COPY

DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

RCRA Corrective Action
Environmental Indicator (EI) RCRAInfo code (CA750)
Migration of Contaminated Groundwater Under Control

Facility Name: General Electric (GE) Plastics Division
Facility Address: Noryl Avenue, Selkirk, New York 12158
Facility EPA ID #: NYD066832023

1. Has **all** available relevant/significant information on known and reasonably suspected releases to the groundwater media, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been **considered** in this EI determination?

   __X__ If yes - check here and continue with #2 below.

   ____ If no - re-evaluate existing data, or

   ____ if data are not available, skip to #8 and enter "IN" (more information needed) status code.

BACKGROUND

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Migration of Contaminated Groundwater Under Control" EI

A positive "Migration of Contaminated Groundwater Under Control" EI determination ("YE" status code) indicates that the migration of "contaminated" groundwater has stabilized, and that monitoring will be conducted to confirm that contaminated groundwater remains within the original "area of contaminated groundwater" (for all groundwater "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Migration of Contaminated Groundwater Under Control" EI pertains ONLY to the physical migration (i.e., further spread) of contaminated ground water and contaminants within groundwater (e.g., non-aqueous phase liquids or NAPLs). Achieving this EI does not substitute for achieving other stabilization or final remedy requirements and expectations associated with sources of contamination and the need to restore, wherever practicable, contaminated groundwater to be suitable for its designated current and future uses.

Duration / Applicability of EI Determinations

EI Determinations status codes should remain in RCRAInfo national database ONLY as long as they remain true (i.e., RCRAInfo status codes must be changed when the regulatory authorities become aware of contrary information).

2. Is **groundwater** known or reasonably suspected to be **"contaminated"**[1] above appropriately protective "levels" (i.e., applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action, anywhere at, or from, the facility?

__X__ If yes - continue after identifying key contaminants, citing appropriate "levels," and referencing supporting documentation.

____ If no - skip to #8 and enter "YE" status code, after citing appropriate "levels," and referencing supporting documentation to demonstrate that groundwater is not "contaminated."

____ If unknown - skip to #8 and enter "IN" status code.

Rationale:

Site Description
The General Electric (GE) Selkirk site (the site) is approximately 800 acres and has been in operation since 1967. The site is located in Albany County and is approximately one mile west of Feura Bush and three and one-half miles northwest of Selkirk. The site is bordered by a fiberglass manufacturing facility, a rail yard, and a car carrier terminal. The site was built upon a layer of medium-dense brown clay and silt, approximately 2 – 16-feet thick. This brown clay and silt layer is underlain by a soft to very soft gray clay. The gray clay layer is reported to be between 59 and 166-feet thick.

The main manufactured product is Noryl Thermoplastic molding material, which has a variety of applications in the automotive, electronics and building industries. The five primary manufacturing operations at the site include:

- Manufacture of 2, 6-xylenol, cresols, mesitols, and cresylic acids from the alkylation of phenol with methanol.
- Manufacture of PPO polymeric material from the oxidative polymerization of 2,6-xylenol.
- Manufacture of Noryl thermoplastic resin.
- Manufacture of GEH polystyrene from styrene monomer and polybutadiene.

General Physical Setting

Topography
GE Selkirk is located in a valley setting of the Hudson-Champlain Section of the Ridge and Valley Physiographic Province. The Hudson-Champlain Section extends from Newburgh, New York to Quebec City, Canada. Bedrock beneath the site consists of Ordovician-age shales, sandstones, gray wacke, and siltstones of the Schenectady Formation. Bedrock beneath the GE Selkirk site is overlain by deposits formed by glacial Lake Albany that were created by a retreating glacier in the Hudson River Valley. Fine-grained lacustrine silt and clay contains thin varves of fine to medium sand that were deposited in deep-water areas of the lake. Streams entering the lake formed deltas and deposited coarser sands and gravels. The deposits in the Hudson-Champlain Section have been reported to occur from a thin veneer to 300 feet (Law 1993). Beneath the topsoil horizon at the site, a layer of medium-dense brown clay and silt, approximately 2 to 16-feet thick exists. The brown silt and clay layer is underlain by a soft to very soft gray clay. This clay is reportedly between 59 and 166-feet thick beneath the Site (Law 1993).

Surface Water
The GE Selkirk site lies on the water shed divide of the Vloman Kill and Coeymans Creek and lies within a dendritic drainage basin that carries water southeast to the Hudson River about 5 miles from the site. Two unnamed tributaries

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[1] "Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriate "levels" (appropriate for the protection of the groundwater resource and its beneficial uses).

border the site. The tributary on the northern border drains to Vloman Kill, the southern tributary drains to Coeymans Creek. Groundwater beneath the landfill likely has a component of flow toward the Vloman Kill (Law 1993). Flow in the Vloman Kill has a significantly reduced flow during dry-weather periods. Coeymans Creek has a better sustained flow due to its larger drainage area (Law 1993).

Hydrogeology
On-site, there is a groundwater divide causing gradients both to the north and south, towards the Vloman Kill and Coeymans Creek systems, respectively. The lacustrine sediments existing beneath the site have very low hydraulic conductivities and produce low yields. Groundwater levels in the vicinity of the landfill vary seasonally between two feet on the up gradient side of the landfill to as great as six feet down gradient of the landfill. Depth to water ranges from approximately 12 to 16 feet below ground surface (Summit 1994). The Schenectady Formation also produces low yields; median yields in this bedrock aquifer are approximately two gallons per minute (Law1993).

The site conceptual model developed during the RCRA Facility Investigation (RFI) indicates that there is no human exposure pathway for groundwater because there are no known users of the groundwater within one mile of the site. Therefore, the groundwater exposure pathway is limited to migration of impacted groundwater to local surface water. The model indicates that impacted groundwater will attenuate to below NYS Groundwater Quality Standards prior to discharge to any surface waters. This attenuation is a function of dilution, adsorption, dispersion, and an assumed biodegradation factor. Under these conditions, there are no receptors exposed to impacted groundwater from the site.

References: "Corrective Measures Study Work Plan, General Electric Plastics, Selkirk, New York;" Nittany Geoscience; February 1995

"Roadside Geology of New York State", Bradford B. Van Diver, September 1989

"Hydrogeologic Conditions General Electric Plastics Selkirk Operations, Selkirk, New York," Law Environmental, Inc., 1993

"Interim Corrective Measures Study Report for the On-site Landfill, General Electric Plastics, Selkirk, New York," Summit Environmental Group, Inc., 1994

Summary of Previous Investigations
As an operating plant, GE routinely performs Industrial Hygiene air quality assessments to evaluate worker exposure to VOCs and phenolics. These assessments are performed to evaluate both indoor and outdoor exposure pathways. Based on results of these assessments, there is no unacceptable risk to workers from airborne chemicals at the site. In addition, GE has procedures in place to evaluate and mitigate work exposures to impacted soil and groundwater.

