

DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

RCRA Corrective Action

Environmental Indicator (EI) RCRAInfo code (CA750)

Migration of Contaminated Groundwater Under Control

Facility Name: Forest Laboratories Inc.
Facility Address: 500Commack Road, Commack, NY 11725-5000
Facility EPA ID #: NYD980773691

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).

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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?

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

☐ If no - re-evaluate existing data, or

☐ If data is not available, skip to #8 and enter IN (more information needed) status code.

BACKGROUND

The Forest Laboratories facility in Commack, NY was formerly owned by the Hazeltine Corporation. Hazeltine had ten buildings located in four areas of Long Island. Building #6 was in Commack and sought a hazardous waste management permit under 6NYCRR Part 373 in the late 1980s.

Hazeltine was a manufacturer of electronic components for radio and television communications systems. They manufactured printed circuit boards and mounted them in metal chassis.

A preliminary review of the facility conducted in 1988 and 1989 identified 3 SWMUs. The identified SWMUs were two container storage areas and one former underground storage tank. An RFA was conducted and the SWMUs were evaluated to determine the impact that past waste handling and disposal practices may have had on the surrounding environment.

Shortly after receiving the 6NYCRR Part 373 Operating Permit, Hazeltine Corporation ceased operation at their Commack facility. In order to satisfy the requirements of the RCRA program and sell the property, Hazeltine decided to do a voluntary investigation of the entire facility.

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?

☐ 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 known or reasonably suspected to be contaminated.

¹Contamination 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).

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

Rationale:

The analytical results obtained during the investigation performed by Hazeltine do not indicate significant impact to the surrounding environment resulting from past waste disposal and handling practices at the facility. Where volatile organic constituents and metals were detected in the groundwater, they were slightly elevated above detection limits but were below state and federal groundwater protection concentrations.

Remediation activities were conducted and included removal and disposal of the contents of the following structures: the underground waste storage tank, the underground fuel oil tank and fourteen disposal structures (septic tank, distribution boxes and cesspools), and the cleaning of the concrete floor of a garage.

Sampling of the contents of these structures and the surrounding groundwater were analyzed for total metals, VOCs, and PCBs before and after the cleaning of the aforementioned areas of concern. The result showed no evidence of significant impact to the surrounding environment.

On the basis of the site investigation and remediation performed during June 1989 through January 1990, it has been determined that there was no significant impact to the environment. Sources of potential future discharge were removed and disposed. Trace levels of organics and metals had been detected in the groundwater, but the concentrations of these contaminants were far below state and federal groundwater protection concentrations.

References:

RCRA Facility Assessment, Hazeltine Corporation, Commack, NY, NYSDEC, September 1991
RCRA Facility Assessment, Preliminary Review, Hazeltine Corporation, Commack, NY, NYSDEC, July 7, 1989
Environmental Site Survey, Hazeltine Corporation, Commack, NY, Radian Corporation, September 8, 1989

3. Has the **migration** of contaminated groundwater **stabilized** (such that contaminated groundwater is expected to remain within existing area of contaminated groundwater² as defined by the monitoring locations designated at the time of this determination)?

²existing 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.

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_____ If yes - continue, after presenting or referencing the physical evidence (e.g., groundwater 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 contamination².

_____ If no (contaminated groundwater is observed or expected to migrate beyond the designated locations defining the existing area of groundwater contamination²) - skip to #8 and enter NO status code, after providing an explanation.

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

Rationale:

N/A

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

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

_____ 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:

N/A

5. Is the **discharge** of contaminated groundwater into surface water likely to be **insignificant** (i.e., the maximum concentration³ 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)?

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

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_____ If yes - skip to #7 (and enter YE status code in #8 if #7 = yes), after documenting: 1) the maximum known or reasonably suspected concentration³ 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 judgment/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 concentration³ 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 concentrations³ 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 implemented⁴)?

_____ 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
2) providing or referencing an interim-assessment,⁵ appropriate to the potential

⁴Note, because areas of inflowing groundwater can be critical habitats (e.g., nurseries or thermal refuge) 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.

⁵The 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

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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 cannot 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?

_____ 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 existing area of groundwater contamination.

_____ If no - enter NO status code in #8.

_____ If unknown - enter IN status code in #8.

Rationale:

surface waters, sediments or eco-systems.

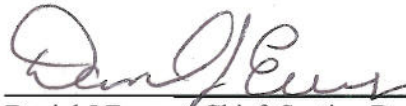
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N/A

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).

