	A-2U	592.7	8. <i>5</i>
¥	c	C-4U	587.7	7.1
٧ı	A	10-B	583.4	7.3
VI	В	11-Џ	584.6	3.2
VI	С	C-51)	594.6	4.1
VI	C	C-8U	595.9	4.8
νΙ	ם	D-6U	599 .7	3.7

- 41. The secondary leachate flow rates for each subares in Sanitary Landfills V, VI and VIII shall be measured and recurded, in a log, whenever the manholes are checked. This check 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 gpad, except during initial filling of the cell (an average of 40 feet of solid waste has been deposited across the floor of each subares). When the 20 gpad 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 ascertains groundwater quality, the permittee must determine whather 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 1989 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.

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46. The facility shall be properly closed in accordance with 6NYCRR Part 360-2.15 and the approved Closure Flan 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.

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Post-Closure

47. Post-closure monitoring and maintenance of Sanitary Landfills I, II, 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 must be submitted on the 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 accountary 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.
 - Weekly leachate level logs (see Special Condition No. 40 of this permit).
 - g. Calibration and maintenance logs for leachate flowmeter/totalizers in manholes MH-10A, MH-11L, MH-8, C-5L, C-8L, D-5L, A-2L and C-4L.
 - Results of the annual leachate transfer line cleaning and pressure testing (see Special Condition No. 36 of this
 permit).
 - 1. Results of the armual 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 to 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(t) and the following:
 - a. An apdated topographic map.
 - b. Any changes to the fill progression plan.
 - An updated cost estimate for closure/post-closure activities to reflect inflation and/or any changes that may impact closure or post-closure.

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- 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 Buffelo, NY 14203-2999 Attn: Regional Solid Materials Engineer (RSME)

Niegara County Health Department 5467 Upper Mountain Rod Lockport, NY 14094 Attn: Director of Environmental Health

Financial Surety

- 51. In accordance with 6 NYCRR Part 360-1.12 and Part 360-2.19, the permittee shall maintain a financial surety 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 surety(s) shall be submitted (if needed) to the RSME.

DEC Environmental Monitor (Monitor)

53. The previously established account to fund Environmental Monitoring serivity at the permittee's facilities shall be maintained with the Department. This finding 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 Pert 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.

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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 finding of environmental compliance activities related to the operation of the permittee's facility. This sum is based on annual Monitor 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 entity 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

- 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.
- This permit does not relieve the permittee from the responsibility of complying with other Federal, State and/or local laws, rules and regulations.
- Upon transfer of ownership of this facility, provisions shall be included in the property deed stating 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.
- Where there are conflicts between elements of the approved plans, the most recently dated approved element shall prevail with respect to the conflicting material.
- 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 on 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.
- Mr. Mark Hans, NYSDEC, Division of Solid and Hazardous Materials, Buffalo/Attn: Mr. James Sacco Mr. Scott Menrath, NYSDEC, Division of Solid and Hazardous Materials, Albany Mr. James Devald, Niagara County Health Department

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APPROVED PLAN SHEETS FOR MAGARA RECYCLING LANDFILL SANITARY LANDFILL AREA V, SUBAREA A AND H PREPARED BY GZA GEOENVIRONMENTAL OF NEW YORK, INC.