A RCRA Facility Assessment Report, prepared by Nittany Geoscience, Inc. and completed 1995-1998 identified several SWMUs and an AOC. This RCRA Facility Assessment (RFA) Report prompted the Corrective Measures Study (CMS) Work Plan and subsequent CMS in September 1998. The RCRA Facility Investigation (RFI) Final Report summarizes the environmental work that has been performed at the site. The RFI Report characterized sediment, soils, and groundwater. A long-term groundwater monitoring program has been conducted at the site since 1996. The areas that continue to require action consists of: (1) Landfill (SWMU #9); (2) Resins Area (SWMU #36); (3) Filled Valley Area (SWMU #31); and (4) A/P Area (AOC #1). These areas are described in more detail below.

Landfill (SWMU #9)
The landfill encompasses approximately five acres (Figure A-1) and contains six cells that historically received wastes from on-site operations. The landfill has not received waste since 1989. All landfill cells containing waste are capped with multi-layered capping systems. The soils existing at the base of the landfill have vertical permeabilities in the $1x10^{-7}$ to $1x10^{-8}$ cm/sec range. The landfill a has leachate collection system and landfill gas management program. Additionally, the landfill contains storm water management structures to control runoff. The landfill is enclosed by a fence that restricts access thereby limiting the threat to human health.

An Interim Corrective Measures Study (CMS) for the landfill was performed in 1994 and a Final CMS was performed in 1996. Based on the landfill CMS, GE has implemented the presumptive remedy of containment, utilizing several control measures to minimize leachate generation and to intercept and contain future groundwater contamination. The individual control measures include:

- Two groundwater interceptor trenches to reduce the amount of leachate generated for off-site disposal and to lower the groundwater elevation within the landfill cells.
- A leachate/groundwater interceptor trench to collect contaminated groundwater at the containment breach.
- A groundwater monitoring network to determine whether contaminated groundwater has migrated from the northwest perimeter of the landfill and to determine if there is a potential surface water pathway for exposure to landfill constituents.
- Naturally-occurring biodegradation and attenuation to reduce the concentration of residual groundwater contamination below New York State Groundwater Quality Standards over time.

Recent Monitoring Results:

- Metals such as copper, cadmium, and selenium were not detected above the New York State Groundwater Quality Standards (NYSGWQ) in any of the monitoring wells sampled.
- Methanol was not detected in any landfill area monitoring well samples during 2005
- Volatile Organic Compounds (VOCs) were not detected in any landfill area monitoring well samples during 2005.
- Historic toluene and phenolics levels for LFB-8A have decreased and remains within a predictable range for this location along the Northwest margin of the landfill.
- Sediment samples were collected from a tributary to Vloman Kill and tested for volatile organic compounds, metals, and other parameters (phenolics and methanol). The results of the sediment data screening indicted that there are no observed impacts to the Vloman Kill tributary.

References: "Landfill Corrective Measures Study, Final Report;" Nittany Geosciences, Inc, May, 1996

"Third Quarter 2005 Groundwater Monitoring Report," Shaw Environmental; December 6, 2005

Resins Area (SWMU #36)
Groundwater impacts in the Resins Area (Figure B-1 / Figure B-5) are believed to have originated from historical spills in the area of the Decanter Tanks. The two constituents of concern in this area are toluene and methanol. Access to the Decanter Tank area is limited by structures and process lines used in ongoing operations.
The residual sources in the Resins Area include: 1) the vadose zone beneath the Decanter Tank and its containment dike and 2) a relatively smaller residual mass of non-aqueous phase product residing within sand seams between the Decanter Tank and the filled valley. The containment dike is asphalt covered, which minimizes infiltration volatilization, and human contact. There are no soil vapor intrusion issues in the Resins Area because there are no buildings overlying contaminated groundwater.

Toluene migration through the sand seams appears to have created an toluene groundwater plume migrating from the Decanter Tank. The lateral extent of this plume appears to have been limited by natural attenuation processes, so that the plume does not appear to extend very far into the filled valley area. The toluene concentrations in the center of this plume, however, have not shown any significant decrease over time.

The Corrective Measures Study for this area recommended monitored natural attenuation and site access restrictions to prevent potential exposure to contaminated media in site process areas. As an extra effort to try to increase the rate of degradation, GE has been working with NYSDEC and GE Global Research Center to develop alternate ways to enhance the natural degradation processes that are occurring at the site. The initial phase of this work had somewhat limited success using Permeox injections. More recently GE has initiated a second phase pilot test to identify other amendments that may be able to enhance the natural degradation.

Monitoring Results:

- Toluene continues to be detected at four of the 18 sampled monitoring locations above the NYS Ground Water Quality Standard (MPR-1, MPR-6, RMW-14, and RMW-15) The concentration of toluene in the groundwater from these wells ranged from 1.1 microgram per liter (ug/L) at MPR-1 to 120,000 ug/L at RMW-5. These concentrations are generally within the historical range of concentrations seen in this area.
- Monitoring at the edge of the plume (LFB-18 and RMW-19) indicate toluene concentrations ranging from 3.8 ug/L to 12ug/L. In general these levels are consistent with the historical data and indicate limited migration from the source area.
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The ongoing groundwater monitoring data in the Resins Area indicate stable conditions with no off-site migration. This data is consistent with natural attenuation processes that are occurring in the subsurface at the site.

References: "Corrective Measures Study"; Nittany Geoscience; September 1998

"Resins Area Biodegradation Enhancement Pilot Study Work Plan"; US Filter Groundwater Services; February 2000

"Second Quarter 2002 Groundwater Monitoring Report," URS Corporation; August 20, 2002

"Third Quarter 2005 Groundwater Monitoring Report," Shaw Environmental; December 6, 2005

Filled Valley Area (SWMU #31)
The valley was originally formed by a tributary to Vloman Kill. This valley was filled in 1983 with locally derived, soils, organic matter, and demolition debris to the level of the plant process areas. The fill has a total thickness of up to 25 feet. The filled valley continues to drain to a tributary of Vloman Kill. (Figure B-4)

Subsequent to completion of the 1998 CMS, approximately 55 empty and crushed, 55-gallon drums were identified during excavation activities at the site. Two of the drums were determined to contain a tar-like, viscous material. The disposal site is within a former valley, which was filled with excavated material from plant expansion projects over a period of eight to ten years. The portion of the valley which held the drums is believed to have been filled during early plant operations around 1967-1968. The laboratory analysis of soil samples collected near and around the drums did not show elevated concentrations of site related contaminants. Subsequent groundwater monitoring in the valley showed the presence of several organic constituents in excess of applicable NYSDEC groundwater standards including: benzene, chlorobenzene, 1,2-chlorobenzene, 1,3-chlorobenzene, 1,4-chlorobenzene and phenolics. There are no soil vapor intrusion issues in the Filled Valley because there are no buildings overlying contaminated groundwater.

