Department of Environmental Conservation

Division of Environmental Remediation

Record of Decision

Albany Karner Road Site

Town of Colonie, Albany County, New York

Site Number 4-01-026

March 2004

New York State Department of Environmental Conservation
GEORGE E. PATAKI, *Governor* ERIN M. CROTTY, *Commissioner*

DECLARATION STATEMENT - RECORD OF DECISION

Albany Karner Road Inactive Hazardous Waste Disposal Site
Town of Colonie, AlbanyCounty, New York
Site No. 4-01-026

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for the Albany Karner Road site, a Class 2 inactive hazardous waste disposal site. The selected remedial program was chosen in accordance with the New York State Environmental Conservation Law and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the Albany Karner Road inactive hazardous waste disposal site, and the public's input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

Actual or threatened release of hazardous waste constituents from this site have been addressed by implementing the interim remedial measures identified in this ROD. The removal of contaminated soil and 55-gallon drums of hazardous waste from the site has significantly reduced the threat to public health and the environment. This site does not present a current or potential threat to public health or the environment.

Description of Selected Remedy

Based on the results of the investigations and the IRMs that have been performed for the Albany Karner Road site, the NYSDEC has selected No Further Action as the remedy for the site.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy selected for this site is protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

MAR 15 2004

Date

Dale A. Desnoyers, Director
Division of Environmental Remediation

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RECORD OF DECISION

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Town of Colonie, Albany County, New York
Site No.4-01-026
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SECTION 1: SUMMARY OF THE RECORD OF DECISION

The New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the Albany Karner Road site comprised of two adjacent properties, owned by different individuals (Knighton and Lucarelli). As more fully described in Sections 3 and 5 of this document, 55-gallon drums of hazardous waste buried with construction, demolition, and other types of metal debris resulted in the disposal of a number of hazardous wastes, including PCBs, toluene, ethylbenzene, xylenes, and phenol, at the site. These wastes contaminated the surface and subsurface soil at the site, and resulted in:

- a significant threat to human health associated with exposure to PCB-contaminated surface and subsurface soil.

- a significant environmental threat associated with the impacts of contaminants leaking from buried drums to surrounding soil and groundwater.

During the course of the remedial investigations certain actions, known as interim remedial measures (IRMs), were undertaken at the Albany Karner Road site in response to the threats identified above. An IRM is conducted at a site when a source of contamination or an exposure pathway can be effectively addressed before completion of the Remedial Investigation/ Feasibility Study (RI/FS). The IRMs undertaken at this site included the removal of the buried drums of hazardous waste and the associated contaminated soil.

Based on the success of the above IRMs, the findings of the investigation of this site indicate that the site no longer poses a significant threat to human health or the environment, therefore "No Further Action" was selected as the remedy for this site. However, due to the presence of residual contamination in the subsurface soil and groundwater, environmental easements will be implemented for the Lucarelli property. Environmental easements for the Lucarelli property will require: a soil management plan; groundwater use restrictions; and non-residential use of the property. Annual certification that these restrictions remain in place and effective would be required and provided by the property owner.

The selected remedy, discussed in detail in Section 6, is intended to attain the remediation goals identified for this site in Section 6. The remedy must conform with officially promulgated standards

and criteria that are directly applicable, or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, criteria and guidance are hereafter called SCGs.

SECTION 2: SITE LOCATION AND DESCRIPTION

The Albany Karner Road Site is located on Route 155 (New Karner Road), in the Town of Colonie, Albany County, New York *(Figure 1)*. The site is located in a moderately populated commercial/ residential area, is generally topographically flat and overgrown with vegetation. The site is bounded by a regulated wetland area to the northwest which has been partially filled in with construction and demolition debris, a wooded area and sewage pump station to the east, Route 155 to the south, and a self storage building complex to the west.

The site is approximately 6.1 acres in size and consists of two adjacent parcels of property owned by different individuals. The first parcel, owned by Mr. Joseph Lucarelli, is 3.9 acres in area and borders the northwest side of New Karner Road. The second parcel, owned by Mr. John Knighton, is 2.2 acres in area and borders the northwest side of the Lucarelli property *(Figure 2)*.

The two parcels that comprise the Albany Karner Road Site were investigated simultaneously under different programs. The Lucarelli property investigation was conducted by Mr. Joseph Lucarelli under the NYSDEC Voluntary Cleanup Program (VCP) and was assigned the VCP site identifier V-00267-4. The northeast portion of the Knighton parcel was the subject of RI work conducted under the State Superfund Program.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

The Albany Karner Road Site was reportedly used in the 1960s and early 1970s by the previous site owners, Cross Country House Movers (Leonard Spector and Charles DelRegno), as an equipment storage and fill/dump area. Substantial rubble and debris consisting of timbers, abandoned and rusting trucks and cars, steel beams, drums, tanks, and other metallic objects lie at or near the ground surface. Ten to fifteen 55-gallon drums of hazardous waste were found exposed at the ground surface at several locations.

3.2: Remedial History

A Phase I Investigation, consisting of a file review, was completed in July, 1983. In July, 1984 the NYSDEC inspected the site and found ten to fifteen drums exposed at the ground surface on the Lucarelli property. These drums were leaking waste and were in deteriorating condition. Two samples were taken from these drums. One sample was a black oily substance containing 3-cyclohexylphenol, and the other was a white powder containing an acetaldehyde polymer.

A Phase II investigation was completed in 1985 for the Lucarelli property by the property owner. This investigation consisted of soil and groundwater sampling, and a geophysical survey of the site including an electromagnetic/resistivity survey. Four groundwater monitoring wells were installed in 1987. Groundwater and soil samples were taken by the NYSDEC. Analytical groundwater results identified several heavy metal constituents, however, the results were not considered to be significant when compared to the typical background concentrations. Air monitoring conducted during the well installation did not indicate any readings above typical background concentrations. Surface water samples collected from the wetland area, near the vicinity where the drums were exposed, indicated low levels of lead and zinc.

In October, 1989, thirty-two 55-gallon drums of hazardous waste containing toluene, benzene, ethylbenzene, acetone, 1,1,1-trichloroethane, xylenes, and solid hazardous waste (phenol) were properly excavated from the Lucarelli property and disposed off-site by the property owner. This drum burial area was one of the areas identified by the electromagnetic/resistivity survey. Upon confirmation of finding hazardous waste buried on site, NYSDEC classified the entire site (Lucarelli and Knighton properties) as a Class "2" Site, listed on the New York State Registry of Inactive Hazardous Waste Sites, in April, 1990. A Class 2 site is a site where hazardous waste presents a significant threat to the public health or the environment and action is required.