Drawing#	Title	Date	Last Revised Date
55060-C-101	Cover Sheet and Drawing Index	December 1997	none
55060-C-102	Site and Subsurface Exploration Location Plan	December 1997	none
55060-C-103	Cross Sections A-A and B-B	Dacember 1997	none
55060-C-104	Approximate Top of Bedrock Elevation Contour Plan	December 1997	none
55060-C-105	Approximate Top-of-Rock High Groundwater	<i></i>	10010
42424 4	Elevation Contour Plan	December 1997	none
55060-C-106 55060-C-107	Design Top of Subgrade Contour Plan (Subarea A) Design Top of Final Grade Contour Plan	. December 1997	none
	(Subarea A)	December 1997	none
55060-C-108	Separation Top of Subgrade from Groundwater	•	•
	and Bedrock (Subarea A)	December 1997	none
55060-C-109	Secondary Leachate Collection & Transfer System		,
	(Subarca A)	December 1997	none
55060-C-110	Primary Leachate Collection & Transfer System	D0041125 2557	164214
	(Subarea A)	December 1997	none
55060-C-III	Design Top of Subgrade Contour Plan (Subares B)	December 1997	
55060-C-112	Design Top of Final Grade Contour Flan	Detcimed 1997	nons
33000-C-111		D1 1007	-14-14
55060-C-113	(Subarea B)	December 1997	TIONS
22000-0-113	Separation Top of Subgrade from Groundwater	Th	
55060-C-114	and Bedrock (Subarca B)	December 1997	none
22000-F-11W	Secondary Leachage Collection & Transfer System		
E CO (O O 11 C	(Subarca B)	December 1997	none
55060-C-115	Primary Leachate Collection & Transfer System	- '	
44040	(Subarea B)	December 1997	nons
55060-C-116	Leschate Transfer System Plans	December 1997	TONC
55060-C-117	Leachate Transfer System Profiles	December 1997	none
55060-C-118	Design Top of Final Grade Contour Flan		
	(Subareas A and B)	December 1997	, uone
55060-C-119	Cross Sections C-C, D-D and E-E	December 1997	none
55060-C-120	Typical Berm and Channel Sections	December 1997	none
55060-C-121	Typical Details	December 1997	none
55060-C-122	Typical Pipe Details	December 1997	. none
55060-C-123	Typical Manhole Details	December 1997	none
55060-C-124	Typical Lift Station Details	December 1997	none .
55060-C-125	Design Top of Final Cover System (Subarea A)	December 1997	none.
55060-C-126	Cross Sections F-F and G-G	December 1997	none
55060-C-127	Design Top of Final Cover System	Descumble 1997	MONC
++-^4-0-1V1	(Subsreas A and B)	Thesamkan 1007	Optobox 1000
55060-C-128	Cross Sections H-H and I-I	December 1997	October 1999
55060-C-129		December 1997	October 1999
2.2000art-1.5%	Typical Final Cover System Details	December 1997	none '

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

Drawing #	Title	Date	Last Revised Date
55597-C-001	Cover Sheet and Drawing Index	April 2002	6/25/02
55597-C-002	Site Plan	April 2002	поде
55597-C-003	General Existing Site Conditions, Subsurface	•	
	Explorations & Fill Descriptions	April 2002	none
55597-C-004	Top of Bedrock Surface Elevation	April 2002	none
55597-C-005	Top of Rock Groundwater Elevations	April 2002	none
55597-C-006	Excavation Plan	April 2002	none
55597-C-007	Top of Subgrade Fill Type I Plan	April 2002	none
55597-C-008	Top of Subgrade Fill Type II Plan	April 2002	none
55597- C-0 09	Approximate Separation Top of Subgrade		
PERMY ALANA	Fill Type II from Top of Bedrock	April 2002	none
55597-C-010	Approximate Separation top of Subgrade	1 10 0000	
65500 C 011	Fill Type II from Top of Rock Groundwater	April 2002	POIC
55597-C-011	Top of Liner System-Final Grade	April 2002	none .
55597-C-012	Secondary Leachate Collection/Transfer	16 1 8000	c m c m a
Ettha m Asa	System Pipe Network Plan	March 2002	6/25/02
55597-C-013	Primary Leachate Collection/Transfer	14 1 2002	C IN C (INT
55507-0-014	System Pipe Network Plan	March 2002	6/25/02 6/25/02
55597-C-014 55597-C-015	Cross-Sections A-A and B-B Cross-Sections C-C and D-D	May 2002 February 2002	6/25/02
55597-C-016	Cross-Section E-E	May 2002	none 6/25/02
55597-C-017	Typical Berm Detail Sta. 0+00 to Sta. 7+40.88	April 2002	1008
55597-C-018	Typical Berm Detail Sta. 7+40.88 to Sta. 8+40.94	April 2002 April 2002	nûnê
55597-C-019	Typiosi Berm Detail Sts. 8+40.94 to Sts. 11+52.79	April 2002	nanc
55597-C-020	Typical Berm Detail Sta. 11+52.79 to	ripin 6000	nune
00071-0-000	Stn. 18+61.47; Sta. 18+16.47 to Sta. 20+41.01	April 2002	none
55597-C-021	Typical Berm Detail Sts. 20+41.01 to	· thin soos	110111
TTTT	Sta. 27+22.42; Sta. 27+22.42 to Sta. 30+66.44	April 2002	none
555 97-C-022	Primary Leachate Transfer System Connection	1.16211.0.044	
	Between Subarcas A & C, MH's A-3U Thru		•
	A-7U, Phase I	May 2002	6/25/02
55597-C-023	Primary Leachate Transfer System Connection		-
	Between Subarcas A & C, MH's A-3U Thru		
	A-7U, Phase II	May 2002	6/25/02
55597-C-024	Detail of Piping Modifications & Abandonment	•	
	of Existing Subarca A Secondary System		
	Manholes A-3L thru A-8L	May 2002	6/25/02
53397-C-025	Berm/Landfill Floor Configuration thru MH A-7U	May 2002 .	6/25/02
5\$\$97-C-026	Leachate Transfer System Connection Between		
	Subarcas A & C, MH A-8U	May 2002	6/25/02
55597-C-027	Landfill Floor & Leschate Collection	·	
	System Detail	May 2002	6/25/02
55597-C-028	Typical Manhole Details	May 2002	6/25/02
55597-C-029	Details for Manholes C-4U & C-4L	May 2002	6/25/02
55597-C-030	Details for Manholes C-6U & C-6L	May 2002	6/25/02
55597-C-031	Pipe Bedding Details	May 2002	6/25/02
55597-C-032	Leachage Collection/Transfer Pipe Connection	1	
	Detail, Geomembrane Bool Detail, &	1 fam 000=	485WA
###ON # A#A	Anchor Trench Detail	May 2007	6/25/02
55597-C-033	Design Top of Final Cover System	1_ () ****	
	(Subarcas A/B/C)	. April 2002	none
55597-C-034	Final Cover System Cross-Sections F-F,		•
PERMIT OF SOF	G-G and H-H	April 2002	none
55597-C-035	Typical Final Cover System Details	March 2002	tighe
			,
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APPROVED PLAN SHEETS FOR NIAGARA RECYCLING LANDFILL SANITARY LANDFILL VIII DEIS PERMIT DRAWINGS PREPARED BY GZA GEOENVIRONMENTAL OF NEW YORK, INC.