A follow-up investigation was conducted in August of 2001 to investigate the vertical and lateral extent of organic contaminants in the valley fill materials. Monitoring conducted, as part of this investigation did not find any further migration of the contaminant plume beyond the previously defined area. A sentinel well (SBD-4) was added to the site's groundwater monitoring program as the presumptive remedy for this area. At the request of the Department, the Southwest Interceptor Trench Outlet was also added to the site monitoring program. These "sentinel" monitoring points have not detected contaminants migrating from their original location within the filled valley. In addition, historical analytical data of total VOCs, metals (Cd, Cu, Se) and phenolics indicate that the concentrations show a general decreasing trend. This pattern continues to suggest that contaminants are not readily migrating in the filled valley area and no further actions appear warranted.

References: "Plume Delineation Work plan for the Valley Fill Area;" Memo From: Dan Ombalksi, and Bob Warren To: Tom Wrobleski and Steve Urschel; June 14, 2000

"Subsurface Investigation Results, Filled Valley Area;" URS Corporation; October 8, 2001

"First Quarter 2002 Groundwater Monitoring Report," URS Corporation; June 6, 2002

"Second Quarter 2002 Groundwater Monitoring Report," URS Corporation; August 20, 2002

"Third Quarter 2005 Groundwater Monitoring Report; Shaw Environmental; December 6, 2005

A/P Area (AOC #1)
Groundwater monitoring was initiated in the A/P Area (Figure B-2) to evaluate the impact of a variety of small spills, and leaks from tanks and the process sewer including Spill site S-3, Xylenol tank MF-204, and Phenol tank MF-149A. The source of contamination has been removed in all these circumstances. There are no soil vapor intrusion issues in the A/P Area because there are no buildings overlying contaminated groundwater.

The groundwater flow direction in the A/P Area is towards Coeymans Creek. Contaminant migration in groundwater occurs in discrete lenses of fine-grained sand and is limited to a depth of approximately 15 feet below ground surface. Contaminants may move within the backfill zones around structural foundations and underground utility line ballast, but transport off-site remains limited by the horizontal hydraulic conductivity of the native soils. The three primary constituents of interest in the A/P Area are phenol, 2,6-xylenol (2,6-dimethylphenol), and o-cresol. Soil contamination has been detected at concentrations up to 460 mg/kg of phenol beneath Tank MF-149A and 32 mg/kg of phenolics at a depth of 1.5 feet beneath the 2,6-xylenol tank MF-204. The soils beneath the phenol tank were removed to a depth of four feet, with no detected phenol remaining in the confirmation samples.

The one potential contaminant exposure pathway identified in the CMS is exposure at Coeymans Creek on the southern boundary of the GE Selkirk site. Due to distance from the A/P area, however, significant exposure in this area is considered highly unlikely. This was confirmed by groundwater monitoring in the site RFI.

The Corrective Measures Study for this area recommended monitored natural attenuation and institutional controls to prevent potential exposure to contaminated media in site process areas.

References: "RFI Final Report, General Electric Plastics, Selkirk, New York;" Nittany Geoscience; September 1998

"Corrective Measures Study, General Electric Plastics, Selkirk, New York;" Nittany Geoscience; September 1998

"Second Quarter 2002 Groundwater Monitoring Report," URS Corporation; August 20, 2002

"Second Quarter 2005 Groundwater Monitoring Report," Shaw Environmental; August 31, 2005

3. Has the **migration** of contaminated groundwater **stabilized** (such that contaminated groundwater is expected to remain within "existing area of contaminated groundwater"[2] as defined by the monitoring locations designated at the time of this determination)?

   __X__ If yes - continue, after presenting or referencing the physical evidence (e.g., groundwater

[2] "existing area of contaminated groundwater" is an area (with horizontal and vertical dimensions) that has been verifiably demonstrated to contain all relevant groundwater contamination for this determination, and is defined by designated (monitoring) locations proximate to the outer perimeter of "contamination" that can and will be sampled/tested in the future to physically verify that all "contaminated" groundwater remains within this area, and that the further migration of "contaminated" groundwater is not occurring. Reasonable allowances in the proximity of the monitoring locations are permissible to incorporate formal remedy decisions (i.e., including public participation) allowing a limited area for natural attenuation.

sampling/measurement/migration barrier data) and rationale why contaminated groundwater is expected to remain within the (horizontal or vertical) dimensions of the "existing area of groundwater contamination"[2]).

____ If no (contaminated groundwater is observed or expected to migrate beyond the designated locations defining the "existing area of groundwater contamination"[2]) - skip to #8 and enter "NO" status code, after providing an explanation.

____ If unknown - skip to #8 and enter "IN" status code.

Rationale:

Through a network of monitoring wells, groundwater is tested quarterly. The network includes sentinel wells specifically located to detect migration of impacted groundwater. In general, the data from these wells indicate that migration has stabilized. These findings are consistent with the site conceptual model developed during the RFI. The RFI model predicted that impacted groundwater will attenuate to below NYS Groundwater Quality Standards prior to discharge to any surface waters. This attenuation is a function of dilution, adsorption, dispersion, and an assumed biodegradation.

4. Does "contaminated" groundwater **discharge** into **surface water** bodies?

____ If yes - continue after identifying potentially affected surface water bodies.

__X__ If no - skip to #7 (and enter a "YE" status code in #8, if #7 = yes) after providing an explanation and/or referencing documentation supporting that groundwater "contamination" does not enter surface water bodies.

____ If unknown - skip to #8 and enter "IN" status code.

Rationale:

Groundwater from the Resins Area, the Landfill, and the Filled Valley all flow northeast toward the Vloman Kill. Sediment samples tested for volatile organic compounds, metals, and other parameters indicted that there are no observed impacts to the Vloman Kill tributary.

The groundwater flow direction in the A/P Area is to the south, towards Coeymans Creek. The groundwater migration pathway from the A/P Area to Coeymans Creek was evaluated in the CMS. Due to distance from the area, and the low horizontal hydraulic conductivity of the native soils, significant migration in this area is considered highly unlikely. The ongoing quarterly monitoring program is consistent with this conceptual model.

References:

"RFI Final Report, General Electric Plastics, Selkirk, New York;" Nittany Geoscience; September 1998

"Corrective Measures Study, General Electric Plastics, Selkirk, New York;" Nittany Geoscience; September 1998

"Second Quarter 2002 Groundwater Monitoring Report," URS Corporation; August 20, 2002

"Second Quarter 2005 Groundwater Monitoring Report," Shaw Environmental; August 31, 2005

5. Is the **discharge** of "contaminated" groundwater into surface water likely to be **"insignificant"** (i.e., the maximum concentration[3] of each contaminant discharging into surface water is less than 10 times their appropriate groundwater "level," and there are no other conditions (e.g., the nature, and number, of discharging contaminants, or environmental setting), which significantly increase the potential for unacceptable impacts to surface water, sediments, or eco-systems at these concentrations)?

____ If yes - skip to #7 (and enter "YE" status code in #8 if #7 = yes), after documenting: 1) the maximum known or reasonably suspected concentration[3] of key contaminants discharged above their groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) provide a statement of professional judgement/explanation (or reference documentation) supporting that the discharge of groundwater contaminants into the surface water is not anticipated to have unacceptable impacts to the receiving surface water, sediments, or eco-system.