In June 1991, an IRM was performed by NYSDEC to remove drums buried on the Knighton property which were also identified by the electromagnetic/resistivity survey. A total of 163 drums were removed and properly disposed off-site. This included 80 drums of chemicals, 80 drums of contaminated soil, and three drums of protective clothing and sampling materials. NYSDEC IRM actions halted when all drums were removed from the embankment.

Groundwater samples collected in November, 1995, by the NYSDEC, from monitoring wells MW-1 to MW-4 did not detect significant groundwater contamination from drum disposal activities. However, these monitoring wells were installed before the drum burial areas were determined and the ground water flow direction was known. (Upon further data analysis, it was apparent that these wells were not located in areas where the drum removal took place or in the path of downgradient groundwater flow.) During this round of sampling two drums, full of material were sampled and removed to a regulated disposal facility in November, 1995 by the NYSDEC. The waste in these drums consisted mostly of benzene, toluene, xylenes, cyanide, and heavy metals.

SECTION 4: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

State Funded RI/FS (Knighton Property)

The PRPs for the site documented to date include: John Knighton, solely by virtue of his ownership of part of the site, and Cross Country House Movers (Leonard Spector and Charles DelRegno), the now-defunct company which once controlled the operation that allowed the disposal of hazardous waste at the site.

John Knighton declined to implement the RI/FS at the site when requested by the NYSDEC. Following the issuance of a Record of Decision, the NYSDEC will evaluate referral of the matter to the New York State Attorney General for recovery of all response costs the State has incurred.

Voluntary Cleanup (Lucarelli Property)

Joseph Lucarelli owns the remainder of the site. The NYSDEC and Mr. Luceralli entered into a Voluntary Cleanup Agreement on August 24, 2000. Pursuant to the Agreement, Mr. Lucarelli undertook an investigation and implemented a full remedial program at the part of the site he owns.

SECTION 5: SITE CONTAMINATION

To further evaluate the contamination present at both parcels of the site and to evaluate alternatives to address the significant threat to human health and the environment posed by the presence of hazardous waste, the NYSDEC has recently conducted a Remedial Investigation (RI) for the Knighton property and Joseph Lucarelli has recently conducted a Voluntary Site Investigation (SI).

5.1: Summary of the Remedial Investigation

The purpose of the RI and SI was to define the nature and extent of any contamination resulting from previous activities at the site.

The RI for the Knighton property was conducted in two phases. The first phase was conducted between August 2000 and September 2000. The second phase was conducted during September 2002. Two reports titled "Remedial Investigation Report, Albany Karner Road Site" and "Remedial Investigation/Feasibility Study Interim Remedial Measures Report" have been prepared which describe the field activities and findings of the RI and Supplemental RI in detail.

The SI for the Lucarelli property was conducted in two phases. The first phase was conducted during September 2000. A report titled "Site Investigation Report, Albany Karner Road Site" has been prepared which describes the field activities and findings of the SI in detail. The second phase was conducted during December 2001. A report titled "Final Engineering Report, Site Investigation & Remediation" has been prepared which describes the supplemental investigation activities and remedial work performed.

The field activities and findings of both investigations are described in the RI and SI reports.

The RI for the Knighton property included the following activities:

- Excavation of test pits to uncover potentially buried 55-gallon drums and contaminated soil.
- Installation of monitoring well MW-5, hydraulically downgradient of the IRM drum and soil removal area, and groundwater samples collected from monitoring wells MW-1 through MW-5 for analysis.
- Collection and analysis of surface water and sediment samples from the wetland.

- Collection and analysis of surface and subsurface soil samples.

The SI for the Lucarelli property included the following activities:

- Excavation of test pits and trenches to uncover potentially buried 55-gallon drums and contaminated soil.
- Installation of five monitoring wells (PES-1 to PES-5) for analysis of groundwater hydraulically downgradient of the IRM drum and soil removal areas.
- Collection and analysis of surface and subsurface soil samples.
- Excavation of thirty-five 55-gallon drums discovered during the SI.

To determine whether the soil, groundwater, surface water, and sediment contained contamination at levels of concern, data from the investigation were compared to the following Standards Criteria and Guidance (SCG)s:

- Groundwater, drinking water, and surface water SCGs are based on NYSDEC "Ambient Water Quality Standards and Guidance Values" and Part 5 of the New York State Sanitary Code.
- Soil SCGs are based on the NYSDEC "Technical and Administrative Guidance Memorandum (TAGM) 4046; Determination of Soil Cleanup Objectives and Cleanup Levels".
- Sediment SCGs are based on the NYSDEC "Technical Guidance for Screening Contaminated Sediments."

Based on the data from the RI and SI, in comparison to the SCGs and potential public health and environmental exposure routes, certain media and areas of the site required remediation which was addressed during the IRMs *(see Section 5.2)*. These media are summarized below. More complete information can be found in the RI and SI reports.

5.1.1: Site Geology and Hydrogeology

Geology

The Albany Karner Road site is underlain by approximately 1 to 10 feet of fill material. The fill consists of sandy soils, concrete, metal, and wood debris. All buried drums found on-site were located 7 to 9 feet below ground surface in the fill material.

Beneath the fill material, over 20 feet of fine silt and sand make up the natural subsurface soils. The soils are light brown in color, flat lying and show no distinctive bedding or structure.

Hydrogeology

Groundwater flow direction at the site was determined by measuring water levels in each of the four existing monitoring wells and the one new monitoring well that was installed during the RI. Each of the monitoring wells is completed in the native sand and silt material, and the well screen straddles the water table. The water table on-site is located approximately three to fifteen feet below grade. Based upon observations of test pits and water level measurements in the monitoring wells, the water table is beneath the fill material and the fill material is unsaturated. The groundwater flow direction is to the west-northwest.

5.1.2: Nature of Contamination

As described in the RI report, many soil, groundwater and sediment samples were collected at the site to characterize the nature and extent of contamination. As summarized in Table 1, the main categories of contaminants which exceeded their SCGs are inorganics (metals), volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, and polychlorinated biphenyls (PCBs).

