Department of Environmental Conservation

Division of Environmental Remediation

Record of Decision

101 Green Acres Road Site
Valley Stream, Nassau County
Site Number 1-30-084

March 2000

New York State Department of Environmental Conservation
GEORGE E. PATAKI, *Governor* JOHN P. CAHILL, *Commissioner*

DECLARATION STATEMENT - RECORD OF DECISION

101 Green Acres Road Site
Valley Stream, Nassau County, New York
Site No. 1-30-084

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for the 101 Green Acres Road Class 2 Inactive Hazardous Waste Disposal Site which was chosen in accordance with the New York State Environmental Conservation Law. The remedial program selected is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300).

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the 101 Green Acres Road Inactive Hazardous Waste Site and upon public 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 releases of hazardous waste constituents from this site have been addressed by implementing the interim response action identified in this ROD. The removal of contaminated soil from the Site has significantly reduced the threat to public health and the environment. Therefore, a groundwater monitoring program will be implemented to monitor the effectiveness of previous remedial actions in preventing further contamination of the groundwater.

Description of Selected Remedy

Based on the results of the environmental investigations of the 101 Green Acres Road Site and the criteria identified for evaluation of alternatives, the NYSDEC has selected no further remedial action with continued groundwater monitoring. The components of the remedy are as follows:

- on-site and off-site groundwater monitoring for volatile organic compounds (VOCs);
- deed restriction on groundwater usage on-site; and
- reevaluation of monitoring results after two years to determine if continued monitoring is necessary or if the Site may appropriately be delisted.

New York State Department of Health Acceptance

The New York State Department of Health concurs with the remedy selected for this site as being 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.

3/31/2000
Date

Michael J. O'Toole, Jr., Director
Division of Environmental Remediation

TABLE OF CONTENTS

RECORD OF DECISION

101 Green Acres Road Site
Valley Stream, Nassau County
Site No. 1-30-084
March 2000

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 has selected this remedy for the 101 Green Acres Road Class 2, Inactive Hazardous Waste Disposal Site. As more fully described in Sections 3 and 4 of this document, spills related to underground storage tanks and degreasing the production machinery resulted in the disposal of a number of hazardous wastes, including 1,1,1-trichloroethane, at the site. These disposal activities resulted in the following significant threats to the public health and/or the environment:

- a significant threat to human health associated with contaminated groundwater in a sole source aquifer and soil gas vapor exposure to nearby residents or on-site workers.

During the course of the investigation certain actions, known as Interim Remedial Measures (IRMs), were undertaken at the 101 Green Acres 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 excavation of underground storage tanks (USTs) and volatile organic compound (VOC) 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 threat to human health or the environment, therefore No Further Action was selected as the remedy for this site. In addition, the Department will also reclassify the site to a Class 4 site on the New York State Registry of Inactive Hazardous Waste Disposal Sites.

SECTION 2: SITE LOCATION AND DESCRIPTION

The 101 Green Acres Road Site, #1-30-084, is located in the Village of Valley Stream in the Town of Hempstead in Nassau County. The Site is approximately 7.2 acres and is located in an urban setting located near the Green Acres Mall at the intersection of Sunrise Highway and Green Acres Road. A Home Depot retail store currently occupies the Site. The areas adjacent to the Site include light industrial facilities, residences, and commercial retail stores. An intermittent seasonal stream named Hook Creek is adjacent to the Site on the western side of the property. The nearest downgradient public water supply well is located at the Starfire Court wellfield, which is approximately 1.25 miles downgradient and southeast from the Site. See Figure 1 for the Site map.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

Industrial operations at the Site began in the 1920's with the Curtiss-Wright Airport which was operated by the Curtiss Flying Service. The airfield was abandoned in 1938, but other air service companies operated the airfield. Between 1940 and 1948, the Columbia Aircraft Corporation built airplanes for the military.

The Bulova Watch Company leased the property from 1948 to 1960 when it took title to the property. There were two airplane hangars on the Site at that time, which were connected by Bulova in 1952. In 1967, Bulova built another building on the western side of the Site. During Bulova's occupancy, they manufactured radio assemblies and jewel assemblies for watches. Operations at the Site also included the soldering of electronic circuit boards, loading TNT into fuses for missiles, mortars, and nuclear detonators, and the machining and degreasing of metal components.

During the 1940's through the 1960's, the most likely disposal areas for hazardous waste at this Site would have been the septic system or release of wastes onto the ground adjacent to the former buildings. Prior to connection to the municipal sanitary sewer system, Bulova discharged sanitary and wastewater discharges to the on-site septic systems. See Figure 2 for the locations of the former septic systems and cesspools.

3.2: Remedial History

In 1990, a Phase II Investigation was performed by Storb Environmental Incorporated for Bulova for a pending sale of the Site. Groundwater monitoring wells were installed on the Site and some groundwater samples were taken off-site. The investigation revealed volatile organic compound (VOC), including petroleum, contamination in the shallow on-site groundwater. In 1991, an IRM was completed to remove the known underground storage tanks (USTs) which were a

source of the contamination. The USTs were located in the courtyard near SA1 and SA4 and were excavated as depicted on Figure 2. Contaminated soil in SA 1, 3, and 5 was also excavated in 1991. A total of 130 cubic yards of contaminated soil was removed. Minor contamination from VOCs continued to be present in some of the monitoring wells on-site.

Petroleum contamination was again found during Site redevelopment in 1993, a NYSDEC Spills Number (Spill No. 93-07732) was assigned, and a Spills file was opened for the Site. Due to the petroleum contamination, a second IRM was completed to remove the source of the contamination. An underground storage tank, discovered on the western side of former Building 2 during demolition, was removed. The IRM consisted of excavation and removal of additional fuel oil tanks and excavation of the contaminated soil surrounding the tanks. The excavations also removed soils that were contaminated with other VOCs. The location of the 1993 additional contaminated soil excavation can be found on Figure 2 as EX01 and EX02. An additional 1,200 cubic yards of soil were removed from the Site.