____ If no - (the discharge of "contaminated" groundwater into surface water is potentially significant) - continue after documenting: 1) the maximum known or reasonably suspected concentration[3] of each contaminant discharged above its groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) for any contaminants discharging into surface water in concentrations[3] greater than 100 times their appropriate groundwater "levels," the estimated total amount (mass in kg/yr) of each of these contaminants that are being discharged (loaded) into the surface water body (at the time of the determination), and identify if there is evidence that the amount of discharging contaminants is increasing.

____ If unknown - enter "IN" status code in #8.

Rationale:

N/A

6. Can the **discharge** of "contaminated" groundwater into surface water be shown to be **"currently acceptable"** (i.e., not cause impacts to surface water, sediments or eco-systems that should not be allowed to continue until a final remedy decision can be made and implemented[4])?

____ If yes - continue after either: 1) identifying the Final Remedy decision incorporating these conditions, or other site-specific criteria (developed for the protection of the site's surface water, sediments, and eco-systems), and referencing supporting documentation demonstrating that these criteria are not exceeded by the discharging groundwater; OR

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[3]As measured in groundwater prior to entry to the groundwater-surface water/sediment interaction (e.g., hyporheic) zone.

[4]Note, because areas of inflowing groundwater can be critical habitats (e.g., nurseries or thermal refugia) for many species, appropriate specialist (e.g., ecologist) should be included in management decisions that could eliminate these areas by significantly altering or reversing groundwater flow pathways near surface water bodies.

2) providing or referencing an interim-assessment,[5] appropriate to the potential for impact, that shows the discharge of groundwater contaminants into the surface water is (in the opinion of a trained specialists, including ecologist) adequately protective of receiving surface water, sediments, and eco-systems, until such time when a full assessment and final remedy decision can be made. Factors which should be considered in the interim-assessment (where appropriate to help identify the impact associated with discharging groundwater) include: surface water body size, flow, use/classification/habitats and contaminant loading limits, other sources of surface water/sediment contamination, surface water and sediment sample results and comparisons to available and appropriate surface water and sediment "levels," as well as any other factors, such as effects on ecological receptors (e.g., via bio-assays/benthic surveys or site-specific ecological Risk Assessments), that the overseeing regulatory agency would deem appropriate for making the EI determination.

____ If no - (the discharge of "contaminated" groundwater can not be shown to be "**currently acceptable**") - skip to #8 and enter "NO" status code, after documenting the currently unacceptable impacts to the surface water body, sediments, and/or eco-systems.

____ If unknown - skip to 8 and enter "IN" status code.

Rationale:

N/A

7. Will groundwater **monitoring** / measurement data (and surface water/sediment/ecological data, as necessary) be collected in the future to verify that contaminated groundwater has remained within the horizontal (or vertical, as necessary) dimensions of the "existing area of contaminated groundwater?"

__X__ If yes - continue after providing or citing documentation for planned activities or future sampling/measurement events. Specifically identify the well/measurement locations which will be tested in the future to verify the expectation (identified in #3) that groundwater contamination will not be migrating horizontally (or vertically, as necessary) beyond the "area of groundwater contamination."

____ If no - enter "NO" status code in #8.

____ If unknown - enter "IN" status code in #8.

Rationale and Reference:

Through a network of monitoring wells, groundwater is tested quarterly. The network includes sentinel wells specifically located to detect migration of impacted groundwater. The monitoring program is continuously evaluated to ensure representative groundwater data is collected in each of the impacted areas. A complete description of the monitoring program can be found in the most recent quarterly report: Third Quarter 2005 Groundwater Monitoring Report," Shaw Environmental; December 6, 2005.

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[5]The understanding of the impacts of contaminated groundwater discharges into surface water bodies is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration to be reasonably certain that discharges are not causing currently unacceptable impacts to the surface waters, sediments or eco-systems.

8. Check the appropriate RCRAInfo status codes for the Migration of Contaminated Groundwater Under Control EI (event code CA750), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (attach appropriate supporting documentation as well as a map of the facility).

__X__ YE - Yes, "Migration of Contaminated Groundwater Under Control" has been verified. Based on a review of the information contained in this EI determination, it has been determined that the "Migration of Contaminated Groundwater" is "Under Control" at the **General Electric (GE) Plastics Division** facility, **EPA ID # NYD066832023**, located in **Selkirk, New York 12158.** Specifically, this determination indicates that the migration of "contaminated" groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the "existing area of contaminated groundwater". This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

____ NO - Unacceptable migration of contaminated groundwater is observed or expected.

____ IN - More information is needed to make a determination.

Completed by: _____ Date: 8/30/06
Larry A. Rosenmann
Engineering Geologist II
NYSDEC

Supervisor: _____ Date: 9/12/06
Denise Radtke
Chief, Engineering Geology Section
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Director: _____ Date: 9/12/06
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Locations where References may be found:

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References:

Nittany Geoscience, Inc., 1996. Landfill Corrective Measures Study Final Report. General Electric Plastics, Selkirk, New York.

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Earth Tech, August 1994, Draft – Construction work plan for Leachate collection system lift station no. 2 removal, 3 sections, 3 appendices, 1 plate. Document 8537-490/hax/gesmp.

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Dunn Geoscience Corporation, April, 1986, An analysis of the monitoring well network at the GE Noryl Products Plant secure landfill using an areal and cross-sectional groundwater flow and solute transport model, 96 p., 5 plates. Prepared by Paul Wm. Hare.

Dunn Geoscience Corporation, July 30, 1985, Exposure information for the secure landfill unit, 19 p., 5 plates. Prepared by James Narkunas.

Dunn Geoscience Corporation, July 1987, Draft Report – Installation of monitoring wells LB-4 and LB-5 and permeability testing of the diked areas, General Electric Plastics Selkirk
Operation, Selkirk, NY 18 p., 1 plate. Prepared by Rodney Sutch.

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Nittany Geoscience, Inc., 1998c. Corrective Action Compliance RCRA Facility Investigation Landfill Corrective Measure Implementation Bimonthly Progress Report, February 1998. General Electric Plastics, Selkirk, New York.

Nittany Geoscience, Inc., 1998d. Corrective Action Compliance RCRA Facility Investigation Landfill Corrective Measure Implementation Bimonthly Progress Report, April 1998. General Electric Plastics, Selkirk, New York.

