Site Management Plan

Lucarelli Property
Karner Road

Town of Colonie
Albany County, New York

Prepared by:

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Site Management Plan

1. INTRODUCTION AND PURPOSE

1.1. Overview and objectives

The portion of the Albany Karner Road site currently owned by Joseph Lucarelli is approximately 3.87 acres in size. The location of the property and portion of the property subject to the requirements of this plan, is shown on Figure 1. The site has been characterized during several previous investigations.

The objective of this Site Management Plan (SMP) is to set guidelines for management of soil material during any future activities which would breach the cover system. The SMP is a portion of the overall remedy which addresses future disturbance/use of any residually contaminated soil left on the site, after other elements of the remedy have been implemented. This SMP addresses environmental concerns related to soil management and has been reviewed and approved by the New York State Department of Environmental Conservation (NYSDEC) as shown in Exhibit 1. This plan is not intended to serve as a design document for construction activities related to redevelopment activities. It is the developer's responsibility to prepare a design that incorporates the requirements for cover and soil management as set forth in this SMP.

For the convenience of the site owner, summaries of previous environmental investigations have been restated in this SMP, where appropriate. The owner should refer to the previous investigation reports for more detail, as needed.

1.2. Site history

Prior to the 1960's the Site was reportedly undeveloped. During the 1960's and early 1970's, the Site was used as an equipment storage and fill/dump area by the previous site owners, Cross Country House Movers. The owners were Leonard Spector and Charles DelRegno. Substantial rubble and debris consisting of timbers, abandoned and rusting trucks and cars, steel beams, drums, tanks, and other metallic objects were at or near the ground surface. In 1964, a complaint was received by New York State regarding concern that 55-gallon drums of hazardous wastes were being buried at the site. The drums were allegedly generated by Bendix Corporation and General Electric Company. In 1983, Joseph Lucarelli purchased a portion of the Site from Spector and DelRegno.

2. PREVIOUS INVESTIGATIONS

2.1. Chronology

The site has been characterized during several previous investigations by both the NYSDEC and Mr. Lucarelli. The Phase I Investigation sponsored by DEC was completed in 1984 by Wehran Engineering, P.C. The Phase II Investigation was completed in 1987 by RECRA Environmental, Inc. The Phase II consisted of installation of four monitoring wells and completion of a geophysical survey.

In 1988, Mr. Lucarelli sponsored a geophysical investigation and test pit program on his property. The geophysical appeared to generally confirm the potential drum area at the west property line near the north/center of the property.

In 1989 Mr. Lucarelli sponsored a removal project whereby West Central Environmental Corp. removed and disposed 32 drums of waste and contaminated soil from his property. Upon confirmation of finding hazardous waste buried on site, NYSDEC classified the site as "Class 2", where hazardous waste presents a significant threat to the public health and the environment and action is required.

In September, 2000, Mr. Lucarelli sponsored a site investigation as part of the Voluntary Cleanup Agreement. This investigation included trenches, air monitoring, soil sampling, monitoring well installation, and groundwater sampling. Thirty five 55-gallon metal drums were encountered. The drums, which primarily contained resins, and contaminated soil were removed and disposed off site. Fill and native soil which did not appear contaminated was segregated and placed back in the excavation.

Based on the analytical results from the September, 2000 investigation, an interim remedial measure (IRM) was completed in December, 2001. Excavation and off-site disposal of remaining contaminated soil in the area where the 55-gallon drums were encountered was accomplished in order to meet NYS Technical and Administrative Guidance Memorandum (TAGM) 4046 Recommended Soil Cleanup Objectives (RSCO) for VOCs, SVOCs, Pesticides, and PCBs. Activities also included additional site test pits with related surface and subsurface soil samples, soil samples of the excavation pit walls and floor, and site air monitoring. The detected contaminant of concern was PCBs.

2.2 Nature and extent of contamination

Based on data obtained from previous investigations and the remediation done at the site, the Final Engineering Report – Site Investigation and Remediation, Lucarelli Property, Karner Road, dated October 2002, was developed by Hennessy Engineering & Consulting. The report described the site history, investigations, and interim remedial measures.

Results of ground water sampling indicate constituents in the soil/fill material have not significantly impacted ground water quality. The most significant detection in groundwater was 5 ppb phenol in monitoring well PES-5, which is located in the area of the drum removal. A follow-up sampling of this well after the IRM was non-detect for phenol. Results from the September, 2000 investigation of monitoring well MW-108-3, located east of the excavation, indicated 4 ppb phenol and monitoring well PES-2, also located east of the excavation, indicated 4 ppb benzene.
The main contaminant of concern that remains at the site is PCB-contaminated subsurface soils. During the December, 2001 IRM, some of the soil meeting TAGM 4046 guidance was backfilled into the excavation. The backfill was staged in seven piles with PCB concentrations ranging from 0-2.29 ppm. Soil samples from the excavation pit sidewalls and the floor had PCB concentrations ranging from 0-5.22 ppm.

The remaining soil piles were backfilled with the pile of greatest contamination deposited in the excavation first and the pile with the least contamination deposited last. A surface cover system consisting of clean fill was placed over the excavation a minimum of approximately 2' in depth.

Site monitoring wells did not detect any PCBs in groundwater. Based on the investigations and IRM, future exposures to contaminants in groundwater are unlikely.