Drawing #	. Title	Date	Last Revised Date
55597.1-C-001	Cover Sheet and Drawing Index	December 2004	none
55597.1-C-002	Site Plan	December 2004	hone
55597.1-C-003	General Existing Site Conditions & Fill Descriptions	December 2004	none
55597.1-C-004	Top of Bedrock Surface Elevations	December 2004	none
\$5597.1-C-005	Top of Rock Groundwater Blevations	December 2004	none
55597.1-C-006	Top of Clay Groundwater Elevations	December 2004	none
55597.1-C-007	Option 1, Top of Landfill Liner	December 2004	none
55597.1-C-008	Option I, Excavation Plan	December 2004	
55597.1-C-009	Option 1, Top of Subgrade Fill	December 2004	none none
35597.1-C-010	Option 1, Approximate Separation Top of	LICCULTURE ZUUM	Haric
	Subgrade Fill from Top of Bedrock	December 2004	Hama .
55597.1-C-011	Option 1, Approximate Separation Top of	Détermer 2004	none
	Subgrade Fill from Top of Rock Groundwater	December 2004	none
55597,1-C-012	Option I, Approximate Separation Top of	Describer 2004	MOHE
	Subgrade Fill from Top of Clay Groundwater	December 2004	none
55597.1-C-013	Option I, Cross-Section A-A	December 2004	
55597.1-C-014	Option 1, Cross-Section B-B	Desember 2004	nanc none
55597.1-C-015	Option 1, Secondary Leachate Collection/Transfer Lines	December 2004	
55597.1-C-016	Option 1, Primary Leachate Collection/Transfer Lines	Trenemner 1000	none
- THE 178 W WIND	and Surface Drainage Plan	December 2004	nome.
55597.1-C-017	Option 2, Top of Landfill Liner	December 2004	
55597,1-C-018	Option 2, Excavation Plan	December 2004	none
55597.1-C-019	Option 2, Top of Subgrade Fill	December 2004	none
55597.1-C-020	Option 2, Approximate Separation Top of	December 2004	rione
5055,,2-0-520	Subgrade Fill from Top of Bedrock	December 2004	
55597.1-C-021	Option 2, Approximate Separation Top of	LACCHINDER 2004	none
-400111-0-051	Subgrade Full from Top of Roak Groundwater	December 2004	vom t
55597.1-C-022	Option 2, Approximate Separation Top of	Determer With	none .
DOUBLING OF	Subgrade Fill from Top of Clay Groundwater	D	2024
55597.1-C-023	Option 2, Cross-Section A-A	December 2004 December 2004	none
55597.1-C-024	Option 2, Cross-Section B-B	December 2004	none
55597.1-C-025	Option 2, Leachate Collection/Transfer Lines and	Peterinos, sona	ине
PPEP113-0-02D	Surface Drainage Plan	December 2004	******
55597.1-C-026	Option 3, Top of Landfill Liner	December 2004	none none
55597.1-C-027	Option 3, Excavation Plan	December 2004	none.
55597.1-C-028	Option 3, Top of Subgrade Fill	December 2004	none
55597.1-C-029	Option 3, Approximate Separation Top of	Perchilor toos	IMIC
2202711 0 023	Subgrade Fill from Top of Bedrock	December 2004	MARA
55597.1-C-030	Owige 2 Agent when to Companies Tour of	medember sona	none .
#### (**_^_\^\\\	Option 3, Approximate Separation Top of Subgrade Fill from Top of Rock Groundwater	Tiesenster 1004	
55597.1-C-031	Ortica 3. Americant Services Control 10 of the analysis of the	December 2004	none
2009111 - 0-03 (Option 3, Approximate Separation Top of	D	
55597.1-C-032	Subgrade Fill from Top of Clay Groundwater Option 3, Cross-Section A-A	December 2004	none
55597.1-C-032 55597.1-C-033	Option 3. Cook Continu D. D.	December 2004	none
55597.1-C-034	Option 3, Cross-Section B-B Option 3, Leachate Collection/Transfer Lines and	December 2004	none
1.140-034	Option 5, Leachaic Collection/ I rankfer Lines and	Desc-L- 0004	24 44 44
55597.1-C-035	Surface Drainage Plan	December 2004	none
55597.1-C-035	Option 4, Top of Landfill Liner	December 2004	none
	Option 4. Excavation Plan	December 2004	none
55597.1-C-037	Option 4, Top of Subgrade Pill	December 2004	nònė
55597.1-C-038	Option 4, Approximate Separation Top of	D1 2555	
55507 1 77 555	Subgrade Fill from Top of Bedrock	December 2004	none
55597.1-C-039	Option 4, Approximate Separation Top of	The second of th	
	Subgrade Fill from Top of Rock Groundwater	December 2004	none
	•	! '	
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APPROVED PLAN SHEETS FOR NIAGARA RECYCLING LANDFILL SANITARY LANDFILL VIII DEIS PERMIT DRAWINGS PREPARED BY GZA GEOENVIRONMENTAL OF NEW YORK, INC.