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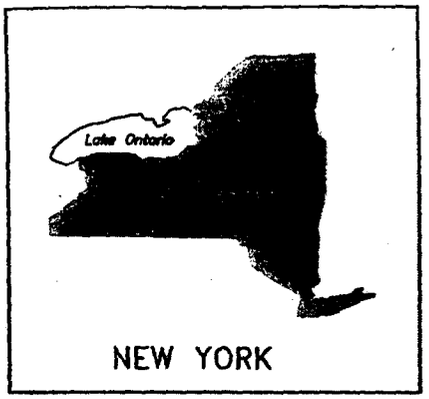
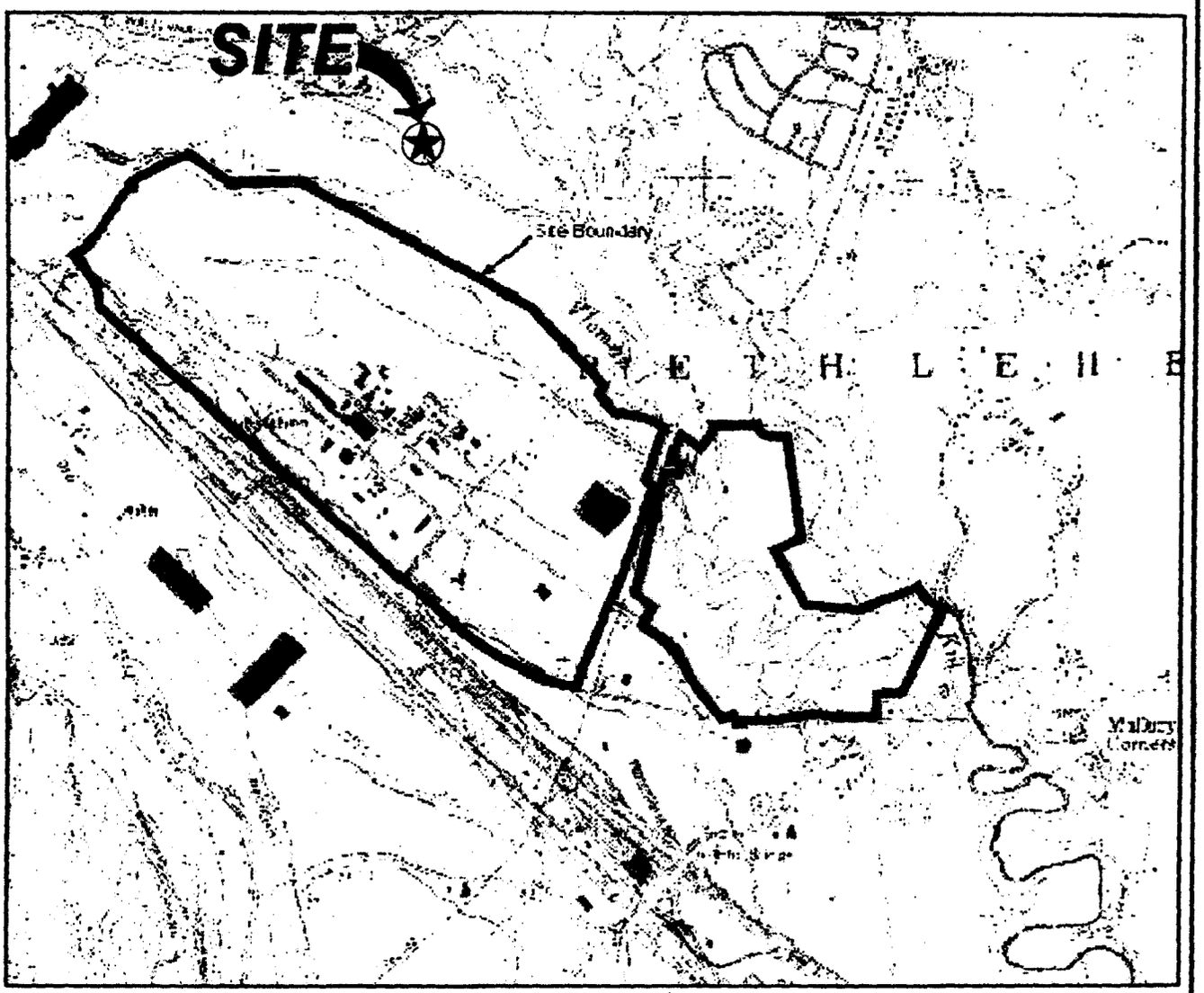
Nittany Geoscience, Inc., 1998g. Groundwater Monitoring Program Landfill Corrective Measure Implementation Bimonthly Progress Report, February 1998. General Electric Plastics, Selkirk, New York.





OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
ALBANY, NY	S. SHKOLNIK 07-22-03			844650A1

SCALE

0 2000 4000 FEET

REFERENCE:

NYSDOT 7.5' QUADRANGLE, DELMAR, NY (1993).

Shaw Environmental, Inc.

GENERAL ELECTRIC
ADVANCED MATERIALS

FIGURE 1
SITE LOCATION MAP

SELKIRK, NEW YORK

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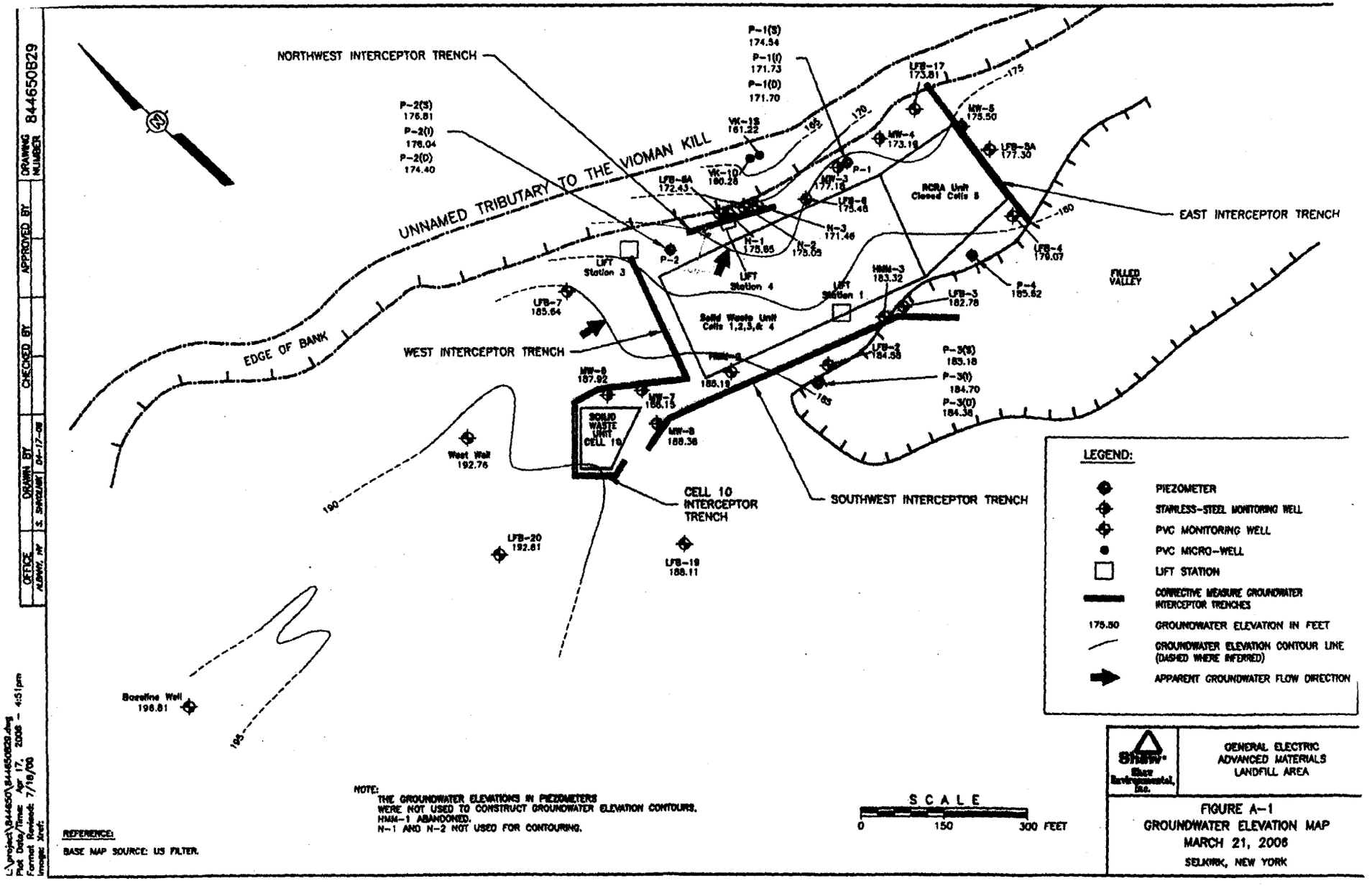