3. CONTEMPLATED USE

If development occurs, the property has been identified for business, commercial, or light industrial uses. Town of Colonie Zoning for the property is Business E, which permits general business uses and does not permit residential uses.

4. SUMMARY OF REMEDY

The constituents of potential concern (COPCs) for soil and groundwater have been identified in section 2.2 of this document. Based on the business, commercial, or light industrial contemplated use of the property, the remedial action objectives (RAOs) for the Site are to minimize potential exposure to on-site surface soil, subsurface soil, and ground water and to prevent releases from residual PCB-impacted soils.

To achieve the RAOs for the site, the PCB-contaminated soils were removed and a cover system was placed over the affected area as depicted in Figure 2. The cover system was placed directly on top of the regraded on-site soil/fill material and consists of the materials described in section 4.1.

All of the remedy components are described in the Record of Decision dated March, 2004 and the Final Engineering Report – Site Investigation and Remediation, Lucarelli Property, Karner Road, dated October 2002.

4.1. Cover system

The purpose of the surface cover system is to eliminate the potential for human contact with fill material and eliminate the potential for contaminated runoff from the property. The cover system consists of a minimum of 24 inches of vegetated soil cover. The fill, obtained from William M. Larned & Sons, a DEC permitted mine in Rotterdam, NY, was graded and compacted. Considerably more than a 2' lift was placed over parts of the excavation due to off-site contaminated soil removal.

5. MANAGEMENT OF SOILS/FILL AND LONG TERM MAINTENANCE OF COVER SYSTEM

The purpose of this section is to provide environmental guidelines for management of subsurface soils/fill and the repair/replacement of the cover system during any future intrusive work which breaches the cover system.

5.1. Site preparation

As part of redevelopment or future intrusive on-site activities, the Site may require grading prior to cover system replacement. The fill material and any debris piles generated during intrusive activities will be graded to the surface required for redevelopment. Trees, shrubs, roots, brush, masonry,

rubbish, scrap, debris, pavement, curbs, fences, etc. will be removed and properly disposed off-site or stockpiled on site in accordance with applicable solid waste regulations. Only exempt materials as defined in 6 NYCRR Part 360-7.1(b)(1) are allowed for stockpiling. Prior to cover system replacement, protruding material will be removed from the ground surface. Burning will not be allowed on-site.

5. 2 Excavation and grading below the cover system

All excavation work below the cover system will require monitoring of soil/fill disturbances by a Professional Engineer's representative with construction/remediation experience. This Professional Engineer (P.E.) must also provide a stamped/signed certification that excavation work below the cover system and subsequent repair/replacement of the cover system was conducted in a manner consistent with this SMP. This P.E. certification must be included in the annual certification report required in section 9 of this document.

During excavation work below the cover system, the soil/fill will be inspected for staining and will be field screened for the presence of VOCs with a photoionization detector (PID). This soil may be reused as backfill material on-site provided it is placed beneath a cover system component and contains no visual, olfactory or PID evidence of contamination. Soil/fill that is excavated as part of development which can not be used as fill below the cover system will be further characterized prior to transportation off-site for disposal at a permitted facility.

Soil/fill that is excavated as part of development outside both the perimeter of the cover system and site areas previously subject of an Interim Remedial Measure (IRM), will be monitored for visual and olfactory evidence of contamination, but is not required to be monitored with a PID. Figure 2 depicts the areas of the cover system and prior IRMs.

Excavated soil/fill may be used on-site as fill below the cover system. Soil/fill that is excavated as part of development which can not be used as fill below the cover system will be further characterized prior to transportation off-site for disposal at a permitted facility.

5.2.1. Visibly impacted soil/fill or soil/fill that exhibits elevated PID readings

Stained soil is soil that is observed to be discolored, tinted, dyed, unnaturally mottled, or has a sheen. Soil/fill screening and sampling is described in Section 5.3. Excavated soil/fill that is visibly stained or produces elevated PID readings (i.e., sustained 10 ppm or greater) will be considered potentially contaminated and stockpiled on the property for further assessment. The potentially contaminated soil/fill will be stockpiled (maximum 50 cubic yard piles) on polyethylene sheeting and then sampled for reuse, treatment, or disposal. The stockpiled, potentially contaminated soil/fill will also be completely covered using polyethylene sheeting to reduce the infiltration of precipitation and the migration of dust. Sampling and analysis will be completed in accordance with the protocols delineated in Section 5.3. Visibly impacted soil/fill containing one or more constituents in excess of NYSDEC TAGM 4046 will be transported off-site to a permitted waste management facility.

5.2.2. Buried drums or underground storage tanks

If buried drums or underground storage tanks are encountered during soil excavation activities, excavation will cease and the NYSDEC will be immediately notified. All drums and/or

underground storage tanks encountered will be evaluated and the contractor will submit a removal plan for NYSDEC approval. Appropriately trained personnel will excavate all of the drums and/or underground storage tanks while following all applicable federal, state, and local regulations. Removed drums and underground storage tanks will be properly characterized and disposed off-site. The soil/fill surrounding the buried drums or underground storage tanks will be considered as potentially contaminated and will be stockpiled and characterized.