Drawing #	Title	Date	Last Revised Date
55597.1-C-040	Option 4, Cross-Section A-A	December 2004	none
55597.1-C-041	Option 4, Cross-Section B-B	December 2004	none
55597.1-C-042	Option 4, Leachate Collection/Transfer Lines and		
	Surface Drainage Plan	December 2004	none
55597.1-Ç-043	Connection of Clean-Out Access Pipes to Existing		•
	Sanitary Landfill VI Leachate Transfer Lines	December 2004	ηφηέ
55597.1-CQ43.1	Details for Secondary Lift Station Manhole for	•	
	Tie-In to San VI Landfill	June 2005	none
55597.1-C-044	Cross-Sections of Liner Tie-In from Sanitary		
	Landfill VIII to Existing Sanitary Landfill VI Cross-Sections of Lines Tie-In from Sanitary	December 2004	none
55597.1-C-045	Cross-Sections of Liner Tie-In from Sanitary		
53568 1 50 544	Landfill VIII to Existing Santtary Landfill V	December 2004	HOUS
55597.1-C-046	Modifications & Abandonment of Existing	•	
	Manholes and Leachate Transfer Lines	B 1 2004	•
6660B 1 O A4B	Sanitary Landfill VI	December 2004	none
55597.1-C-047	Details for Sanitary Landfill VIII Floor & Leachate	•	
	Collection System & Clean-Out Access Pipes	4	1
	for Liner Constructed on Existing Sanitary	D	
55597,1-C-048	Landfill VI Sideslopes	December 2004	догле
22231,1-0-046	Leachate Collection System/Cleanout Access	T	
55597.1-C-049	Pipe Demils (Applicable to Option 1 Only)	December 2004	none
33377.1-4-049	Typical Secondary Leachate Collection System Manhole Details	Dacember 2004	n mone
55597.1-C-050	Turnian Drimon Lacobate Cultration System	10000mber 2004	B/2005
2222117-0-000	Typical Primary Leachate Collection System Menhole Details	December 2004	8/2005
55597.1-C-051	Details of Typical Pipe Bedding	December 2004	none
55597.1-C-052	Leachete Collection/Transfer Pipe Detail,	2-44CHIOCI EOC-1	LIGER
	Geomombrane Boot Detail & Anchor Trench Detail	December 2004	TORR
55597.1-C-053	Top of Final Cover System	December 2004	nòne
55597.1-C-054	Final Cover System Cross Sections	December 2004	none
55597.1-C-055	Typical Final Cover System Tie-In Sanitary		-m- = + +
	Landfill VIII to Sanitary Landfill VI	December 2004	none
55597.1-C-056	Typical Final Cover System Details for Sanitary	1	1.1
	Landfill VIII	December 2004	none