NOTE:
THE GROUNDWATER ELEVATIONS IN PIEZOMETERS WERE NOT USED TO CONSTRUCT GROUNDWATER ELEVATION CONTOURS.
HMM-1 ABANDONED.
N-1 AND N-2 NOT USED FOR CONTOURING.

REFERENCE:
BASE MAP SOURCE: US FILTER.

Shaw Environmental, Inc.

GENERAL ELECTRIC
ADVANCED MATERIALS
LANDFILL AREA

FIGURE A-1
GROUNDWATER ELEVATION MAP
MARCH 21, 2006
SELKIRK, NEW YORK

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
ALBANY, NY	S. SWIDLINSKI 04-17-06			844650B29

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Format Revised: 7/18/00
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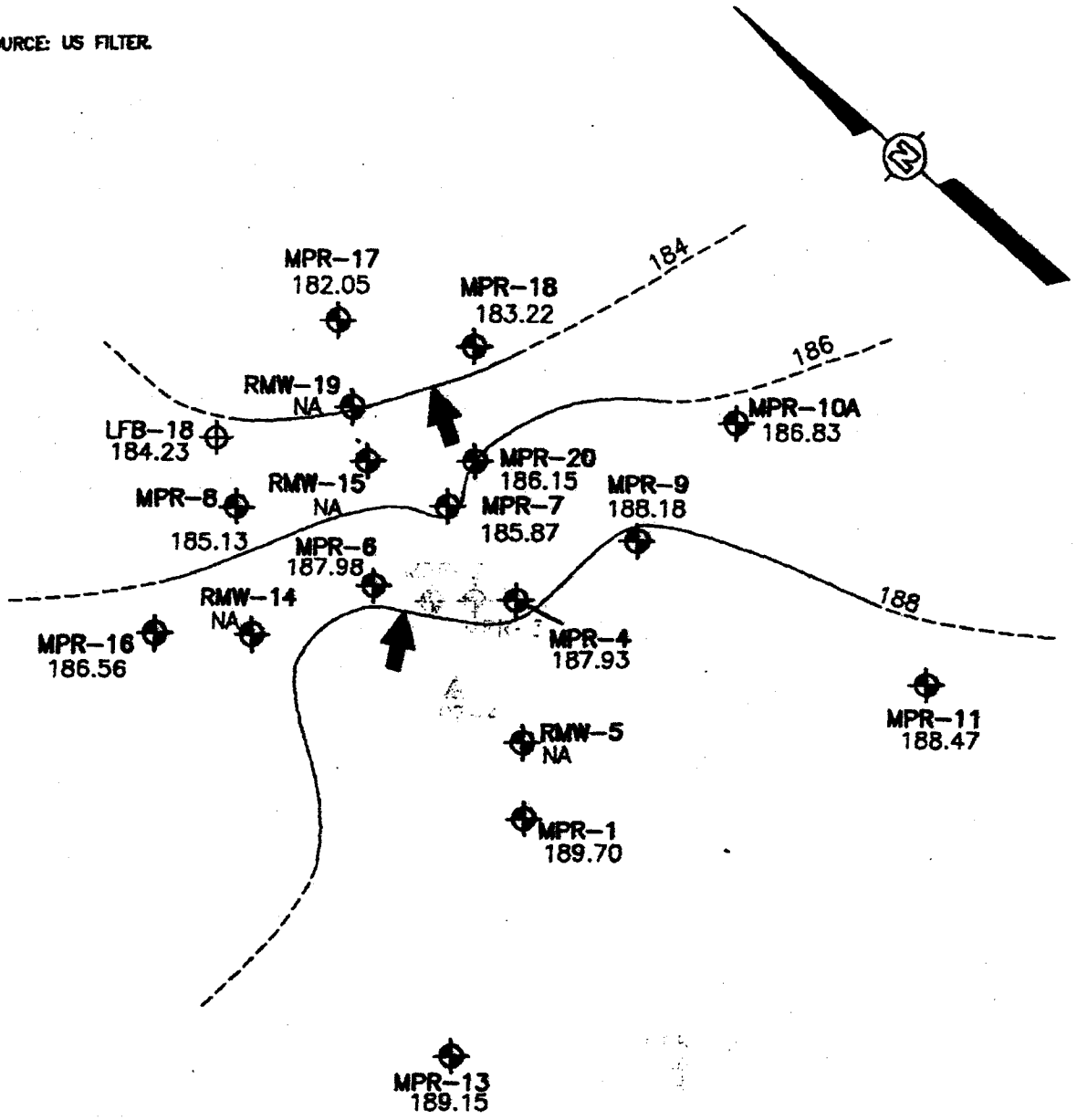
REFERENCE:

BASE MAP SOURCE: US FILTER



LEGEND:

⊕	PVC MONITORING WELL
⊕	EXISTING MONITORING WELL
	FORMER RFI PIEZOMETER
186.83	GROUNDWATER ELEVATION IN FEET
	GROUNDWATER ELEVATION CONTOUR LINE
	APPARENT GROUNDWATER FLOW DIRECTION (DASHED WHERE INFERRED)
NA	NOT AVAILABLE

APPROXIMATE SCALE

0 150 300 FEET

Shaw Environmental, Inc.