5.3.1 Excavated and stockpiled soil/fill

Excavated soil/fill may be used on-site as fill below the cover system. Soil/fill that is excavated as part of development which can not be used as fill below the cover system will be further characterized prior to transportation off-site for disposal at a permitted facility. For excavated soil/fill with visual evidence of contamination (i.e., staining or elevated PID measurements), one composite sample and a duplicate sample will be collected for each 100 cubic yards of stockpiled soil/fill. For excavated soil/fill that does not exhibit visual evidence of contamination but must be sent for off-site disposal, one composite sample and a duplicate sample will be collected for 2000 cubic yards of stockpiled soil, and a minimum of 1 sample will be collected for volumes less than 2000 cubic yards.

The composite sample will be collected from five locations within each stockpile. A duplicate composite sample will also be collected. PID measurements will be recorded for each of the five individual locations. One grab sample will be collected from the individual location with the highest PID measurement. If none of the five individual sample locations exhibit PID readings, one location will be selected at random. The composite sample will be analyzed by a NYSDOH ELAP-certified laboratory for pH (EPA Method 9045C), Target Compound List (TCL) SVOCs, pesticides, and PCBs, and TAL metals, and cyanide. The grab sample will be analyzed for TCL VOCs.

Soil samples will be composited by placing equal portions of fill/soil from each of the five composite sample locations into a pre-cleaned, stainless steel (or Pyrex glass) mixing bowl. The soil/fill will be thoroughly homogenized using a stainless steel scoop or trowel and transferred to pre-cleaned jars provided by the laboratory. Sample jars will then be labeled and a chain-of-custody form will be prepared.

5.3.2. Soil/fill disposal or reuse

Visually contaminated soil/fill that has been characterized and found to meet the site specific action levels (SSALs), may be reused as subgrade or excavation subgrade backfill, if appropriate. On-site soil/fill may not be reused as backfill in landscaping berms to be used for the planting of trees and shrubs. If the analysis of the soil/fill samples reveals unacceptably high levels of any analytes, the soil may not be used as backfill on-site and additional analyses will be necessary to further classify the material for disposal purposes. The developer will be responsible for characterizing any material that is found to contain one or more constituents in excess of the SSALs. At a minimum, a duplicate sample may need to be analyzed for the toxicity characteristic using the Toxicity Characteristic Leaching Procedure (TCLP) for the particular analytes that were detected at concentrations exceeding the SSALs. The duplicate sample may also be analyzed for the other RCRA Characteristics including reactivity, corrosivity, and ignitability. If the analytical results indicate that concentrations exceed the standards for RCRA characteristics, the material will be

considered a hazardous waste and must be properly disposed off-site at a permitted disposal facility within 90 days of excavation.

Additional characterization sampling for off-site disposal may be required by the disposal facility. To potentially reduce off-site disposal requirements/costs, the owner or site developer may also choose to characterize each stockpile individually. If the analytical results indicate that the soil is not a hazardous waste, the material will be properly disposed off-site at a non-hazardous waste facility. Stockpiled soil cannot be transported on or off-site until the analytical results are received.

5.4. Subgrade material

Subgrade material used to backfill excavations or placed to increase site grades or elevation shall meet the following criteria:

- Excavated on-site soil/fill which appears to be visually impacted shall be sampled and analyzed. If analytical results indicate that the contaminants, if any, are present at concentrations below NYSDEC TAGM 4046 levels, the soil/fill can be used as backfill on-site.

- Any off-site fill material brought to the site for filling and grading purposes shall be from an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination. Off-site borrow sources shall hold a current NYSDEC Mining Permit.

- Off-site soils intended for use as site backfill cannot otherwise be defined as a solid waste in accordance with 6 NYCRR Part 360-1.2(a).

5.5. Cover system specifications

5.5.1. Soil

Cover soil material shall meet the following criteria:

- The existing cover system consists of a minimum of 24 inches of vegetated soil cover. If disturbance to the cover occurs in the future, final cover thickness shall be a minimum of 24".

- Excavated on-site soil/fill from below the existing cover shall not be used as cover material.

- Excavated on-site soil/fill which appears to be visually impacted shall be sampled and analyzed. If analytical results indicate that the contaminants, if any, are present at concentrations below NYSDEC TAGM 4046 levels, the soil/fill can be used as backfill on-site.

- Any off-site fill material brought to the site for filling and grading purposes shall be from an acceptable borrow source free of industrial and/or other potential sources of chemical or

petroleum contamination. Off-site borrow sources shall currently hold a NYSDEC Mining Permit.

- Off-site soils intended for use as site backfill cannot otherwise be defined as a solid waste in accordance with 6 NYCRR Part 360-1.2(a).

- Topsoil used for the final cover shall be fertile, friable, natural loam surface soil, capable of sustaining plant growth, and free of clods or hard earth, plants or roots, sticks or other extraneous material harmful to plant growth.

- Grassed areas will be seeded with a sustainable perennial mixture with appropriate erosion control measures taken until the perennial grasses are established.

- To reduce the disturbance of the surface cover material, clean soil berms will be constructed in areas where shallow-rooted trees and shrubs will be planted. The berms will be of sufficient thickness to allow the excavation of only clean fill deep enough to plant the tree or shrub root ball. The berm material will contain sufficient organic material to allow tree and/or shrub growth, and will be of sufficient strength to support trees and/or shrubs at their maximum height.