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

Drawing #	Title	Date	Last Revised Date
55597.1-C-101	Cover Sheet and Drawing Index	December 2004	none
55597.1-C-102	Site Plan	Desember 2004	none
55597,1-C-103	General Existing Site Conditions & Fill Descriptions	December 2004	2004
55597.1-C-104	Top of Bedrock Surface Elevations	December 2004	BODE
55597.1-C-105	Top of Rock Groundwater Elevations	December 2004	none
55597,1-C-106	Top of Clay Groundwater Elevations		DOUC
55597.1-C-107	Subarca A Top of Landfill Liner Grading Plan	December 2004	none
55597.1-C-108	Substant A Company I and the Calledian Towards Contains	December 2004	none
55597.1-C-109	Subarea A Secondary Leachate Collection/Transfer System	December 2004	none
55597.1-C-110	Subarca A Primary Loschate Collection/Transfer System	December 2004	none
55597.1-C-111	Subareas A & B Top of Landfill Liner Grading Plan Subareas A &B Secondary Leachate Collection/	December 2004	nons
\$5597.1-C-112	Transfer System Subareas A & B Primary Leachate Collection/	December 2004	none .
	Transfer System	December 2004	June 2005
55597.1-C-113	Suberoas A & B Excavation Plan	December 2004	
55597.1-C-114	Subarcas A & B Top of Subgrade Fill		none
55597.1-C-115	Subarcas A & B Approximate Separation Top	December 2004	none
	of Subgrade Fill from top of Bedrock	December 2004	none
55597.1-C-116	Subareas A & B Approximate Separation Top	TARAMINA! SAAL	134124
	of Subgrade Fill from Top of Rock Groundwater	December 2004	nane
55597.1-C-117	Subarcas A & B Approximate Separation Top		
	of Subgrade Pill from Top of Clay Groundwater	December 2004	none
55597.1 - C-118	Subareas A & B Cross-Sections A-A & B-B	December 2004	none
55597.1-C-119	Subarea A & B Cross-Section C-C	December 2004	none
55597,1-C-120	Typical Containment Berm Cross-Sections	December 2004	none
55597.1-C-121	Subarca A Temporary Loachate Removal System		
	Cross-Sections	December 2004	June 2005
55597,1-C-121,1	Cross-Section of Leachate Transfer System		
	Through Subarea A/Subarea B Internal Berm	June 2005	nônê
55597.1-C-121.2	Typical Cross-Section of Sanitary Landfill VIII	1	
	Subarea A Berm Construction and Liner Tie-In	•	•
	Sanitary Landfill VIII Subarea B to Sanitary	•	
	Landfill VIII Subarea A	June 2005	none
55597.1-C-122	Cross-Section of Leachate Transfer Pipe	,	
•	Connections from San LF VIII, Sub. A to Future		
	San LF VIII, Sub. F	December 2004	June 2005
55\$97.I-C-123	Cross-Sections of Liner Tie-In to San LF V,		· · ·
	Subarcas A & C	December 2004	none
55597.1-C-124	Cross-Sections of Liner Tie-In to San LF V,	* 1	
	Subarea B	December 2004	none
55597.1-C-125	Details of Landfill Floor Cross-Section & Leachate		' '
	Collection System Detail and Frimary Leachate	i i	
	Collection System Cleanout Access Pipes	December 2004	none
55597.1-C-126	Typical Secondary Leachate Collection System	2000(1104 2424)	110114
	Manhole Details	December 2004	8/2005
55597.1-C-126.1	Details for Lift Station Manhole AB8-11 &	TACAIMAI TOUT	Oranoù
	Typical Geomembrane/Manhole Boot Detail	June 2005	ρφιέ
		<u> </u>	• 1