A new system of catch basins for storm water drainage was installed on-site in 1993. Additional monitoring wells were also installed on-site to replace the monitoring wells that were destroyed during the Site redevelopment.

In 1995, the NYSDEC Spills file for the Site was closed. The Nassau County Department of Health (NCDOH) set the soil cleanup objectives for the site during the Phase III Investigation in 1991. The additional VOC contamination was referred to the NYSDEC Division of Hazardous Waste Remediation.

SECTION 4: SITE CONTAMINATION

To evaluate the contamination present at the Site and to determine if a significant threat to human health and/or the environment posed by the presence of hazardous waste existed, Bulova has recently conducted a Remedial Investigation (RI). The Home Depot, NYSDEC, NYSDOH, and NCDOH also conducted supplemental investigation activities concurrent with Bulova's RI activities.

4.1: Summary of the Remedial Investigation

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

The RI was conducted in two phases. The first phase was conducted during January 1999 and the second phase was conducted during April 1999. A report entitled Remedial Investigation

Results, June 15, 1999 has been prepared which describes the field activities and findings of the RI in detail.

The RI included the following activities:

- collection of soil gas samples on-site;
- collection of groundwater Hydropunch samples on-site and off-site;
- collection of soil samples on-site; and
- historical research to determine possible Freon usage and possible radioactive materials used at the Site.

The supplemental investigation conducted by the Home Depot, NYSDEC, NYSDOH, and NCDOH included the following activities:

- collection of indoor air samples from nearby residences;
- collection of surface water samples in the catch basins and the on-site drainage system;
- collection of one split sediment sample from Hook Creek;
- collection of groundwater samples from the on-site monitoring wells; and
- a private well survey of nearby residences, along with appropriate testing.

To determine which media (soil, groundwater, etc.) are contaminated at levels of concern, the RI analytical data was compared to environmental Standards, Criteria, and Guidance values (SCGs). Groundwater, drinking water, and surface water SCGs identified for the 101 Green Acres Road Site are based on NYSDEC Ambient Water Quality Standards and Guidance Values and Part 5 of New York State Sanitary Code. For soils, NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 provides soil cleanup guidelines for the general protection of groundwater, regional background conditions, and health-based exposure scenarios. In addition, for soils, site specific background concentration levels were considered for certain classes of contaminants. Guidance values for evaluating contamination in sediments are provided by the NYSDEC "Technical Guidance for Screening Contaminated Sediments." The indoor air quality of the nearby residences was evaluated by comparing the results with levels typically detected in indoor air.

Based on the RI results, in comparison to the SCGs and potential public health and environmental exposure routes, the Site does not require further remediation. This is summarized below. More complete information can be found in the RI Report.

Chemical concentrations are reported in parts per billion (ppb), parts per million (ppm), and parts per billion by volume (ppbv) for air samples. For comparison purposes, where applicable, SCGs are provided for each medium. See Table 1.

4.1.1: Site Geology and Hydrogeology

The surface topography is generally flat with a gentle slope toward the south and southeast. The elevation of the Site is approximately eight to ten feet above mean sea level. The upper aquifer consists of sand and gravel with thin beds of clay and silt with coarse-grained material. The shallow groundwater is located at four to six feet below ground surface (bgs), and generally flows in a southeastern direction on the Site. At approximately 40 feet bgs, there are two layers of greenish-gray clay, named the "20-Foot Clay" and the Gardiners Clay. The "20-Foot Clay" is similar to Gardiners Clay and is located on top of the Gardiner Clay layer. Sand and silts may separate the two clay layers. The Gardiners Clay is grayish green and contains silt and sand beds.

The Magothy Formation which consists of fine to coarse sand with some clay is located at approximately 75 feet bgs. The Raritan Formation is underneath the Magothy Formation and is made up of clayey sand and silty sand. The Lloyd Aquifer, which is below the Magothy, contains gravel and sand with beds of sandy silts and clays. Bedrock is located at approximately 1,000 feet bgs.

Due to the mixed beds of sand, gravel, and silts and clays, the groundwater flow patterns on the Site are potentially different from the regional groundwater flow. The Gardiners Clay acts as a confining layer which appears to be preventing contamination from migrating further into the aquifer.

Local groundwater flow patterns may vary from regional patterns due to presence of groundwater discharge areas, such as Valley Stream and Clear Stream.

4.1.2: Nature of Contamination

The main contaminants at the Site consist of volatile organic compounds (VOCs) such as 1,1,1-trichloroethane (1,1,1-TCA), dichloroethane, tetrachloroethylene (PCE), trichloroethylene (TCE), 1,1-dichloroethene (1,1-DCE), and various Freons. VOCs are likely to volatilize when in contact with the air, which could pose inhalation problems to the public. These VOCs, when in the liquid phase, tend to be heavier than water which allows them to sink when in contact with

groundwater. Any pumping wells may also draw the compounds down into the aquifer, thereby increasing the chances of the wells becoming contaminated. Possible human exposure could result from dermal contact with contaminated water and ingestion of contaminated water.

As described in the RI report, many soil, groundwater, soil gas, and sediment samples were collected at and near the Site to characterize the nature and extent of contamination. The main categories of contaminants which exceed their SCGs are VOCs.

4.1.3: Extent of Contamination

The groundwater in the southeastern portion of the Site is the main medium of concern. The investigations in the southeast corner have indicated VOC levels above the NYSDEC's groundwater quality standards. The most significant groundwater contamination was found in the southeastern portion of the property (MWHD4) in 1995 at 16,000 ppb for 1,1,1-TCA. Historically, the highest concentrations of VOCs have been located at the southeastern portion of the Site. The groundwater under the rest of the Site is comparable to background levels for this area. The groundwater quality standard for 1,1,1-TCA is 5 ppb.