5.5.2. Asphalt

It is expected that asphalt will be used for the development in areas that will become roads, sidewalks, and parking lots. Where asphalt will represent a cover in terms of remedial action, a minimum cross-sectional thickness of 6 inches of material total (asphalt and clean subbase material) is required for protection from exposure to the underlying soil/fill material. The actual cross section of the asphalt cover (i.e., thickness of the asphalt and subbase material) will be determined based on the intended use of the area.

5.5.3. Concrete

It is expected that concrete may be used in areas that will become slab-on-grade structures, utilities, footings, foundations, or signs. Concrete may also be used instead of asphalt for roads, sidewalks, and parking lots. Where concrete will represent a cover in terms of remedial action, a minimum cross-sectional thickness of 6 inches of material total (concrete and clean subbase material) is required for protection from exposure to the underlying soil/fill material. A vapor barrier consisting of polyethylene sheeting with a minimum thickness of 8-mils will be installed under all structures (for sites impacted by VOC contamination only). Type and thickness of concrete and subbase material will be determined based on intended use of the area.

5.6. Erosion control

Federal and state laws require that the project obtain coverage under the NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Storm Water Discharges from Construction Activities for certain activities disturbing between 1 and 5 acres of land. Requirements for coverage under the Construction Storm Water General Permit include the submittal of a Notice of Intent form and the development of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must fulfill all permit requirements and must be prepared in accordance with "Chapter Four:

the Storm Water Management and Erosion Control Plan" in Reducing Impacts of Storm Water Runoff from New Development, NYSDEC, 1992. This Storm Water Management and Erosion Control Plan, in accordance with permit requirements, will provide the following information:

- A background discussion of the scope of the construction project.
- A statement of the storm water management objectives.
- An evaluation of post-development runoff conditions.
- A description of proposed storm water control measures.
- A description of the type and frequency of maintenance activities required to support the control measure.

The SWPPP will address issues such as erosion prevention, sedimentation control, hydraulic loading, pollutant loading, ecological protection, physical site characteristics that impact design, and site management planning. All descriptions of proposed features and structures at the Site will include a description of structure placement, supporting engineering data and calculations, construction scheduling, and references to established detailed design criteria. The SWPPP will conform to all requirements as established by applicable regulatory agencies.

Proven soil conservation practices will be incorporated in the construction and development plans to mitigate soil erosion, off-site sediment migration, and water pollution from erosion. The use of appropriate temporary erosion control measures such as silt fencing and/or hay bales will be required around all soil/fill stockpiles and unvegetated soil surfaces during redevelopment activities. These methods are described below. Stockpiles shall be graded and compacted as necessary for positive surface water runoff and dust control. Stockpiles of soil/fill will be placed a minimum of 50 feet from the property boundaries.

5.6.1 Temporary erosion control measures.

Temporary erosion and sedimentation control measures and facilities will be employed during active construction stages. Prior to any construction activity, temporary erosion and sediment control measures shall be installed and maintained until such time that permanent erosion control measures are installed and effective.

During construction activities, silt fencing will be placed around the area of the cover system and former IRMs. As sediment collects along the silt fences {hay bales, etc.}, they will be cleaned to maintain desired removal performance and prevent structural failure of the fence. Accumulated sediment will be removed when 50% of the storage capacity of the silt fence is full. Removed sediment will be stockpiled and characterized in accordance with Section 5.3. The perimeter silt fences will remain in place until construction activities in the area are completed and vegetative cover or other erosion control measures are adequately established. Silt fences will be provided and installed in accordance with the New York Guidelines for Urban Erosion and Sediment Control.

5.6.2 Permanent erosion control measures.

Permanent erosion control measures and facilities will be incorporated during cover construction and during site redevelopment for long-term erosion protection. These measures and facilities will be installed as early as possible during construction phases. Parking and building systems associated

with redevelopment shall not include dry wells or other subsurface injections/disposal piping or facilities within the area of the cover system or where prior IRMs were completed.

Permanent measures will incorporate a combination of design features to limit overall erosion and sediment problems to practical design limits, and the placement of permanent facilities during site restoration for long term erosion protection. They will include limiting steep slopes, routing runoff to surface water collection channels, limiting flow velocities in the collection channels to the extent practical, and lining collection channels, where appropriate. In areas where flow will be concentrated (i.e. collection channels) the channel slopes and configuration will be designed to maintain channel stability.

Any final slopes greater than 33 percent will be reinforced, and will have a demarcation layer under the clean cover to indicate if erosion has extended to the subgrade. Following the placement of final cover soils over regraded areas, a revegetation program will be implemented to establish permanent vegetation. Vegetation serves to reduce erosion, enhance evapotranspiration, and improve runoff water quality. The areas to be grassed will be seeded in stages as construction is completed with 100 lbs./acre of seed conforming to the mix included in Section 5.5.1.

5.7. Dust control

The surface of unvegetated or disturbed soil/fill areas will be wetted with water or other dust suppressive agents to control dust during construction in the area of the cover system or prior IRMs. Any subgrade material left exposed during extended interim periods (greater than 90 days) prior to placement of final cover shall be covered with a temporary cover system (i.e., tarps, spray type cover system, etc.) or planted with vegetation to control fugitive dust to the extent practicable. Particulate monitoring will be performed along the downwind occupied perimeter of the subparcel during subgrade excavation, grading, and handling activities in accordance with the Community Air Monitoring Plan further detailed in Section 6.2 and in accordance with NYSDEC TAGM 4031 (Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites), which is included in Exhibit 2.