Inorganics

The inorganic contaminants of potential concern that were found in the groundwater, surface water, surface soil, subsurface soil, and sediment included: iron; zinc; thallium; sodium; maganese; mercury; lead; selenium; copper; aluminum; vandium; beryllium; and nickel. These metals are naturally occuring in nature and are all within Eastern U.S. background concentrations for soils and slightly exceed NYSDEC standards for groundwater and surface water. The concentrations of the cadmium, copper, lead, mercury and zinc exceeded the criteria for sediment. Zinc exceeded the Severe Effect Level Sediment Criteria in one sample. However, this occurrence was isolated and not likely related to the buried 55-gallon drums of hazardous waste. The remaining metals exceeded the low effect level for sediment in samples immediately adjacent to the site. Due to the limited areal extent, these metals do not represent a threat to human health or the environment and are not considered to be contaminants of concern at this site.

Volatile Organic Compounds (VOCs)

There were only two VOCs identified above the SCGs in the groundwater samples collected during the site investigation conducted by Joseph Lucarelli during September 2000. Benzene was detected in monitoring well PES-2 at a concentration of 4 parts per billion (ppb) that exceeded the groundwater standard of 1 ppb. Monitoring wells MW-3 and PES-5 had phenol detected at concentrations of 4 ppb and 5 ppb, respectfully (*Figure 4*). However, these concentrations were below the laboratory detection limit and were reported as estimated values. These VOC concentrations were at low levels, located in a limited area and did not appear to represent a significant threat to human health or the environment.

In September 2003, groundwater was sampled for phenol from well PES-5 where it was previously detected during the September 2000 sampling event. This well is located in the area where drums of hazardous waste and contaminated soil were excavated during the IRMs that took place in December 2001 and December 2002 that are discussed in more detail in Section 5.2 of this document. It has been concluded from re-sampling this well that phenol was not detectable in

groundwater and the removal of the hazardous waste has eliminated the source of contamination for the groundwater.

Pesticides

The pesticide aldrin was detected in one groundwater sample at a very low concentration and in four subsurface soil samples above SCGs. This chemical was an isolated occurrence in groundwater and is not considered to be a threat to human health or the environment. The aldrin that was detected in the subsurface soil samples is localized at the former drum removal area and SB-5 *(Figure 3)*. This chemical is located in the fill material and is not considered a source of groundwater contamination. Aldrin does not pose a threat to human health or the environment at this site and is not considered a contaminant of concern at this site. Furthermore, groundwater was resampled in September 2003 from monitoring well PES-5 and analayzed for aldrin. This monitoring well is located where drums of hazardous waste and contaminated soil were excavated. It has been concluded from resampling this well that aldrin was non-detect in groundwater and the removal of the hazardous waste has eliminated the source of contamination for the groundwater.

SVOCs

The SVOCs phenol, 2-methylphenol, benzo(a)pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene were detected throughout the surface and subsurface soils at the site. 2-methylphenol was detected at one location slightly exceeding SCGs. Phenol was detected throughout the fill at the site and in one groundwater sample at a low concentration. The other SVOCs detected in the soils are polycyclic aromatic hydrocarbons (PAHs) that are common combustion byproducts typically detected at similar levels in suburban environments. They do not represent a threat to human health or the environment at this site and are not considered to be contaminants of concern at this site.

4-methylphenol and bis(2-ethylhexyl)phthalate were detected in surface water samples collected in the wetland. These chemicals were detected in low concentrations in isolated areas and do not present a threat to human health or the environment, and therefore are not considered to be contaminants of concern at this site.

PCBs

There were PCBs detected in the surface and sub-surface soil at the Knighton parcel of the site. PCBs were detected in the subsurface soil at the Lucarelli parcel of the site. PCBs are the contaminant of concern at this site and are the subject of this PRAP.

5.1.3: **Extent of Contamination**

This section describes the findings of the investigation for all environmental media effected by the contaminant of concern.

Chemical concentrations are reported in parts per billion (ppb) for water and parts per million (ppm) for soil and sediment. For comparison purposes, where applicable, SCGs are provided for each medium.

Table 1 summarizes the degree of contamination for all of the contaminants that exceed SCGs including the contaminant of concern (PCBs) and compares the data with the SCGs for the site. The following are the media which were effected by the contaminant of concern.

Surface Soil

PCBs were detected in surface soil from two separate locations within the Knighton property. One location was the former drum removal area where drums were excavated in 1991 and three remaining drums were removed during the September 2000 site investigation *(Figure 3)*. Surface soil samples SS-10, SS-11, and SS-12 taken from this area ranged from 1.5 to 17 ppm PCBs.

PCBs were also detected in another location where drums were not encountered. A surface soil sample collected from the area indicated by SS-3 show PCBs at 1.4 ppm. Upon re-sampling this area to determine the extent of the PCB contamination, surface soil samples SS-3A and SS-3B were collected and showed that PCBs were below 1 ppm in this area suggesting that the previous sample was an anomaly and that the area does not contain significant PCB contamination. It was determined that this area did not require remedial action.

Subsurface Soil

Subsurface soil sampling at the Knighton parcel detected PCB contamination at SB-5 at 46 ppm. This area was re-sampled to determine the extent of the contamination. Samples TP-9A and TP-9C were below soil guidance values suggesting that there is not widespread contamination in this area *(Figure 3)*. It was determined that this area did not require remedial action.

Subsurface soil in the area where 55-gallon drums of hazardous waste were found at the Lucarelli parcel was contaminated with PCBs *(Figure 4)*. PCB samples collected from the area where the drums were removed showed PCB contamination in the subsurface soil ranging from 1.6 to 150 ppm.

5.2: Interim Remedial Measures

An Interim Remedial Measure (IRM) is conducted at a site when a source of contamination or an exposure pathway can be effectively addressed before completion of the RI/FS.

The IRM for the Knighton property was conducted during December 2002 *(Figure 3)*. The IRM included:

- Excavation and disposal of approximately 90 cubic yards of PCB-contaminated surface soil to the NYSDEC recommended cleanup level of 1 ppm. The soil was excavated to native soils approximately 8 feet below the ground surface. No residual PCBs above 1ppm remain in the soil at the Knighton parcel of the site.

- Excavation and disposal of five additional drums buried on site.