The NYSDOH and NCDOH conducted a private well survey in the area adjacent to the Site to determine if there was a possibility of contamination in any private wells. One residential irrigation well adjacent to the Site was sampled, but no contamination was found. A second well was found, but the well was shut down for the season so it could not be sampled. This well will be tested when it is used again. No other private wells were found.

The unsaturated soil was contaminated, but is no longer considered to be a medium of concern because the contaminated soil has been removed. The removal was done as part of two IRMs. After the two IRMs, the soil was retested and the VOC concentrations in the soil were found to be less than NYSDEC TAGM guidance values.

Soil gas was a possible medium of concern due to the proximity of the adjacent residences and the nature of the contaminants. To explore possible soil gas and groundwater contamination, an on-site soil gas investigation was done. Additionally off-site indoor air testing was conducted by the NYSDOH with the assistance of NCDOH.

Table 1 summarizes the extent of contamination for the contaminants of concern in groundwater and soil and compares the data with the SCGs for the Site. The groundwater monitoring wells and elevation of the water table are located on Figure 3.

The following are the media which were investigated and a summary of the findings of the investigation.

Soil

The soil was contaminated with petroleum products and other volatile organic compounds. The areas of concern consisted of the locations of the petroleum storage tanks, and five other areas. The petroleum contamination was removed during the IRM to Spill Technology and Remediation Series (STARS) soil guidance values. Areas of concern, SA 1-5, were also sampled for additional VOCs.

Area SA1 showed some benzene, toluene, ethylbenzene, and xylene (BTEX) contamination at concentrations of 0.76 - 2.7 ppm and methylene chloride contamination.

Area SA3 had soil contamination from ethylbenzene at 1.1 ppm, xylene at 2.9 ppm, toluene at 1.9 ppm, methylene chloride at 4.9 ppm, and acetone at 11 ppm. The recommended petroleum contaminated soil cleanup levels from STARS are 8,000 ppm, 200,000 ppm, and 20,000 ppm for ethylbenzene, xylene, and toluene, respectively. The TAGM 4046 recommended soil cleanup levels for methylene chloride is 0.1 ppm and for acetone is 0.2 ppm.

The soils of SA5 were contaminated with TCE, methylene chloride, and PCE at concentrations of 0.66 ppm, 1.5 ppm, and 0.13 ppm, respectively. Areas SA 1, 3, and 5 were excavated to remove the contaminated soil.

Areas SA2 and SA4 did not have soil contamination above recommended soil cleanup objectives. Table 2 is a list of the contaminants found in the soil.

Groundwater

Shallow groundwater flows southeast across the Site. Sample results from monitoring wells MWHD4 and MWHD6, located in the southeastern corner of the Site, have historically shown the highest levels of VOC contamination at the Site. Wells MWHD2 and MWHD3 are located upgradient. The on-site monitoring wells are screened at the water table.

On-site vertical delineation of the groundwater contamination was completed for the RI in 1999. Sampling of groundwater using Hydropunch samples indicated that the contamination does not migrate beneath the Gardiners Clay that is located approximately forty to fifty feet bgs. A Hydropunch provides a method for collecting groundwater samples using a specially designed sample tool to provide a hydraulic connection with the adjacent water table.

The highest concentrations of VOCs are in the shallow groundwater at 6-10 feet bgs. PCE, 1,1-DCE, Freon 113, and 1,1,1-TCA were found only in the shallow groundwater at concentrations of 5.8 ppb, 38.4 ppb, 412 ppb, and 88.3 ppb respectively. The NYSDEC Class GA groundwater standard for the above-mentioned contaminants is 5 ppb for each. TCE and 1,2-dichloroethene (1,2-DCE) were the only contaminants found at greater depths at the Site. The TCE decreased in

concentration as the depth increased. Table 3B contains the data for the groundwater delineation at the Site.

The contaminant of most concern on-site was 1,1,1-trichloroethane (1,1,1-TCA), which was found at concentrations of 16,000 ppb in 1995 at MWHD4 in the southeast corner of the Site. The Remedial Investigation has revealed that levels of VOCs in groundwater have been steadily decreasing over time, and have not impacted off-site groundwater (See Figure 1 for locations of off-site samples). Samples from MWHD4 in April 1999 show that the concentrations of 1,1,1-TCA in groundwater have decreased to 98.2 ppb. No additional definitive source of groundwater contamination was determined during the Remedial Investigation. The VOCs detected at the Site are presumed to be residual contaminants from before implementation of the remedial activities previously discussed. Table 3D shows the contamination at MWHD4.

Groundwater samples were collected off-site at various depths at the Airport Industrial Office Park (AIOP). The AIOP is located adjacent to the southern side of the Site. The RI revealed that there were low concentrations of VOCs in the groundwater off-site, but did not detect the two main VOCs of concern - 1,1,1-TCA and 1,1-DCE. It was also concluded in the RI that shallow groundwater from the site does not flow directly toward the AIOP, which is located directly south of the Site. See Figure 3 for the groundwater flow at the Site.

Off-site groundwater investigations were performed by ENVIRON using a Geoprobe®. A Geoprobe® is a hydraulically-powered, probing machine designed specifically for use in the Environmental Industry. Samplers are driven into the ground to obtain groundwater samples without the use of drilling to remove soil or to make a path for the tool.

Additionally, during the RI, ENVIRON collected six groundwater samples, OS1-6, on Forest Road in the residential area adjacent to the Site, as seen in Figure 1. These groundwater samples were taken at 10-foot intervals to the top of the "20-Foot" clay. The only contaminant found by the on-site lab was 1,1-DCE which was present at 9.4 ppb and 5.3 ppb in the 10-foot and the 40-foot intervals of OS-4, respectively. The off-site samples OS1-5 were also split and sent to a commercial laboratory. The lab sample of OS-5 at 40 feet had 1,1-DCE, PCE, and TCE at concentrations of 10.4 ppb, 11.5 ppb, and 8.2 ppb, respectively. The NYSDEC groundwater standard is 5 ppb.