Dust suppression techniques will be employed at the Site during construction in the area of the cover system or prior IRMs in accordance with NYSDEC DER TAGM 4031. This TAGM describes guidance for dust monitoring, and includes a list of effective dust suppression techniques. As per TAGM 4031, dust suppression techniques that may be used at the Site include applying water on roadways, wetting equipment, spraying water on buckets during excavation and dumping, hauling materials in properly covered or watertight containers, covering excavated areas and material after excavation activity ceases, establishing vegetative cover immediately after placement of cover soil, and reducing the excavation size and/or number of excavations. The use of atomizing sprays is recommended so that excessively wet areas will not be created but fugitive dust will be suppressed.

5.8. Construction water management

Pumping of water (i.e., ground water and/or storm water that has accumulated in an excavation) from excavations, if necessary, will be done in such a manner as to prevent the migration of particulates, soil/fill, or unsolidified concrete materials, and to prevent damage to the existing subgrade. Water pumped from excavations will be managed properly in accordance with all

applicable regulations so as to prevent endangerment of public health, property, or any portion of the construction.

In areas where ground water may be contaminated, the ground water in excavations will be field screened for VOCs and observed for any noticeable sheens. Water in the excavations will not be discharged to the ground surface if:

- staining or PID measurements above background are observed in the excavation, or
- a sheen is present on the water surface

If any of these conditions exist, the water pumped from the excavations will be containerized and analyzed in accordance with the Surface Water and Ground Water Quality Standards set forth in 6 NYCRR Part 703.5 and the local sewer authority discharge permit. If the water meets the surface water and ground water quality standards, it may be discharged to the ground surface. If the water does not meet the surface water and ground water quality standards, it may be discharged to the local sewer authority under a discharge permit. If the water quality is such that the local sewer authority discharge permit requirements will be exceeded, or the local sewer authority will not approve the discharge to a sewer, it will be transported off-site for proper disposal or treated on-site via a treatment system that has been approved by NYSDEC. Runoff from surface discharges shall be controlled. No discharges shall enter a surface water body without proper permits.

5.9. Access controls

Access to soil/fill in the area of the cover system or prior IRMs must be controlled until final cover is placed to prevent direct contact with subgrade materials. Excavated subgrade material that is stockpiled on site must be temporarily covered to limit access to that material.

5.10. Institutional controls

The use of the property has been restricted through a deed restriction that prevents the use of ground water and disturbance of the final cover system. Deed restrictions are described in detail in the Record of Decision dated March, 2004.

5.11. Operation, Maintenance and Monitoring

This section describes conditions and procedures for operating, maintaining and monitoring physical components of the remedy. At a minimum, this section should be reviewed annually during the post-closure period and updated as necessary. This work will be the responsibility of the property owner, Joseph Lucarelli.

Erosion of the soil cover system will be reduced by maintaining a vegetative cover. In order to reduce disturbance of the soil cover material, cover materials, fencing, signs, and gates and similar physical features will be monitored annually and repaired as needed.

- Berms or mounds composed of clean soil will be constructed in areas in which trees and shrubs will be planted.

- The final cover system (i.e., vegetative cover, roads, buildings, parking lots, etc.) will be evaluated for disturbances such as sloughing, cracks, settlement, erosion, distressed vegetation, damaged fencing, gates or signs.
- Repair of any deficiencies found will be in accordance with the requirements of this document.
- The annual report will include discussion on activities during that reporting period.

6. HEALTH AND SAFETY

Invasive work performed at the property will be performed in accordance with all applicable local, state, and federal regulations to protect worker health and safety.

If intrusive work is expected to breach the cover system at the property, all contractors performing redevelopment or maintenance activities will be required to prepare a site-specific, activity-specific Health and Safety Plan (HASP) as described below. The HASP must also include provisions for protection of the community as described in Section 6.2.

6.1. Construction personnel protection

Contractors engaged in subsurface construction or maintenance activities (e.g., foundation and utility workers) will be required to implement appropriate health and safety procedures. These procedures will involve, at a minimum, donning adequate personal protective equipment, performing appropriate air monitoring, and implementing other engineering controls as necessary to mitigate potential ingestion, inhalation and contact with residual constituents in the soils. Recommended health and safety procedures include, but may not be limited to, the following:

- While conducting invasive work at the Site, the Contractor shall provide safe and healthful working conditions. The Contractor shall comply with all New York State Department of Labor regulations and published recommendations and regulations promulgated under the Federal Occupational Safety and Health Act of 1970 and the Construction Safety Act of 1969, as amended, and with laws, rules, and regulations of other authorities having jurisdiction. Compliance with governmental requirements is mandated by law and considered only a minimum level of safety performance. The Contractor shall insure that all work is performed in accordance with recognized safe work practices.

- The Contractor shall be responsible for the safety of the Contractor's employees and the public. The Contractor shall be solely responsible for the adequacy and safety of all construction methods, materials, equipment and the safe prosecution of the work.

- The Contractor is responsible to ensure that all project personnel have been trained in accordance with 29 CFR 1910.120.