The IRM for the Lucarelli property was conducted during December 2001 *(Figure 4)*. The IRM included:

- Excavation and disposal of approximately 223 tons of PCB-contaminated subsurface soil to the NYSDEC recommended cleanup level of 10 ppm. The PCB-contaminated soil extended to the native soil approximately 15 feet deep. PCB contaminated soil with concentrations less then 10 ppm remain in the soil from 2 to 15 feet deep. Two feet of clean fill was placed over the area where the drums were excavated from and the low level PCB-contaminated soil remains.

- Disposal of 35 drums of hazardous waste excavated during the SI.

5.3: Summary of Human Exposure Pathways:

This section describes the types of human exposures that may present added health risks to persons at or around the site. A more detailed discussion of the human pathways exposure can be found in Section 6.0 and on Table 6-1 of the RI report prepared for the investigation of the Knighton Property. This exposure assessment is representative of the exposures and health risks associated with both parcels of the site.

An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five elements: [1] a contaminant source, [2] contaminant release and transport mechanisms, [3] a point of exposure, [4] a route of exposure, and [5] a receptor population.

The source of contamination is the location where contaminants were released to the environment (any waste disposal area or point of discharge). Contaminant release and transport mechanisms carry contaminants from the source to a point where people may be exposed. The exposure point is a location where actual or potential human contact with a contaminated medium may occur. The route of exposure is the manner in which a contaminant actually enters or contacts the body (e.g., ingestion, inhalation, or direct contact). The receptor population is the people who are, or may be, exposed to contaminants at a point of exposure.

An exposure pathway is complete when all five elements of an exposure pathway exist. An exposure pathway is considered a potential pathway when one or more of the elements currently does not exist, but could in the future.

Pathways which are known to or may exist at the site include:

- Direct contact, incidental ingestion and inhalation exposures to site contaminants in subsurface soil by construction workers involved in current and future excavation activities.

- Currently, groundwater is not considered an exposure pathway of concern. The potential for future exposures to contaminants in groundwater is unlikely due to the completion of the IRMs and the availability of a public water supply in the area. However, potential exposures to contaminated groundwater could occur in the future if a drinking water well were installed on site.

5.4: Summary of Environmental Impacts

This section summarizes the existing and potential future environmental impacts presented by the site. Environmental impacts include existing and potential future exposure pathways to fish and wildlife receptors, as well as damage to natural resources such as aquifers and wetlands.

Ecological exposure pathways to metals and PCBs in the soils and the sediments at the site are complete. However, the extent of metals contamination is limited. Therefore, no significant ecological risks due to elevated metals were identified. Prior to the IRMs, exposure to PCBs in the soil presented significant ecological risk. Samples from the adjacent wetland receiving drainage from the site have not identified widespread contamination, therefore remediation in the wetland will not be necessary.

Site contamination has impacted the shallow groundwater near an area where thirty-five drums of hazardous waste were located and removed from the Lucarelli property. However, as discussed in Section 5.1.2, the contaminant concentrations are at low levels, located in a limited area and do not represent a significant threat to the environment.

SECTION 6: SUMMARY OF THE REMEDIATION GOALS AND PROPOSED REMEDY:

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375-1.10. The remedy must, at a minimum, eliminate or mitigate all significant threats to public health and/or the environment presented by the hazardous waste disposed at the site through the proper application of scientific and engineering principles.

Prior to the completion of the IRMs as described in Section 5.2, the remediation goals for this site were to eliminate or reduce to the extent practicable:

- exposures of persons at or around the site to PCB-contaminated surface and subsurface soils.
- environmental exposures of flora and fauna to PCB-contaminated soils.
- the release of contaminants from buried 55-gallon drums of hazardous waste into soil that could potentially impact groundwater and create exceedances of groundwater quality standards.

Further, the remediation goals for the site include attaining to the extent practicable:

- ambient groundwater quality standards.
- TAGM HWR-94-4046 soil cleanup guidance values for PCB-contaminated surface and subsurface soil to meet.

The NYSDEC believes that the IRMs have accomplished these remediation goals.

Based on the results of the investigations at the site, the IRMs that have been performed, and the evaluation discussed below, the NYSDEC has selected No Further Action as the remedy for the site.

The basis for this selection is the NYSDEC's conclusion that No Further Action will be protective of human health and the environment and will meet all SCGs. Overall protectiveness is achieved through meeting the remediation goals listed above. The IRMs have met the remedial goals for the soil by excavating and properly disposing off-site the 55-gallon drums of hazardous waste and PCB-contaminated soil.

The main SCGs applicable to this project are TAGM HWR-94-4046 and NYSDEC "Ambient Water Quality Standards and Guidance Values".

The "No Further Action" remedy meets these SCGs because all PCB-contaminated soil that exceeded SCGs have been removed to an approved disposal facility, and IRMs have been performed that removed the source of the groundwater contamination (the 55-gallon drums of hazardous waste).

Therefore, the NYSDEC concludes that the elements of the IRMs already completed have achieved the remediation goals for the site and that "No Further Action" is needed other than the institutional controls listed below.

- Imposition of an institutional control for the Lucarelli property in such form as the NYSDEC may approve that would prevent the use of groundwater as a source of potable or process water without necessary water quality treatment as determined by the Albany County Department of Health.

- Imposition of an institutional control for the Lucarelli property in the form of environmental easements, to be sent to the county clerk for filing, to notify future owners of the elevated residual PCB contamination remaining in subsurface soil and residual benzene and phenol which may remain in groundwater on the site.

- Imposition of an institutional control for the Lucarelli property in the form of environmental easments which will require a Soil Management Plan to provide for the proper sampling, handling, and treatment and/or disposal (if required) if subsurface soils containing elevated levels of PCBs greater than 1 ppm are disturbed following the completion of the remedial action. The plan would delineate measures that may be necessary for the protection of on-site workers, the public, and the environment in the event of future subsurface soil disturbance.

- Imposition of an institutional control in the form of an environmental easment on the Lucarelli property to restrict the future use of the property to non-residential activities, in accordance with the Voluntary Agreement for the parcel.

- Imposition of a required annual certification by the property owner to the NYSDEC that the above measures remain in place and use of the property is in compliance with the restrictions.

SECTION 7: HIGHLIGHTS OF COMMUNITY PARTICIPATION

As part of the remedial investigation process, a number of Citizen Participation activities were undertaken to inform and educate the public about conditions at the site and the potential remedial alternatives. The following public participation activities were conducted for the site:

- Repositories for documents pertaining to the site were established.
- A public contact list, which included nearby property owners, elected officials, local media and other interested parties, was established.
- Factsheets were mailed to inform the residents on the public contact list when documents were available for review at the reositories.
- A notification was printed in the Environmental Notice Bulletin (ENB) for the proposed remedy for the Voluntary portion of the site.
- A public meeting was held on February 11, 2004 to present and receive comment on the PRAP.
- A responsiveness summary (Appendix A) was prepared to address the comments received during the public comment period for the PRAP.