Freon compounds have appeared in on-site groundwater since 1995. Freon 113 concentrations at GP-03 were as high as 3,500 ppb in 1997. In 1999, Freon 113 was in the shallow groundwater at 412 ppb at GP-09 located near MWHD6 in the southeast corner of the Site. GP-03 and GP-09 are located next to each other. Freon 11 was also found in 1999 at concentrations of 679 ppb at MWHD6. Minor contamination from Freon 12 has also been detected at the Site. Trace levels of Freon compounds have also recently appeared in upgradient wells. The NYSDEC Class GA

groundwater standard for the Freon compounds is 5 ppb for each. No source of the Freon contamination has been found.

Sediments

Since Hook Creek, an intermittent stream, is located adjacent to the property and since storm drainage from the Site could have discharged to the Creek, the sediments were sampled for VOCs. Two sediment samples were taken by the NYSDEC and the NCDOH. No surface water was collected because the Creek was dry. The results showed that the sediments are not contaminated with VOCs.

Surface Water

Surface water samples from Hook Creek were taken by Storb Environmental in 1990 (Sample Point 6 and Sample Point 7 on Figure 1). The results showed that there was no contamination from site-related contaminants. In 1993, the previous drainage system of interconnected catch basins and drywells was destroyed during redevelopment of the Site. A new storm water drainage system with a set of drywells was constructed on the Site at that time. The NCDOH collected water samples from the new drainage system in the southeastern corner, which has historically corresponded to the highest concentrations of VOCs. The NCDOH did not find any VOC contamination in the catch basins. The surface water in Hook Creek was not re-sampled at the time because the creek was dry.

Soil Gas

Elevated concentrations of Freon 113 and several other VOCs were detected in soil gas samples at the southeast corner of the Site. Because contaminated soil gas can migrate across a site and off-site, in August of 1999 the NYSDOH, with the assistance of NCDOH, tested indoor air quality in the homes nearest to the southeast corner of the Site. Based on the test results, NYSDOH determined that none of the primary contaminants of concern related to the Bulova investigation were present in the homes.

4.2: 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. An IRM was conducted prior to Site redevelopment in 1991. The IRM consisted of the removal of petroleum storage tanks and excavation of petroleum contaminated soil. Approximately 130 cubic yards of soil were removed during the IRM. The IRM was overseen by NYSDEC Spills staff and the NCDOH. Another IRM was performed when a UST and an additional 1,200 cubic yards of contaminated soils were removed during Site redevelopment in 1993. See Figure 2 for the locations of the soil excavation areas.

4.3: 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.

An exposure pathway is the manner by which an individual may come in contact with a contaminant. The five elements of an exposure pathway are 1) the source of contamination; 2) the environmental media and transport mechanisms; 3) the point of exposure; 4) the route of exposure; and 5) the receptor population. These elements of an exposure pathway may be based on past, present, or future events.

Human exposure pathways which are known to or may exist at the Site include:

- ingestion of contaminated groundwater;
- dermal contact with contaminated groundwater; and
- inhalation of VOC vapors from soil gas and from use of contaminated groundwater.

Use of contaminated groundwater is not a major concern because businesses and residences in the area are connected to public water. The nearest downgradient supply well for the public water system is routinely monitored for VOCs and other potential contaminants. Additional groundwater monitoring would be done to detect the contaminants that may leave the Site in the future. A private well in the area, a residential well located upgradient from the contamination and used only for outdoor purposes, was tested and found to be unaffected by groundwater contamination. A second private well not currently in use will be tested when it is reused.

The migration of subsurface soil vapor into on-site or nearby structures is not presently a concern. The on-site commercial facility operates with a positive pressure ventilation system which tends to suppress subsurface vapors. Indoor air testing in the nearest homes has not indicated any impacts from site-related contaminants. Results of future monitoring at the Site will be reviewed to determine if additional indoor air quality testing is necessary.

4.4: Summary of Environmental Exposure Pathways

This section summarizes the types of environmental exposures and ecological risks which may be presented by the Site. The following potential pathway for environmental exposure and/or ecological risks has been identified:

- contamination of adjacent intermittent stream and downstream areas.

Samples from a seasonal intermittent creek receiving storm drainage from the Site have not identified the presence of the Site contaminants. Residual contaminants at the Site are below the ground surface in groundwater. Therefore, environmental exposures are not occurring.

SECTION 5: 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.

The Bulova Corporation signed a Consent Order with NYSDEC on July 29, 1998. The Order was for an additional IRM to be conducted if the RI determined one was necessary and appropriate, other than the removal activities previously done at the Site. The RI revealed that a third IRM was not necessary and the order was not executed. The NYSDEC has begun negotiations with the PRPs to implement the selected remedy under an Order on Consent.

SECTION 6: SUMMARY OF THE REMEDIAL GOALS AND SELECTED ACTION

The selected remedy for any site should, at a minimum, eliminate or mitigate all significant threats to the public health or the environment presented by the hazardous waste present at the site. The State believes that the remediation that has taken place, which is described in Section 4.2 Interim Remedial Measures, accomplished this objective.

No further remedial action was selected as the final remedy for the Site. No further action was chosen because the contaminants are not migrating off-site. There was no evidence during the investigation that Freon was migrating off-site, but it is not decreasing over time as quickly as the other VOCs in the on-site groundwater. Surface soil and subsurface soil have not revealed significant levels of contamination. Since the concentrations of the contaminants in groundwater have generally decreased with time, the contaminants do not appear to have moved off-site, and there are no likely exposure pathways, the Site does not pose a significant threat to human health or the environment. Therefore, based on the results of the RI and the IRMs that have been performed at the Site, the NYSDEC is proposing No Further Action, other than monitoring, as the final remedial alternative for the Site. The concentrations of Freon at the Site will be monitored to determine if additional actions are necessary with respect to these compounds.