- The Contractor shall have a HASP, written in accordance with 29 CFR 1926.65, prepared, signed and sealed by a safety professional; a safety professional and/or a trained safety

representative(s) active on the job whenever the work is in progress; an effective and documented safety training program; and a safety work method check list system.

- Recognition as a safety professional shall be based on a minimum of certification by the Board of Certified Safety Professionals as a Certified Safety Professional and 5 years of professional safety management experience in the types of construction and conditions expected to be encountered on the Site.

- All personnel employed by the Contractor or his subcontractors or any visitors whenever entering the job site, shall be required to wear appropriate personal protection equipment required for that area.

6.2. Community air monitoring program

Air monitoring will be performed during excavation and grading activities in the area of the cover system and the former IRMs. This monitoring will be in accordance with the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan, which is included in Exhibit 3. All air monitoring readings will be recorded in a logbook and will be available for review by the NYSDEC and NYSDOH.

7. QUALITY ASSURANCE/QUALITY CONTROL

7.1. Analytical Data

All characterization samples collected during site redevelopment activities will be analyzed using the most recent NYSDEC Analytical Services Protocol (ASP), consistent with section 2 of DER-10, the Technical Guidance for Site Investigation and Remediation.

The laboratory proposed to perform the analyses will be certified through the New York State Department of Health Environmental Laboratory Approval Program (ELAP) to perform Contract Laboratory Program (CLP) analysis and Solid Waste and Hazardous Waste Analytical testing on all media to be sampled during this investigation. The laboratory will maintain this certification for the duration of the project.

The detection limit for constituents of concern shall be equal to or less than the noted action level in TAGM 4046.

Sampling and decontamination procedures are presented in Exhibit 4. Procedures for chain of custody, laboratory instrumentation calibration, laboratory analyses, reporting of data, internal quality control, and corrective actions shall be followed as per NYSDEC ASP and as per the laboratory's Quality Assurance Plan. Where appropriate, trip blanks, field blanks, field duplicates, and matrix spike, matrix spike duplicate shall be performed at a rate of 5% (1 per up to 20 samples) and will be used to assess the quality of the data. The laboratory's in-house QA/QC limits will be utilized whenever they are more stringent than those suggested by the EPA methods.

8. NOTIFICATION AND REPORTING

There shall be no construction, use or occupancy of the property that results in the disturbance or excavation of the property, which threatens the integrity of the cover system or which would result in human exposure to contaminated soils, unless prior written approval by the NYSDEC is obtained. Therefore, notification of NYSDEC at the address below should precede any such work by at least 60 days, to allow time for review and any necessary revisions of a work plan.

The following minimum notification and reporting requirements shall be followed by the property owner prior to and following site development, as appropriate:

$ If buried drums or underground storage tanks are encountered during soil excavation activities, excavation will cease and the NYSDEC will be immediately notified.
$ The Owner shall complete and submit to the Department an annual report by January 15th of each year. Such annual report shall contain certification that the institutional controls put in place, pursuit to the Record of Decision, are still in place, have not been altered and are still effective; that the remedy and protective cover have been maintained; and that the conditions at the site are fully protective of public health and the environment.

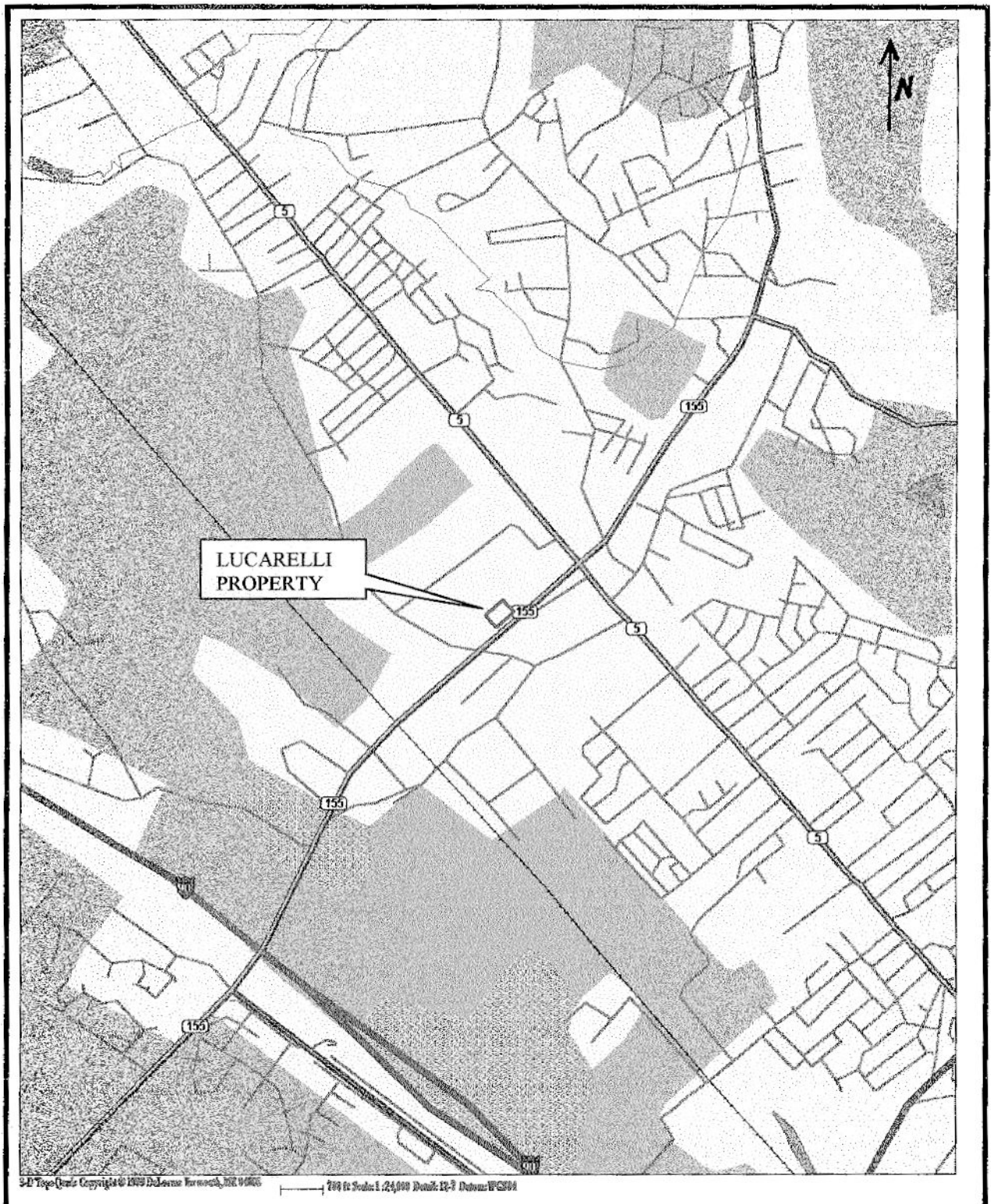
If the cover system has been breached during the year covered by that Annual Report, the owner of the property shall include the following in that annual report:

- A certification that all work was performed in conformance with this SMP.
- Plans showing areas and depth of fill removal.
- Copies of daily inspection reports for soil-related issues.
- Description of erosion control measures.
- A text narrative describing the excavation activities performed, health and safety monitoring performed (both site specified and Community Air Monitoring), quantities and locations of soil/fill excavated, disposal locations for the soil/fill, soil sampling locations and results, a description of any problems encountered, location and acceptability test results for backfill sources, and other pertinent information necessary to document that the site activities were carried out properly.

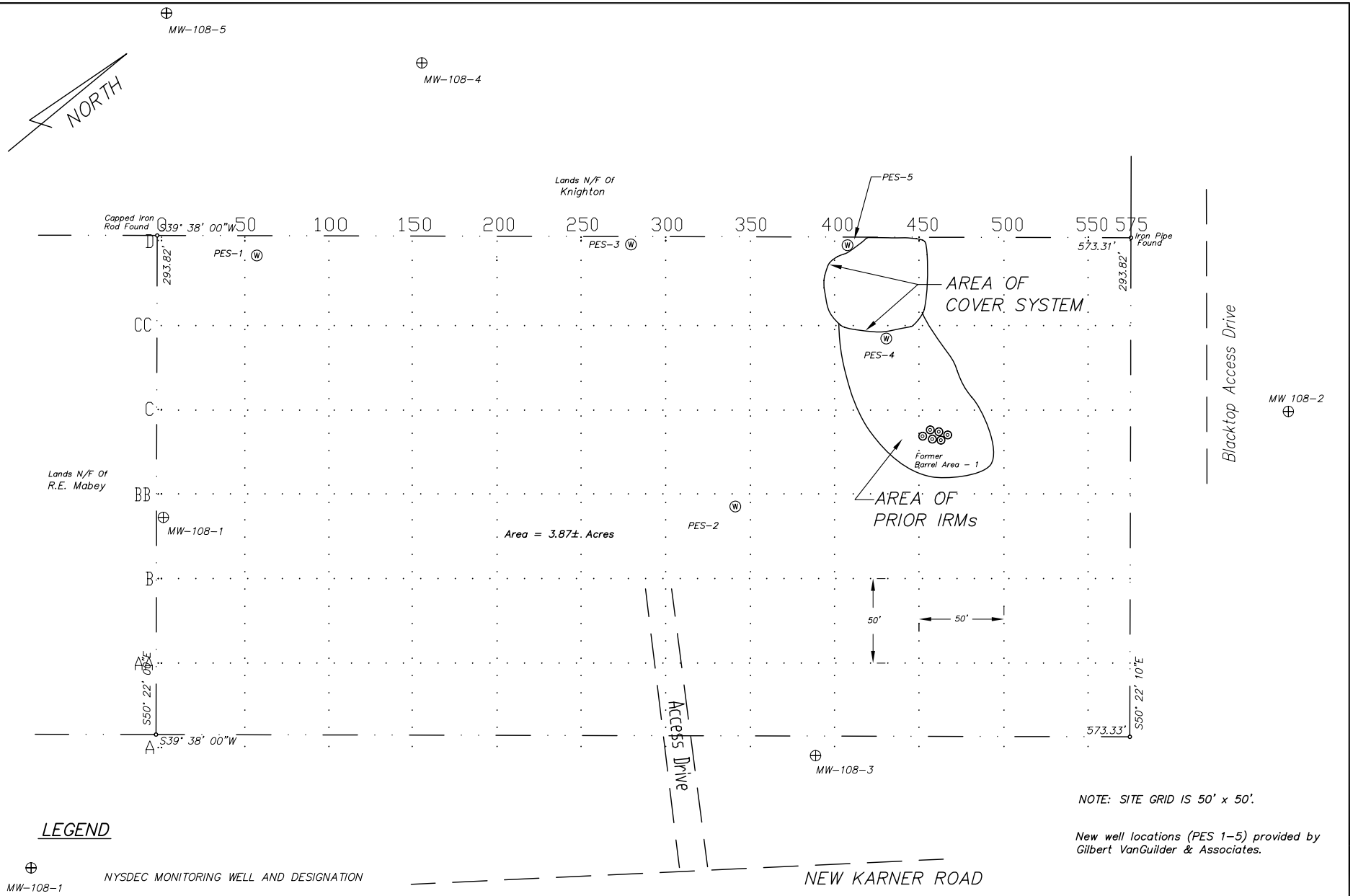
Notification contacts are as follows:

NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7011

List of Figures



Hennessy Engineering & Consulting 16 Grove Street Voorheesville, NY 12186	Town of Colonie — Albany County **FIGURE 1 LOCATION MAP** **Lucarelli Property** Source: DeLorme Quad Maps



HENNESSY
Engineering & Consulting
16 Grove Street
Voorheesville, NY 12186
Tel. 518-765-4530

LUCARELLI PROPERTY
SITE INVESTIGATION

TOWN OF COLONIE * COUNTY OF ALBANY * STATE OF NEW YORK

SITE MANAGEMENT PLAN

SHEET NUMBER

FIG.2

APPROX. SCALE:
1"=80'

Exhibit 1

NYSDEC letter approving this Soils Management Plan

New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, Albany, New York 12233-7016
Phone: (518) 402-9768 • FAX: (518) 402-9020
Website: www.dec.state.ny.us

Denise M. Sheehan
Commissioner

March 13, 2006

William Hennessy
Hennessy Engineering & Consulting
PO BOx 118
Voorheesville, NY 12186

Dear Mr. Hennessy,

I have received and reviewed the revised Site Management Plan (SMP) for the Lucarelli portion of the Albany Karner Road Site No. 401026. The New Your State Department of Environmental Conservation (NYSDEC) has determined that the SMP is acceptable. Please submit your first annual report to me by January 15, 2007, and provide Joseph Lucarelli a copy of this letter.

If you have any questions please call me at (518) 402-9768.

Sincerely,

Kevin Sarnowicz

Kevin Sarnowicz
Environmental Engineer

cc: Joseph Lucarelli

Exhibit 2

NYSDEC TAGM 4031 B Fugitive dust suppression and particulate monitoring program at inactive hazardous waste sites.

Exhibit 3

New York State Department of Health
Generic Community Air Monitoring Plan

Exhibit 4

Sampling and Decontamination Procedures

General Sampling Procedures

A backhoe can be used to remove sections of soil when detailed examination of soil characteristics is required. The following procedures are used for collecting soil samples from test pits or trenches:

1. Prior to any excavation with a backhoe, it is important to ensure that all sampling locations are clear of overhead and buried utilities. Review the site specific Health & Safety plan and ensure that all safety precautions including appropriate monitoring equipment are installed as required.

2. Using the backhoe, excavate a trench approximately three feet wide and approximately one foot deep below the cleared sampling location. Place excavated soils on plastic sheets. Trenches greater than five feet deep must be sloped or protected by a shoring system, as required by OSHA regulations.

3. A shovel is used to remove a one to two inch layer of soil from the vertical face of the pit where sampling is to be done. Samples are taken using the equivalent of a trowel, scoop, or coring device at the desired intervals. Be sure to scrape the vertical face at the point of sampling to remove any soil that may have fallen from above, and to expose fresh soil for sampling. In many instances samples can be collected directly from the backhoe bucket.

4. Grab samples will be placed in an appropriate, labeled sample container and cap secured tightly. Composite soil samples will be composited by placing equal portions of fill/soil from each composite sample location into a pre-cleaned, stainless steel (or Pyrex glass) mixing bowl. The soil/fill will be thoroughly homogenized using a stainless steel scoop or trowel and transferred to pre-cleaned jars provided by the laboratory. When complete, the sample will be placed into appropriate containers and caps secured tightly.

5. Soil samples will be collected and screened for volatile organic compounds using headspace methods and a calibrated Photo-Ionization Detector (PID). The PID will be calibrated before it is brought to the site with a standard gas to provide a hydrocarbon response factor. Grab samples will be collected at a number of depths and locations during the borings. Collected soil samples will be placed in clean plastic bags, sealed and allowed to equilibrate for a minimum of five (5) minutes. The tip of the PID will then be inserted through the side of the plastic bag to allow sampling of the head space (above the soil).

General Sampling Equipment Decontamination Procedures

Removing or neutralizing contaminants from equipment minimizes the likelihood of sample cross contamination, reduces or eliminates transfer of contaminants to clean areas, and prevents the mixing of incompatible substances.

Dedicated disposable sampling equipment will be utilized for this site. This will eliminate the need to introduce extensive decon procedures involving various chemical rinses.

Composite soil sample equipment will be decontaminated utilizing abrasive or non-abrasive cleaning methods as necessary. Rinsing with an appropriate solution, such as Alconox, will be employed to decontaminate stainless steel or pyrex glass mixing bowls and stainless steel scoops or trowels.