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

Drawing #	Title	Dete	Lust Revised Date
55597.1-C-127	Typical Primary Leachate Collection System Manhole Details	December 2004	8/20 0 5
55597.1-C-128	Leachate Collection/Transfer Pipe Detail, Pipe Bedding Detail, Geomembrane Boot Detail &		
55597.1-C-129	Anchor Trench Detail Subareas A & B Top of Final Cover System	December 2004 December 2004	700e
55597.1-C-130	Final Cover System Cross Sections	December 2004	none
55597.1-C-131	Tyrical Final Cover System Datails	December 2004	none
55597.1-C-132	San LF VIII Flume Leachate Collection System Coverage Area	August 2005	none
55597.1-C-133	San LF VIII Flume Plan & Profile	August 2005	none

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47-19-7 (10/86) - Text 12 (E-Reproduction)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF SOLID AND HAZARDOUS WASTE • BUREAU OF HAZARDOUS WASTE OPERATIONS 50 WOLF ROAD, ALBANY, NEW YORK 12233-4017

APPLICATION FOR TREATMENT OR DISPOSAL OF AN INDUSTRIAL WASTE STREAM

FOR STATE USE ONLY			
SITE NO. 32S11	APPLICATION NO.	DATE RECEIVED	
DEPARTMENT AC	CTION	DATE	
Approved	Disapproved		

SEE APPLICATION INSTRUCTIONS ON REVERSE SIDE				
1. NAME OF PROJECT/FACILITY Allied Niagara Falls Landfill Fac		COUNTY Niagara County	1	3. SITE NUMBER 32S11
4. NAME OF OWNER Allied Waste Systems		ADDRESS (Street, City, State, Zip Code 500 Niagara Falls Blvd., Niaga ew York 14304-0354		6. TELEPHONE NO. (716) 285-3344
7. NAME OF OPERATOR Allied Waste Systems		ADDRESS (Street, City, State, Zip Code ame 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 GENER One Horizon Way, Everett, M	,	et, City, State, Zip Code)
13. REPRESENTATIVE OF WASTE GENERATOR Robert Desalvio		Alling ADDRESS OF REPRESENTATI 1 Station Landing, Medford, M		5. TELEPHONE NO. 857) 770- 7801
16. DESCRIPTION OF PROCESS PRODUCING V Excavation for building construction	VASTE		·	
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 100	19b. PHYSICAL ST	TATE] Slurry	Contained Gas	9c. pH Range to
19. COMPONENTS 1) Soil 2) Debris (brick, concrete, 3) 4)	asphalt, etc	Upper 100 5 5	TION (Dry Weight) .ower Typic 95 95 0 5	
20. IS AN ANALYSIS OF WASTE ATTACHED? Yes No	21. WAS A TCLP	TEST CONDUCTED ON THE WASTE? No If "Yes", attach results	22. MATER Hazar	
23. DETAIL ALL HAZARD AND NUISANCE PROB			safety, handling, treatn	nent, and disposal precautions.
25. NAME OF WASTE TRANSPORTER Boston Environmental Corp.		reet, City, State, Zip Code) Street, Brockton, MA 02302	27. NYSDEC PERM NO.	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. a. SIGNATURE AND TITLE OF REPRESENTATIVE OF WASTE GENERATOR DATE				
b. SIGNATURE AND TITLE OF REPRES	ENTATIVE OF TREA	ATMENT OR DISPOSAL FACILITY		DATE

Georgia Department of Natural Resources

Environmental Protection Division • Land Protection Branch
Solid Waste Management Program

4244 International Parkway • Suite 104 • Atlanta • Georgia 30354 (404) 362-2692; Fax (404) 362-2693 Judson H. Turner, Director

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 DIVISION PROTECTION ENVIRONMENTAL



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 31058

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 - W! 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. 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