A deed restriction will be placed on the Site to prohibit the installation of all potable water wells. However, groundwater wells may be installed for non-potable water use with the permission of both the Nassau County Department of Health and the New York State Department of Environmental Conservation.

An Operations and Maintenance (O&M) plan will be developed to monitor the groundwater in the southeastern part of the Site and off-site downgradient for two years. The off-site samples will monitor the groundwater quality and indicate if contamination is leaving the site in the future.

The capital cost of $46,400 is for the construction and installation of the off-site monitoring well and quarterly reports during the O&M period. Both on-site and off-site monitoring wells will be sampled four times a year for at least two years for a total of eight sampling events. The annual O&M cost is $27,500. Total present worth is $97,500.

The Department will also reclassify the Site from a Class 2 to a Class 4 on the New York State Registry of Inactive Hazardous Waste Disposal Sites which means that the Site is properly closed but it requires continued monitoring.

After two years of data have been collected, the project will be re-evaluated. If the groundwater contamination is not decreasing or is increasing, the Department will determine if further monitoring or remedial action is required. If the contamination continues to decrease and does not migrate off-site, the Site will be removed from the New York State Registry of Inactive Hazardous Waste Disposal Sites.

SECTION 7: HIGHLIGHTS OF COMMUNITY PARTICIPATION

As part of the remedial investigation process, a number of Citizen Participation activities were undertaken in an effort 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:

- A repository for documents pertaining to the Site was established.
- A Site mailing list was established which included nearby property owners, local political officials, local media and other interested parties.
- A Fact Sheet was sent to notify the public of the availability of the Proposed Remedial Action Plan (PRAP), give the public information regarding the investigations, and invite the public to the public meeting.
- In March 2000, a Responsiveness Summary was prepared and made available to the public, to address the comments received during the public comment period for the PRAP.

SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE, LYNBROOK, NY; 1969.