GENERAL ELECTRIC
ADVANCED MATERIALS
RESINS AREA

FIGURE B-1
GROUNDWATER ELEVATION MAP
MARCH 22, 2006

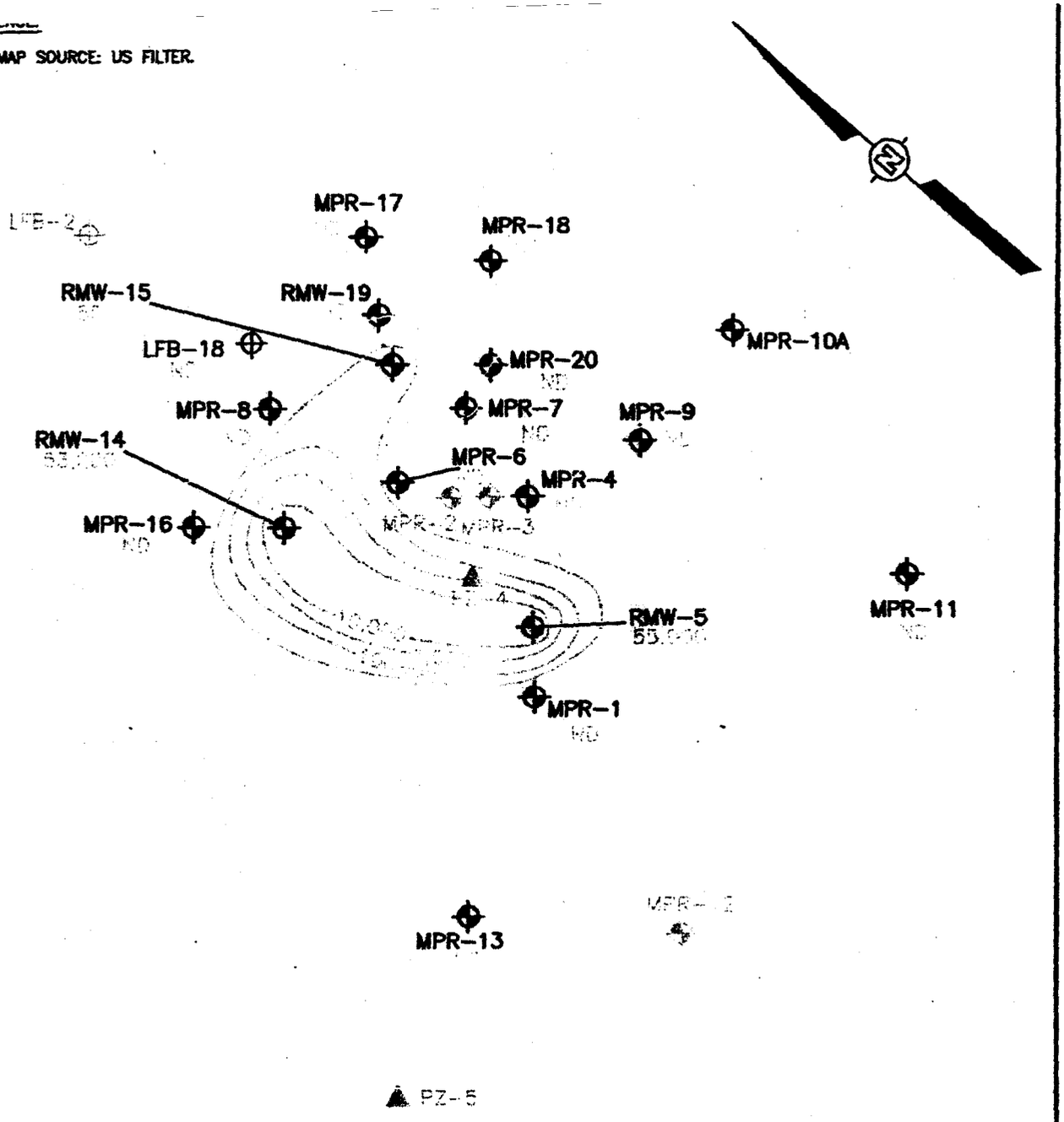
SELKIRK, NEW YORK

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
ALBANY, NY	S. SHKOLNIK 04-17-06			844650A39

L:\project\844650\844650A39.dwg
Plot Date/Time: Apr 17, 2006 - 3:20pm
Format Revised: 7/18/00

Image:
Xref:

BASE MAP SOURCE: US FILTER.



OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
ALBANY, NY	S. SHKOLNIK 04-17-06			844650A40

LEGEND:

- PVC MONITORING WELL
- EXISTING MONITORING WELL
- FORMER RFI PIEZOMETER
- 55 TOLUENE CONCENTRATION (ug/L)
- TOLUENE CONCENTRATION LINE
- ND NOT DETECTED
- GROUNDWATER ELEVATION CONTOUR LINE (GROUNDWATER ELEVATION DATA IN FIGURE B-1)

APPROXIMATE SCALE

0 150 300 FEET

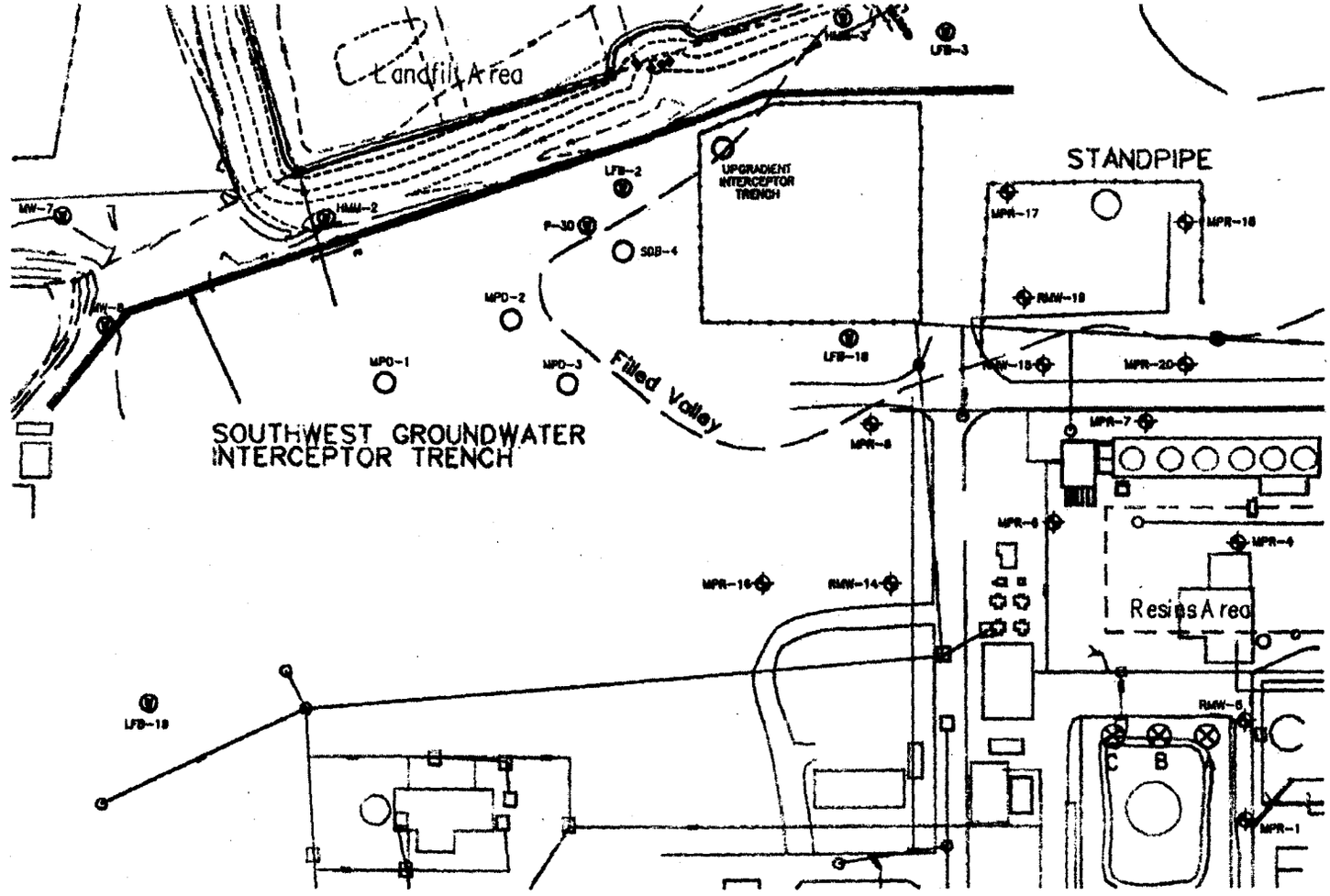
Shaw Shaw Environmental, Inc.