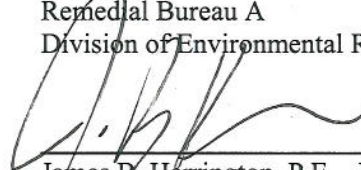
- ☒ **YE** - Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of the information contained in this EI determination, it has been determined that the Migration of Contaminated Groundwater is Under Control at the the **Forest Laboratories Inc., 500 Commack Road, Commack, NY 11725-5000, Facility EPA ID #NYD980773691**. Specifically, this determination indicates that the migration of known or reasonably suspected to be contaminated groundwater is under control, and that monitoring will be conducted, as necessary, 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:


Daniel J. Evans - Chief, Section B
Remedial Bureau A
Division of Environmental Remediation

Date: 9-29-2011

Director:


James B. Harrington, P.E. - Director
Remedial Bureau A
Division of Environmental Remediation

Date: 9-29-2011

Locations where References may be found:

New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway 11th Floor
Albany, New York 12233-7252

Contact, telephone number and e-mail:

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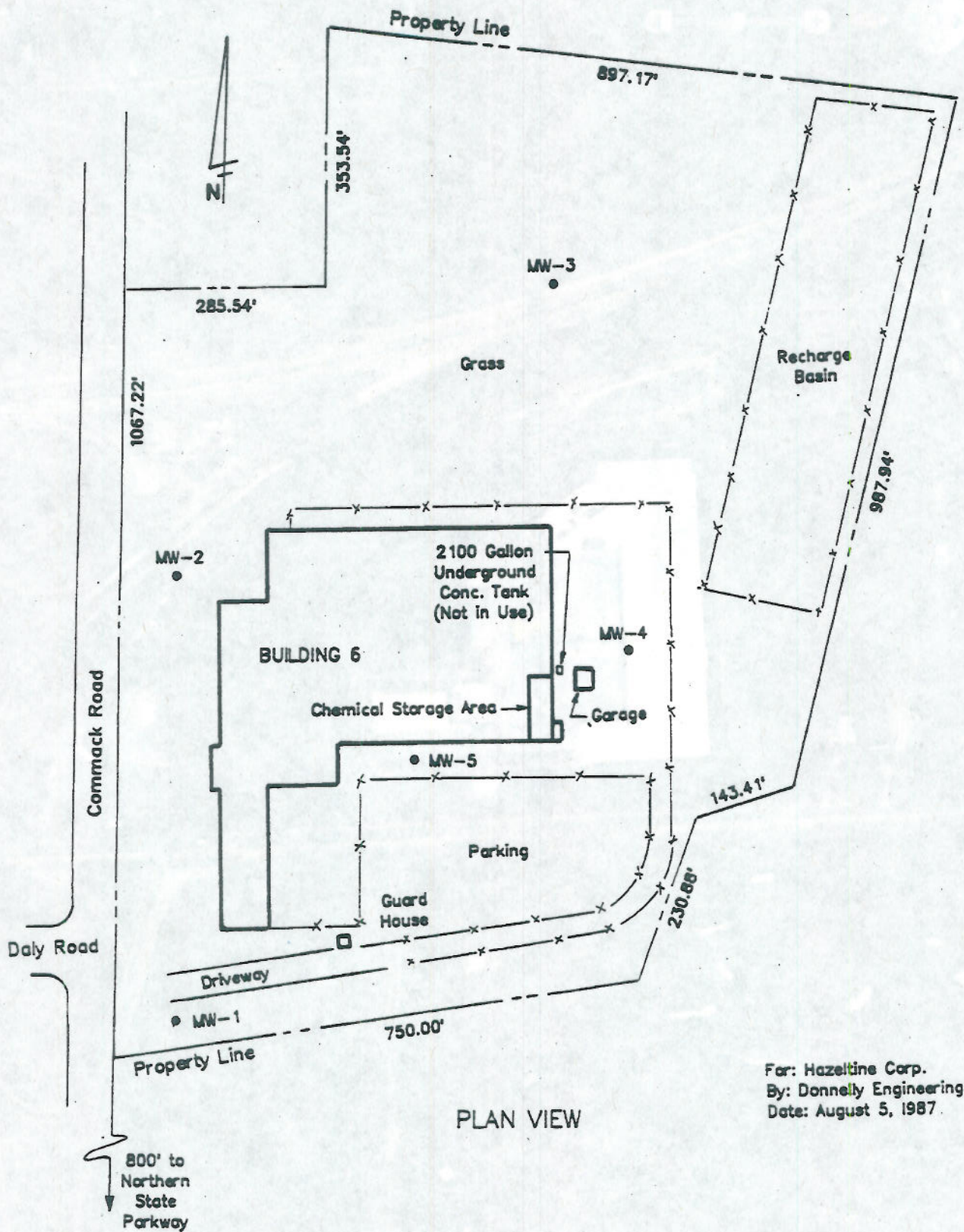
Google
© 2010

Eye alt: 2816 ft

© 2011 Google
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Northern Star Pkwy

40°48'18.91"N 73°17'30.20"W elev 120 ft

Imagery Date: 9/19/2010 1994



For: Hazeltine Corp.
By: Donnelly Engineering
Date: August 5, 1987

Figure 1. Location of Monitoring Wells at Hazeltine Corporation
500 Commack Road, Commack, New York