ENVIRON

DRAFTED BY: KPM | DATE: 4/16/98

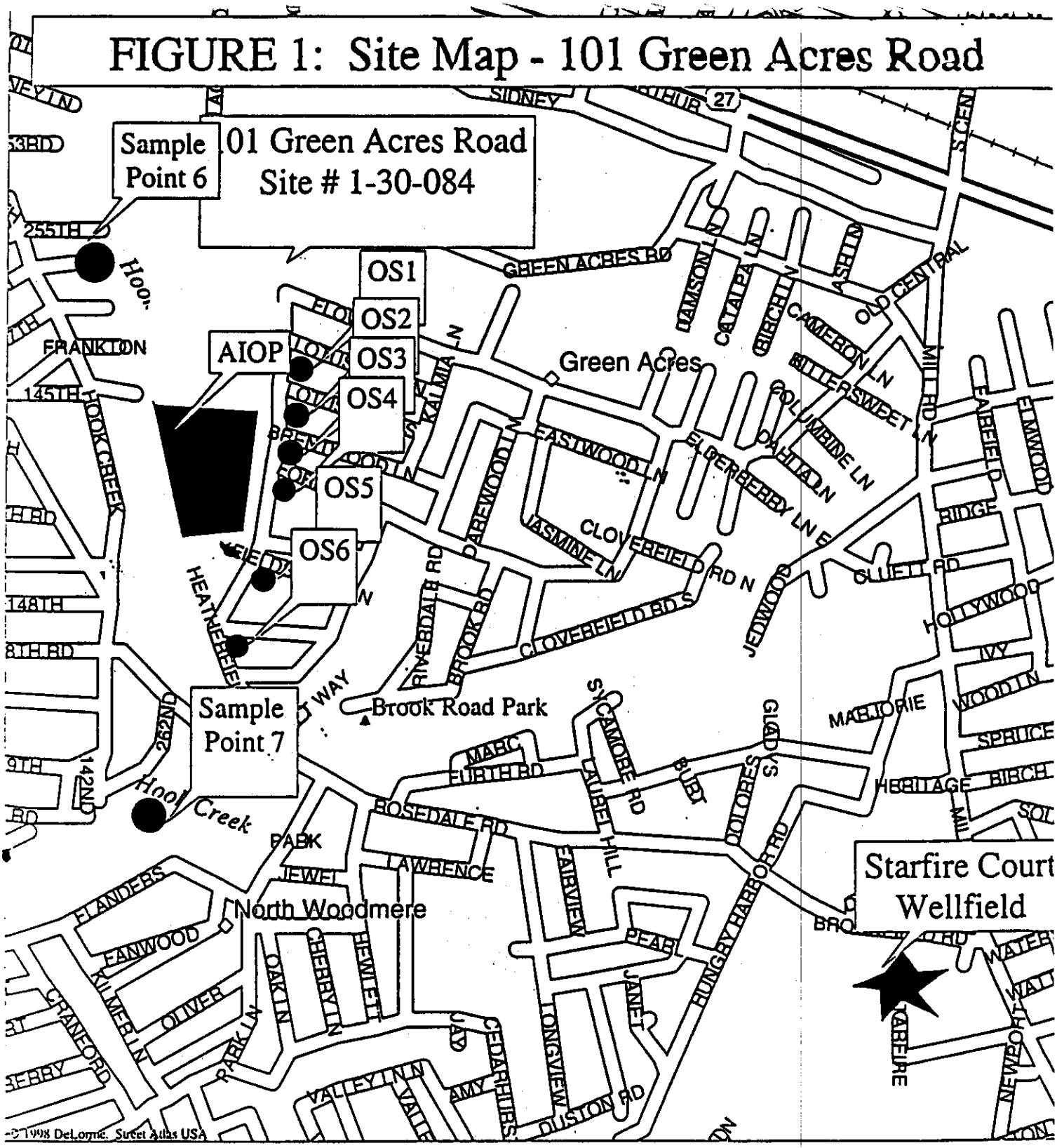
SITE LOCATION MAP

FORMER BULOVA MANUFACTURING FACILITY
VALLEY STREAM, NEW YORK

FIGURE
A

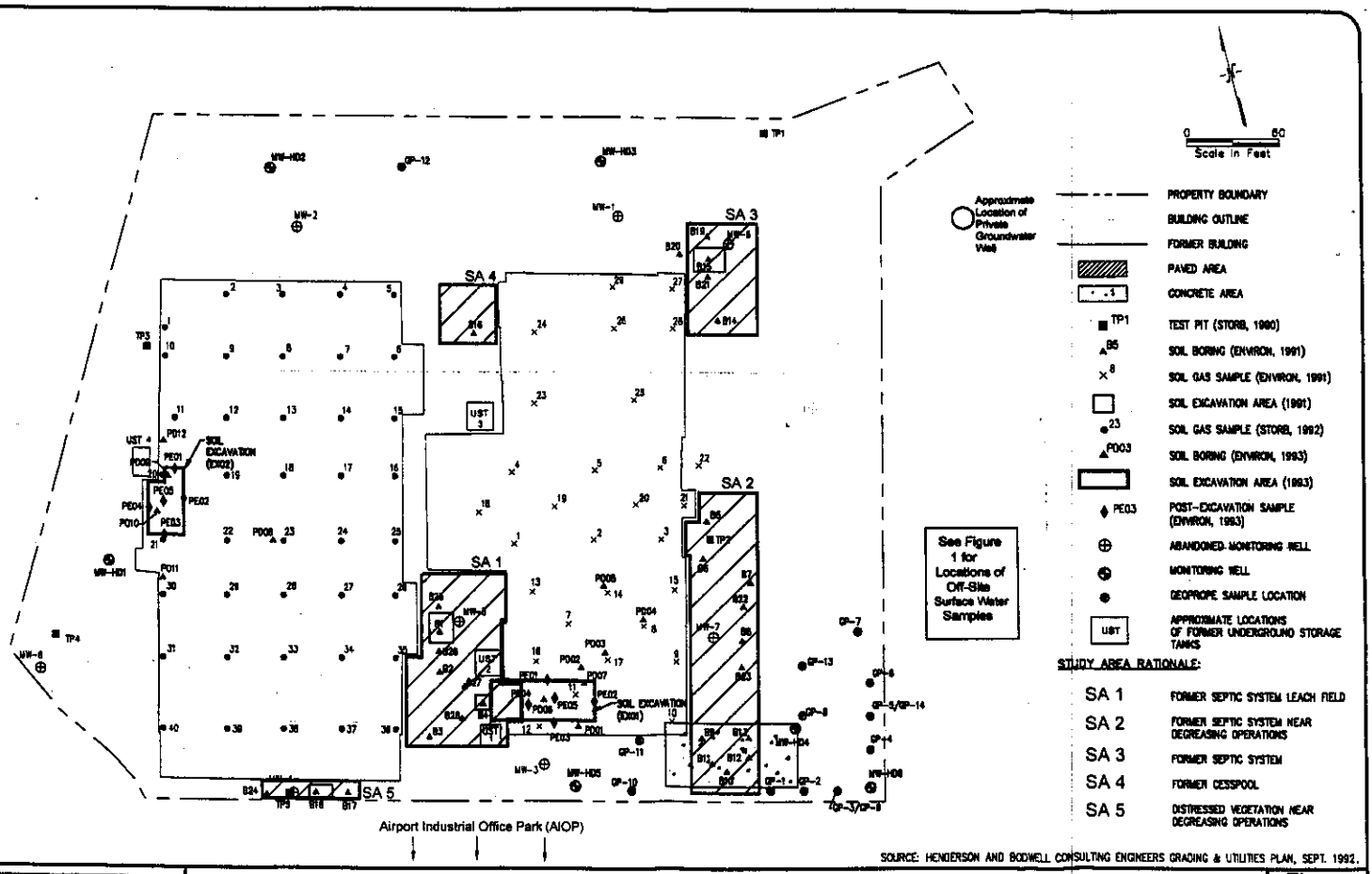
1963AJ01.PRE

FIGURE 1: Site Map - 101 Green Acres Road



Mag 15.00
Fri Jan 28 13:53 2000
Scale 1:9,375 (at center)
1000 Feet
200 Meters

- Local Road
- Major Connector
- Primary State Route
- Railroad
- Small Town
- Park/Reservation
- Locale
- County Boundary
- Lake
- Land
- River/Canal