No significant public comments were received.

TABLE 1
Nature and Extent of Contamination
Range of sampling dates, August 2000-September 2003

SURFACE SOIL	Potential Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b] (ppm)[a]	Frequency of Exceeding SCG
Semivolatile Organic Compounds (SVOCs)	phenol	0.070 to 0.120	0.030	6 of 19
	benzo(a)pyrene	0.190 to 0.860	0.061	8 of 19
	benzo(a)anthracene	0.300 to 0.580	0.224	5 of 19
	dibenzo(a,h)anthracene	0.096 to 1.300	0.014	1 of 19
	chrysene	0.400 to 0.620	0.400	3 of 19
	benzo(b)fluoranthene	0.330	0.330	1 of 19
Total PCB/Pesticides	PCBs*	ND[d] to 17	1	4 of 19
Total PCB post-IRM confirmation samples	PCBs*	ND[d] to 0.81	1	0 of 6
Inorganic Compounds	iron	5,030 to 18,300	2,000	12 of 12
	zinc	37 to 479	20	12 of 12
	mercury	ND[d] to 2.4	0.1	7 of 12
	selenium	ND[d] to 3.9	2	5 of 12
	copper	6.8 to 59.4	25	4 of 12
	beryllium	ND[d] to 0.42	0.16	3 of 12
	nickel	5.1 to 17.9	13	1 of 12

SUBSURFACE SOIL	Potential Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b] (ppm)[a]	Frequency of Exceeding SCG
Semivolatile Organic Compounds (SVOCs)	phenol	ND[d] to 8.100	0.030	8 of 25
	benzo(a)anthracene	ND[d] to 0.810	0.224	14 of 25
	chrysene	ND[d] to 0.800	0.4	15 of 25
	2-methylphenol	0.170	0.1	1 of 25
	benzo(a)pyrene	0.00068 to 0.810	0.061	8 of 25
	dibenzo(a,h)anthracene	ND[d] to 0.390	0.014	9 of 25
Total PCB/Pesticides	PCBs*	ND[d] to 150	10	5 of 25
	aldrin	0.00023 to 2.1	0.041	6 of 25
Total PCB post-IRM Confirmation samples	PCBs*	ND[d] to 5.22	10	0 of 8
Inorganic Compounds	iron	4,300 to 14,200	2,000	19 of 19
	beryllium	0.19 to 4.1	0.16	18 of 19
	zinc	45.4 to 305	20	18 of 19
	copper	39.9 to 87.3	25	15 of 19
	mercury	0.21 to 0.32	0.1	14 of 19
	nickel	23.7 to 49,900	13	12 of 19

SEDIMENTS	Potential Contaminants of Concern	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)[a]	Frequency of Exceeding SCG
Inorganic Compounds	cadmium	0.38 to 1.7	LEL[c] - 0.6	3 of 5
			SEL[c] - 9	0 of 5
	copper	5.7 to 21.7	LEL - 16	1 of 5
			SEL - 110	0 of 5
	lead	21 to 87.5	LEL - 31	3 of 5
			SEL - 110	0 of 5
	mercury	0.087 to 0.25	LEL - 0.15	1 of 5
			SEL - 1.3	0 of 5
	zinc	30.7 to 281	LEL - 120	0 of 5
			SEL - 270	1 of 5

GROUNDWATER	Potential Contaminants of Concern	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)[a]	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	benzene	ND[d] to 4	1	2 of 10
	phenol	ND[d] to 5	1	2 of 10
Confirmatory Sample September 2003	phenol	ND	1	0 of 1
Total PCB/Pesticides	aldrin	ND[d] to 0.015	ND	1 of 10
Confirmatory Sample September 2003	aldrin	ND	ND	0 of 1
Inorganic Compounds	iron	447 to 56,000	300	9 of 10
	manganese	570 to 5,080	300	9 of 10
	sodium	5,470 to 64,300	20,000	4 of 10
	thallium	ND[d] to 4.2	0.5	5 of 10

SURFACE WATER	Potential Contaminants of Concern	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)[a]	Frequency of Exceeding SCG
Semivolatile Organic Compounds (SVOCs)	4-methylphenol	ND[d] to 4	1	2 of 5
	bis (2-ethylhexyl)phthatate	ND[d] to 5	0.6	4 of 5
Inorganic Compounds	aluminum	71.9 to 9,630	100	4 of 5
	iron	797 to 11,800	300	5 of 5
	lead	ND[d] to 42.2	15.6	1 of 5
	mercury	ND[d] to 0.15	0.0007	1 of 5
	silver	ND[d] to 1.2	0.1	3 of 5
	vanadium	1.4 to 16.4	14	1 of 5

[a] ppb = parts per billion, which is equivalent to micrograms per liter, ug/L, in water;
ppm = parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