GENERAL ELECTRIC
ADVANCED MATERIALS
RESINS AREA

FIGURE B-5
TOLUENE CONCENTRATION
GROUNDWATER FLOW DIRECTION
MARCH 22, 2006
SELKIRK, NEW YORK

Xref:.
Image:.

L:\project\844650\844650A40.dwg
Plot Date/Time: 04/17/06 03:20pm
Plotted by: Samuil.Shkolnik



LEGEND:

- VALLEY FILL AREA MONITORING POINTS
- PVC MONITORING WELL
- LAND FILL AREA MONITORING WELL
- RFI PIEZOMETER

APPROXIMATE SCALE

0 150 300 FEET

REFERENCE:

BASE MAP SOURCE: US FILTER.

Shaw Stone & Webster, Inc.

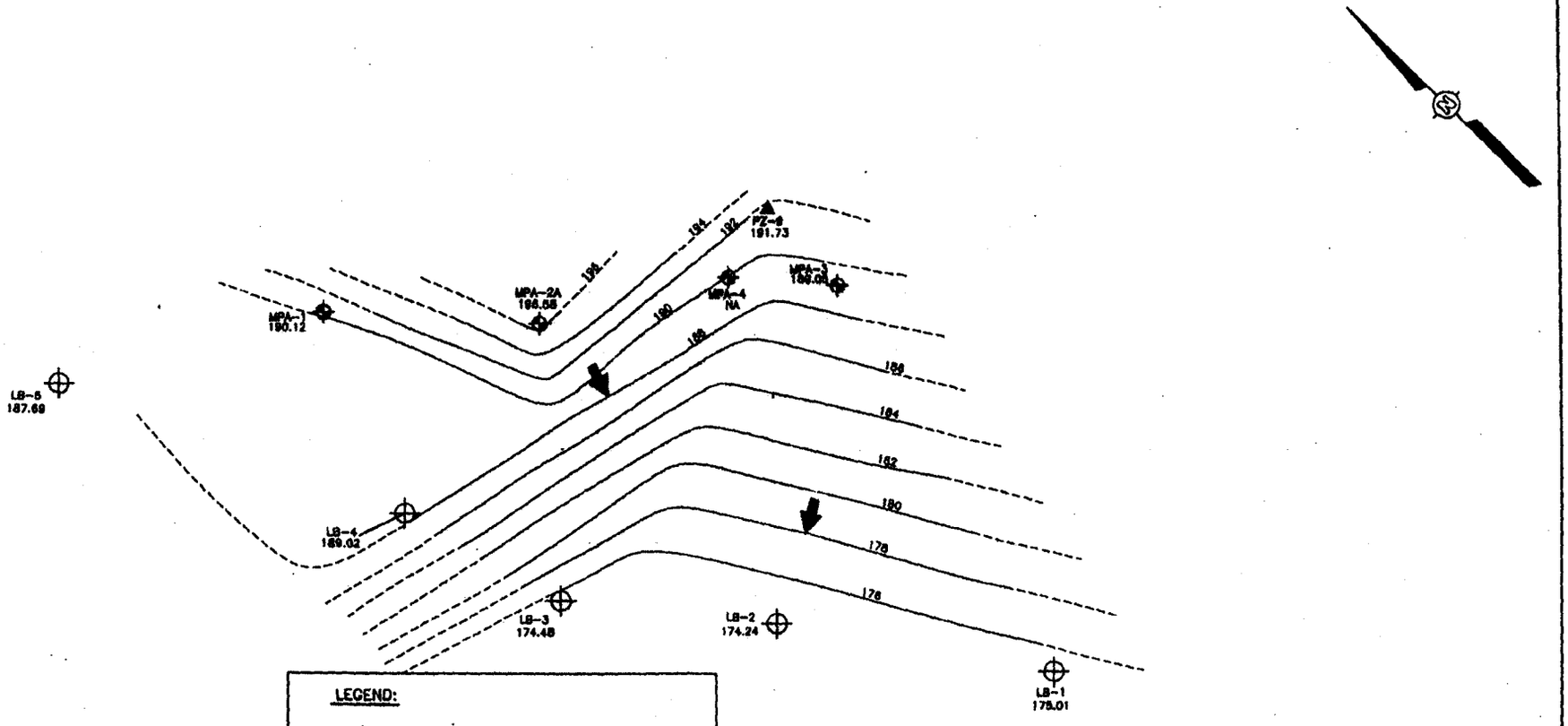
GENERAL ELECTRIC
ADVANCED MATERIALS
FILLED VALLEY AREA

FIGURE B-4
LOCATION OF
MONITORING POINTS

SELKIRK, NEW YORK

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
ALBANY, NY	S. SHEWART 11-16-05			844650B26

Plot Date/Time: Apr 19, 2006 - 8:12am
Format Revised: 12/15/99
Image: L:\projects\91253\007-581-02-01.dgn
Ref:



LEGEND:

- PVC MONITORING WELL
- EXISTING MONITORING WELL
- RFI PIEZOMETER
- 191.73 GROUNDWATER ELEVATION IN FEET
- GROUNDWATER ELEVATION CONTOUR LINE (DASHED WHERE INFERRED)
- APPARENT GROUNDWATER FLOW DIRECTION
- NA DATA NOT AVAILABLE

NOTE: MPA-4 LOCATION APPROXIMATED.

SCALE
0 100 200 FEET

REFERENCE:
BASE MAP SOURCE: US FILTER.

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
ALBANY, NY	S. SINCLAIR 04-19-06			844650830

L:\project\844650\844650830.dwg
Plot Date/Time: Apr 18, 2006 - 11:40am
Format Revised: 7/18/00
Image: Xref:

Shaw Shaw Environmental, Inc.

GENERAL ELECTRIC
ADVANCED MATERIALS
ALKYLATED PRODUCTS AREA

FIGURE B-2
GROUNDWATER ELEVATION MAP
MARCH 21, 2006

SELKIRK, NEW YORK