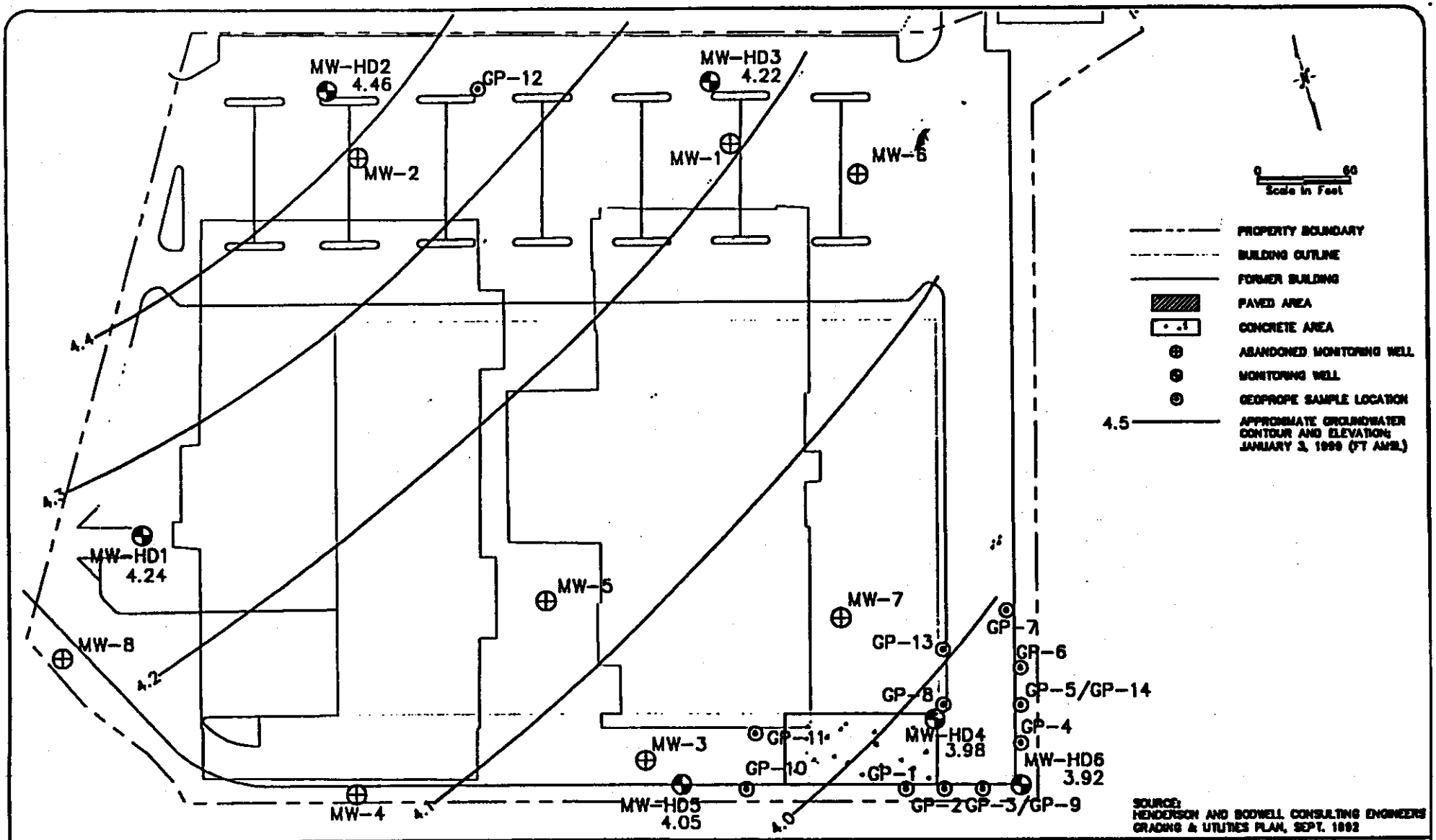
SOURCE: HENDERSON AND BODWELL CONSULTING ENGINEERS GRADING & UTILITIES PLAN, SEPT. 1992.

ENVIRON

PREPARED BY: NYSDEC | DATE: 3/00

101 Green Acres Road Site, No. 1-30-084
Sample Points and Interim Remedial Actions

Figure 2



ENVIRON

PREPARED FOR NYSDEC | DATE 1/00

GROUNDWATER POTENTIOMETRIC SURFACE MAP – JANUARY 1999

101 GREEN ACRES ROAD, SITE NO. 1-30-084

Valley Stream, New York

FIGURE 3

Table 1
Nature and Extent of Contamination

MEDIUM	CATEGORY	CONTAMINANT OF CONCERN	CONCENTRATION RANGE (ppb)	FREQUENCY of EXCEEDING SCGs/ Background	SCG/ Bkgd (ppb)
Groundwater	Volatile Organic Compounds (VOCs)	Trichloroethylene	ND (1) to 800	66 of 214	
		Tetrachloroethylene	ND (1) to 113	23 of 214	5
		1,1- Dichloroethene	ND (1) to 3,000	42 of 214	5
		1,1-Dichloroethane	ND (1) to 340	43 of 214	5
		Dichlorodifluoromethane (Freon 12)	ND (1) to 7	3 of 214	5
		Trichlorofluoromethane (Freon 11)	ND (1) to 679	4 of 214	5
		Trichlorotrifluoroethane (Freon 113)	ND (1) to 3,500	5 of 214	5
		1,1,1-Trichloroethane	ND (1) to 16,000	54 of 214	5
		Vinyl Chloride	ND (1) to 67	7 of 214	2
		Chlorobenzene	ND (1) to 22	4 of 214	5
		1,2-Dichlorobenzene	ND (1) to 47	7 of 210	3
		1,4-Dichlorobenzene	ND (1) to 96	5 of 210	3
		1,2-Dichloroethane	ND (1) to 4	1 of 214	0.6
		1,2-Dichloroethene (total)	ND (1) to 84	31 of 214	5
		Chloroform	ND (1) to 12	2 of 6	7
		1,1,2-Trichloroethane	ND (1) to 5	1 of 214	1
		Chloroethane	ND (1) to 14	2 of 214	5
		Benzene	ND (1) to 2	1 of 214	1
	Metals	Arsenic	ND (0.5) to 40	1 of 7	25
		Copper	ND (10) to 560	1 of 7	200
		Lead	ND (2) to 140	4 of 7	25

Table 1 (cont.)