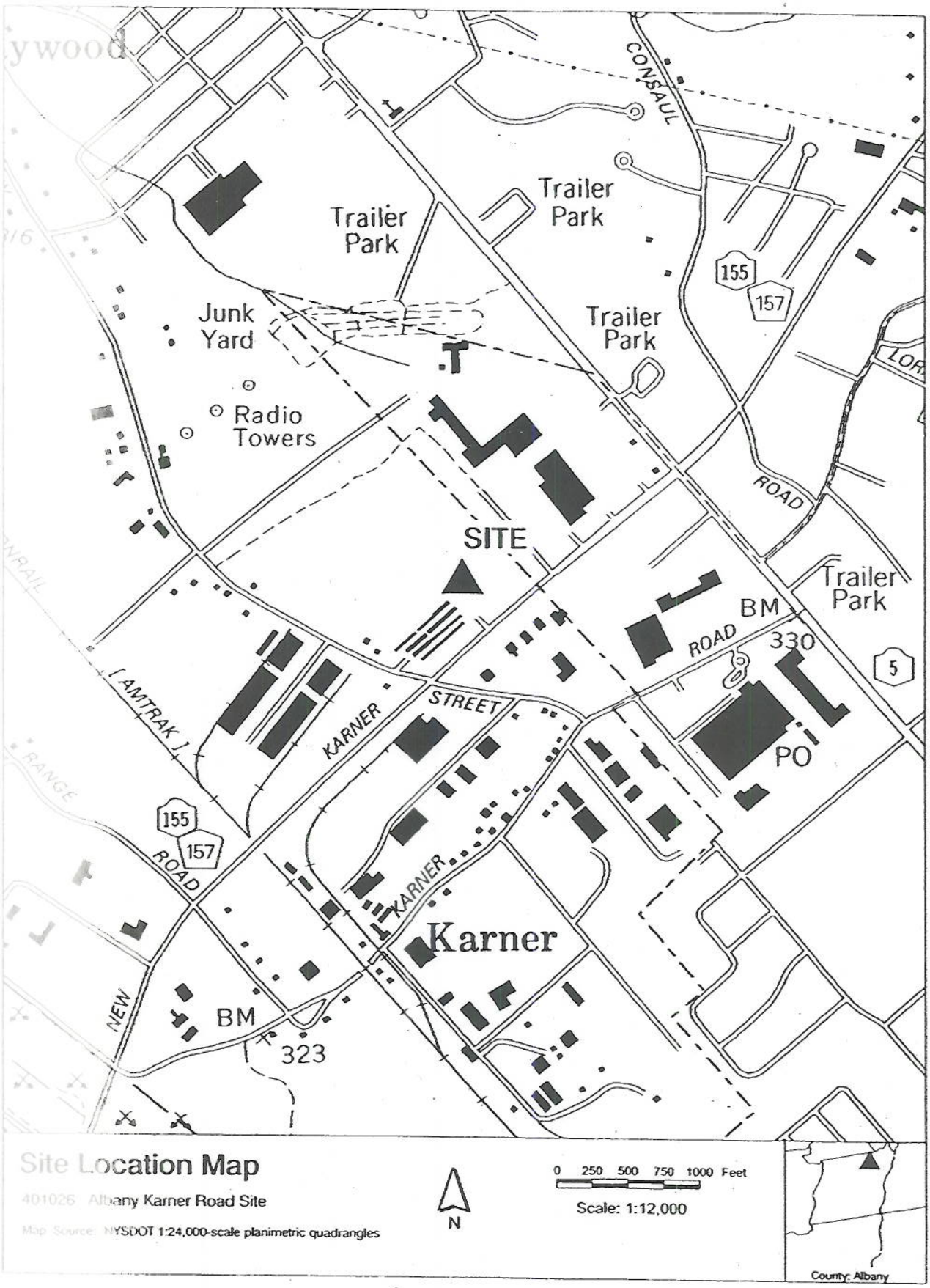
[b] SCG = standards, criteria, and guidance values;

[c] LEL = Lowest Effects Level and SEL = Severe Effects Level. A sediment is considered to be contaminated if either of these criteria is exceeded. If both criteria are exceeded, the sediment is severely impacted. If only the LEL is exceeded, the impact is considered to be moderate.

* Compound identified as an actual, rather than potential, Contaminant of Concern for this investigation

[d] ND = Non-detectable

Figure 1


CONSAUL
Trailer Park
Trailer Park
Trailer Park
Junk Yard
Radio Towers
155
157
ROAD
SITE
Trailer Park
BM
330
ROAD
5
AMTRAK
KARNER
STREET
PO
155
157
ROAD
KARNER
Karner
NEW
BM
323
Site Location Map
401026 Albany Karner Road Site
Map Source: NYSDOT 1:24,000-scale planimetric quadrangles
N
0 250 500 750 1000 Feet
Scale: 1:12,000
County: Albany