GENERATOR WASTE PROFILE WORKSHEET

Page 1 of 3(revised 8/13) Area To be completed by Waste Industries (WI) - Representative SW Designee Number: __ Profile Number: ___ Approval Date: ___ 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 Zip Code: 02149 State: MA Fax No: Generator's Mailing Address: 101 Station Landing City: Medford Zip Code: 02155 State I.D. No: 3-13341 SIC Code: NA Email Address: Generator/Generator Designee Contact Name: Robert Desalvio 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 Contact Person: Michael Kozak Transporter Name: Tunnel Hill Partners, L.P. Address: 390 N.Broadway, Ste 220 City: Jerico State: NY Zip: 11753 Phone No: 516-806-6232 Email Address: mkozak@tunnelhillpartners.com Fax No.: 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 SEMI-SOLID Physical State at 70 degrees F: SOLID POWDER LIQUID OTHER/explain: Method of Shipment: X BULK DRUM BAGGED Estimated Volume: Cubic Yards 10,600 Tons 17,000 Other Permanent Waste Stream? Tyes No Special Handling Instructions: **COMPOSITION BREAKDOWN** Color: Odor (describe): Free Liquids Flash Point Phenol % Solids: pH: \boxtimes NO ☐ Yes Brown None <u>></u>150 100 Content: Degrees F

Physical Description/Characteristics of Waste: Brown, fine to coarse SAND, some Gravel, little Silt, little Clay, little

Organics, trace debris

PAGE 2 OF 3 – GENERATOR WASTE PROFILE SHEET REVISED 10/2008

REPRESENTATIVE SAMPLE CERTIFICATION

Is the representative sample collected to prepare this profile and lab	<u> </u>	h U.S. EPA § 40 CFR			
261 .20 © guidelines or equivalent rules?	☐ YES ☐ NO ☐ Grab Sample ☐ Grab Sample	nlo			
Sample Date:		pic			
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		s for this Profile			
Does this waste or generating process contain regulated concentrations of t Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, M Silvex as defined in § 40 CFR 261.33?	fethoxychlor, Toxaphene, 2, 4-D, 2, 4, 5, -TP	☐ Yes ⊠ No			
Does this waste or the generating process cause it to exceed OSHA exposu Or Hydrogen Cyanide as defined in § 40 CFR 261.23?	re limits from high levels of Hydrogen Sulfide	☐ Yes ⊠ No			
Does this waste contain regulated concentrations of Polychlorinated Bipher		Yes No			
Does this waste contain regulated concentrations of listed hazardous waster Including RCRA F-Listed Solvents?	s defined by § 40 CFR 261.31, 261.32, 261.33,	☐ Yes ⊠ No			
Does this waste contain regulated concentrations of 2, 3, 7, 8-Tetrachlorod Dioxin as defined in § 40 CFR 261.31?	ibenzodioxin (2, 3, 7, 8-TCCD), or any other	Yes No			
Is this a regulated Toxic Material as defined by Federal and/or State Regulation	ations?	☐ Yes ⊠ No			
Is this a regulated Radioactive Waste as defined by Federal and/or State Re		Yes No			
Is this a regulated Medical or Infectious Waste as defined by Federal and/o	or State Regulations?	Yes No			
Is this waste generated at a Federal Superfund Clean Up Site?		Yes No			
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 abovementioned disposal site.					
Robert Desalvio, President AUTHORIZED REPRESENTATIVE NAME AND TITLE (PRINTED)	Wynn MA, LLC 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.

> PAGE 3 OF 3 – GENERATOR WASTE PROFILE SHEET **REVISED 10/2008**

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 herby certify that I am authorized to approve the names of

Generator of Waste Stream	
(Company or Individual)	
Generator's Signature	
Print Signature & Title	
Generator's Address	
Telephone Number	
Date	
9	oker designees are authorized to sign as a representative(s) ne generator for the following purposes (check those that approximately see
generator or as an agent for t 1. Complete and sign 2. Sign contracts to c 3. Sign certifications	
generator or as an agent for t 1. Complete and sign 2. Sign contracts to c 3. Sign certifications 4. Sign manifests to c 5. Other,	Generator Waste Profile Worksheets. spose and/or transport material. necessary to comply with landfill requirements.

Name of Individual	Title	Name Of Company	Telephone No.



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

- 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.