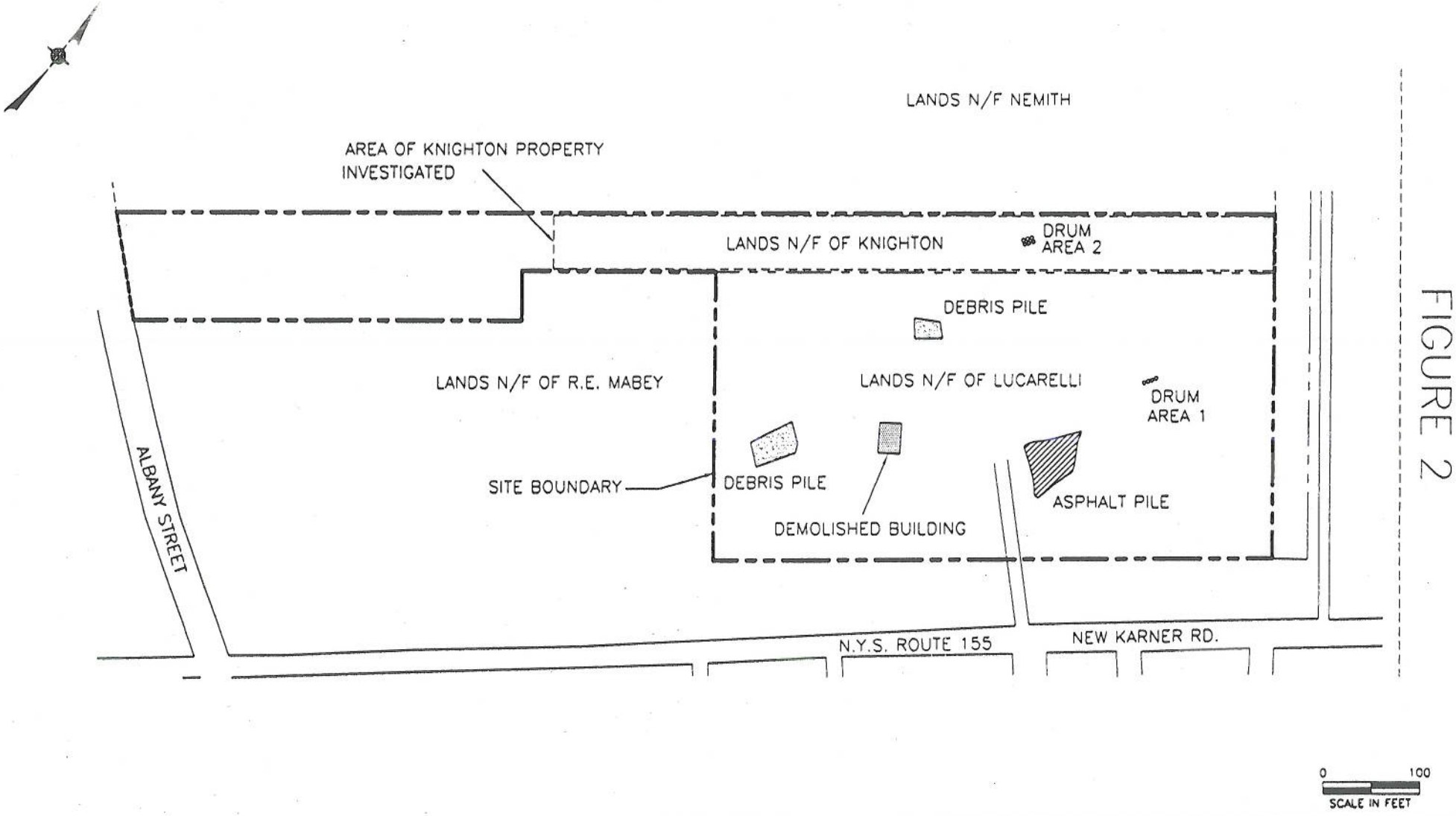


FIGURE 2

ALBANY KARNER ROAD SITE
COLONIE, NEW YORK

SITE MAP

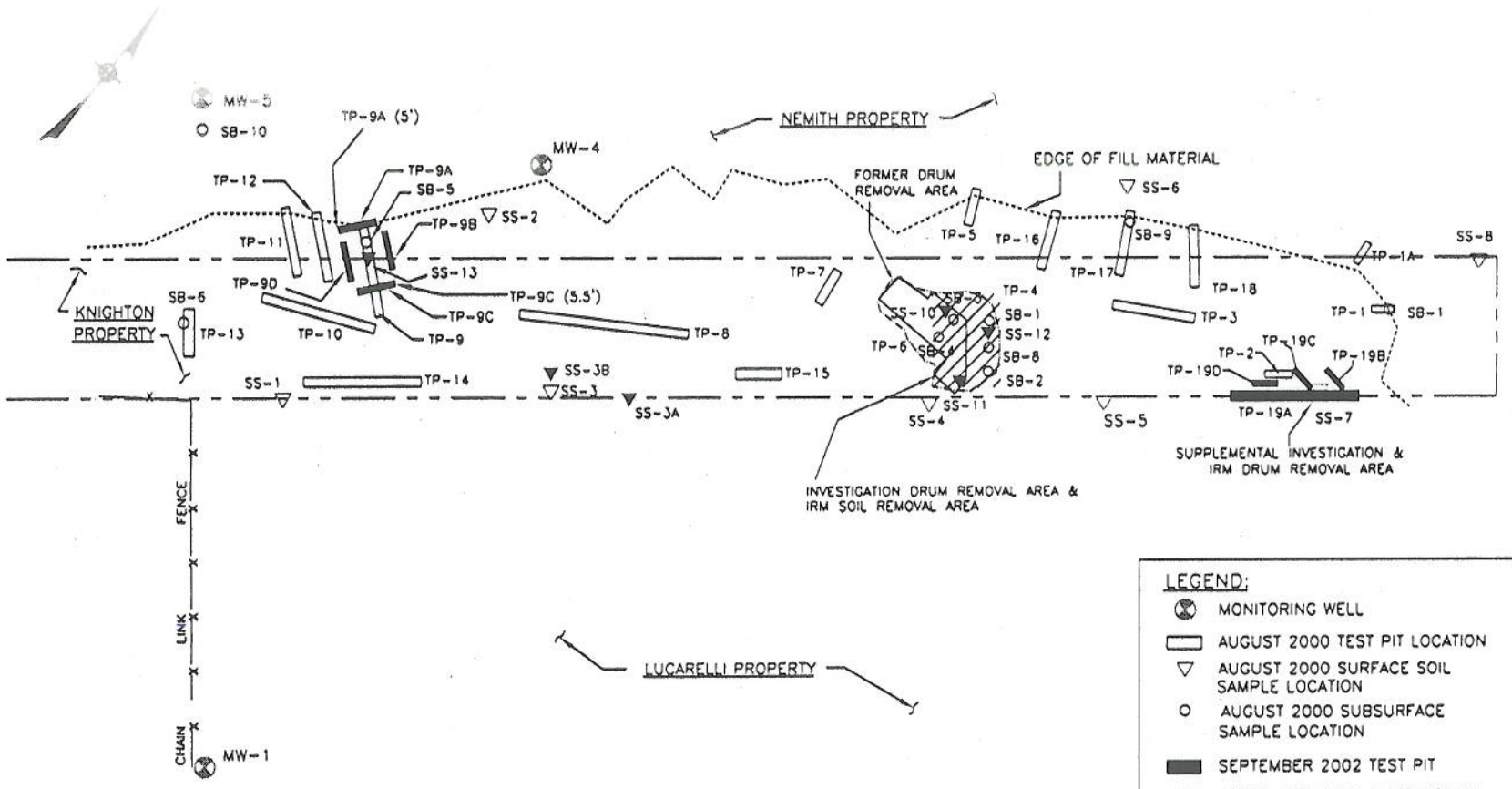


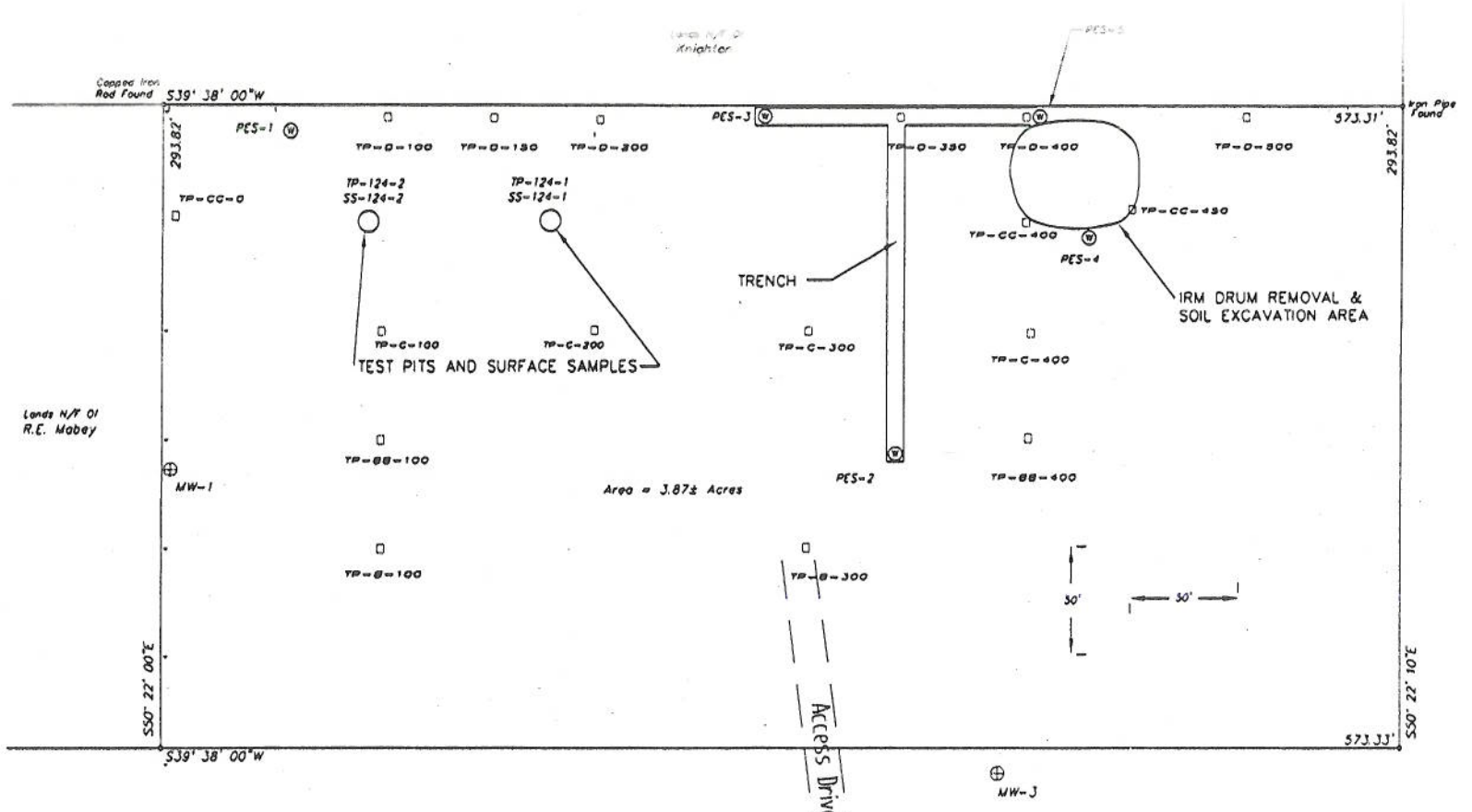
FIGURE 3

ALBANY KARNER ROAD SITE
ALBANY, NEW YORK

KNIGHTON PROPERTY SOIL AND DRUM REMOVAL AREA

0 60
SCALE IN FEET

FIGURE 4



LUCARELLI PROPERTY SOIL AND DRUM REMOVAL AREA

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

Albany Karner Road
Town of Colonie, Albany County, New York
Site No. 4-01-026

The Proposed Remedial Action Plan (PRAP) for the Albany Karner Road site, was prepared by the New York State Department of Environmental Conservation (NYSDEC) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on January 7, 2004. The PRAP outlined the remedial measure proposed for the contaminated PCB-contaminated soil at the Albany Karner Road site.

The release of the PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A public meeting was held on February 11, 2004, which included a presentation of the Remedial Investigation (RI) and Interim Remedial Measures (IRMs) as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on February 13, 2004.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the NYSDEC's responses:

COMMENT 1: Do the Institutional Controls and Environmental Easements apply to the whole site?

RESPONSE 1: All PCB-contaminated soils have been removed from the John Knighton's property and groundwater is not contaminated above New York State Groundwater Standards; there are no restrictions on the Knighton property. Institutional controls and environmental easements only apply to the parcel of the site owned by Joseph Lucarelli. Low level PCB contamination remains in the sub-surface soil and low-level VOC contamination remains in the groundwater on Joseph Lucarelli's parcel.

APPENDIX B

Administrative Record

Administrative Record

Albany Karner Road
Site No. 4-01-026

1. Proposed Remedial Action Plan for the Albany Karner Road site, dated December 2003, prepared by the NYSDEC.

2. "Budget Amendment NYSDEC Work Assignment D3600-18.2", November 2003, Prepared by Dvirka and Bartilucci Consulting Engineers.

3. "Interim Remedial Measures Report", July 2003, Prepared by Dvirka and Bartilucci Consulting Engineers.

4. "Final Engineering Report, Site Investigation & Remediation, Lucarelli Property, Karner Road", volume 1, October 2002, Prepared by Hennessy Engineering & Consulting.

5. "Final Engineering Report, Site Investigation & Remediation, Lucarelli Property, Karner Road", volume 2, July 2002, Prepared by Hennessy Engineering & Consulting.

6. "Remedial Investigation Report", May 2002, Prepared by Dvirka and Bartilucci Consulting Engineers.

7. "Lucarelli Property Laboratory Report", December 2001, prepared by Precision Environmental Services.

8. "Work Plan Amendment 1, Limited Subsurface Investigation, Lucarelli Property, Karner Road", June 2001, Prepared by Hennessy Engineering & Consulting.

9. "Lucarelli Property Data Usability Summary Report", March 2001, Prepared by Hennessy Engineering & Consulting.

10. "Lucarelli Property Data Usability Summary Report", January 2001, Prepared by Hennessy Engineering & Consulting.

11. Voluntary Cleanup Agreement, Index No. A4-0406-9912, between NYSDEC and Joseph Lucarelli, executed on August 24, 2000.

12. "Remedial Investigation/Feasibility Study Project Management Work Plan", June 2000, Prepared by Dvirka and Bartilucci Consulting Engineers.

13. "Remedial Investigation and Feasibility Study Work Plan", June 2000, Prepared by Dvirka and Bartilucci Consulting Engineers.

14. "Work Plan, Limited Subsurface Investigation, Lucarelli Property, Karner Road", March 2000, Prepared by Hennessy Engineering & Consulting
15. Referral Memorandum dated July 13, 1999 for the Knighton parcel of the Albany Karner Road Site.

16. "Albany Street - Karner Road Site Inspection Prioritization Evaluation", June 1994, Prepared by the U.S Environmental Protection Agency.

17. Fact Sheets/Notices

18. Fieldnotes