MEDIUM	CATEGORY	CONTAMINANT OF CONCERN	CONCENTRATION RANGE (ppm)	FREQUENCY of EXCEEDING SCGs/Background	SCG/ Bkgd. (ppm)
Soil	Volatile Organic Compounds (VOCs)	Xylenes (total)	ND (.001) to 5.6	3 of 49	1.2
		Trichloroethene	ND (.001) to 4.67	1 of 49	0.67
		Methyl Ethyl Ketone (MEK)	ND (.005) to 4.9	1 of 49	0.3
		Acetone	ND (.005) to 11	1 of 49	0.2
		Methylene Chloride	ND (.002) to 1.9	9 of 49	0.1

Table 2
Remedial Alternative Costs

Remedial Alternative	Capital Cost	Annual O&M	Total Present Worth
No Further Action with Groundwater Monitoring	$46,500	$27,500	$97,500

Table 3 A - Groundwater Contamination

All Values in Parts Per Billion (ppb)

WELL	DATE	TCE	PCE	1,1-DCE	1,1-DCA	1;1,1-TCA	Vinyl Chloride	1,2-DCE	MEK
MW1	Feb-91								
	Jan-92	44							
	May-92	2.2J							
	Jul-92	10							
	Nov-92	24							
MW2	Feb-91		7						
	May-91		12						
	Sep-91		12						
	Jan-92		7.1						
	May-92		5.8J						
	Jul-92		10						
	Nov-92		8.1						
MW3	Feb-91		14	110			67		2.75J
	May-91		2.2J			3.6J			
	Sep-91	4J	25		2.6J	8.2			
	Jan-92	3J	40		1.1J	7.2			
	May-92	1.3J	13			5.3J			
	Jul-92	15	49			2.8J			
	Nov-92	2.7J	15			3.1J			
MW4	Feb-91	11							34
	May-91	2.2J							
	Sep-91	4.1J							
	Jul-92	1.1J							
MW5	Sep-91					3.7J			2.4J
MW7	May-91					24			
	Sep-91					40			
	Jan-92					6.2			
	May-92					3.5J			
	Jul-92					2.3J			
	Nov-92	1.1J				6.6J			
SCGs		5	5	5	5	5	2	5	50

J-Estimated Value
TCE - Trichloroethene
PCE - Tetrachloroethene
1,1-DCE - 1,1-Dichloroethene
1,1-DCA - 1,1-Dichloroethane
1,1,1-TCA - 1,1,1-Trichloroethane
1,2-DCE - 1,2-Dichloroethene
MEK - Methyl Ethyl Ketone

Table 3 B - Groundwater Contamination

All Values in parts per billion (ppb)

	SAMPLE #	DEPTH	TCE	PCE	1,1-DCE	1,1-DCA	Freon 12	Freon 113	1,1,1-TCA	Vinyl Chloride	1,2-DCE	Chloroform	Bromoform	Dibromo-chloromethane
1990	SP 2		7											
	SP 5		28						18		7			
1997	GP1	6'-10'	10.9	1.2	40.9	119			22.5	7.1	10.5			
	GP2	6'-10'	9.6		27.8	27.7			60		2.2			
	GP3	6'-10'	6.3	1.3	17.8	38.2			38.5					
	GP3	20'-24'	79.9	21.3		140		3,500	507					
	GP4	6'-10'	209	0.58		6.7			2.9		10.2			
	GP5	6'-10'	79.4	0.87		2.1					3.9			
1999 AIOP	SB2	39'	4.6	1.9								11.6		
		52'	14.7	1.4								5.8		
		63'	4.6	3.2								11		
	SB3	38'	2.7	3.8							4.8		1.5	1.2
		53'	1.7	1.8							2.8			
		63'	3.4	3.4							5.2			
1999	GP5	6'-10'	21.3			4.5		12.4	4.2	3.6	4.7			
		36'-42'	5.6								3.8			
		52'-56'												
		72'-76'												
	GP9	6'-10'	23.5	5.8	38.4	31.9	4.3	412 e	88.3					
		42'-46'	11.3								3.6			
		53'-57'												
		72'-76'	0.71											
SCGs			5	5	5	5	5	5	5	2	5	7	50	5

e - Estimated Values
TCE - Trichloroethene
PCE - Tetrachloroethene
1,1-DCE - 1,1-Dichloroethene
1,1-DCA - 1,1-Dichloroethane

Freon 12 - Dichlorodifluoromethane
Freon 113 - Trichlorotrifluoroethane
1,1,1-TCA - 1,1,1-Trichloroethane
1,2-DCE - 1,2-Dichloroethene

Table 3C - Groundwater Contamination

All values in parts per billion (ppb)

WELL	DATE	TCE	PCE	1,1-DCE	1,1-DCA	Freon 12	Freon 113	1,1,1-TCA	Vinyl Chloride	1,2-DCE	Benzene	Chloro-methane	Methylene Chloride	Chloro-benzene	1,4-DCB	1,2-DCB
MWHD1	Sep-96					7										
	Dec-96					6										2
	Mar-97															5
	Jun-97							1	3		2					3
	Jun-98															8
	Sep-98				1											
	Dec-98				1				2			4				
	Jan-99				2.4	6										
MWHD2	May-94															
	Jun-94						1.3J									
	Sep-95													5	96	47
	Mar-96													2	69	21
	Jun-96													2	21	9
	Sep-96													2		
	Jun-97		1													
	Sep-97		2													
	Sep-98													7		
	Dec-98													22	96	
	Jan-99													16.4	41.9	19.3
MWHD3	May-94	25.8														
	Jun-94	32.8														
	Sep-95	6														
	Mar-96	3								2						
	Jun-96	5								4						
	Sep-96	3								3						
	Dec-96	6								9						
	Mar-97	4								5						
	Jun-97	6		1	1					11						
	Sep-97	5								6						
	Mar-98									2			1			
	Jun-98	1								3						
	Sep-98	4								3						
	Dec-98	6	4													
SCGs		5	5	5	5	5	5	5	2	5	1	5	5	5	3	3

J-Estimated Value
TCE - Trichloroethene
PCE - Tetrachloroethene
1,1-DCE - 1,1-Dichloroethene
1,1-DCA - 1,1-Dichloroethane
Freon 12 - Dichlorodifluoromethane
Freon 113 - Trichlorotrifluoroethane
1,1,1-TCA - 1,1,1-Trichloroethane
1,2-DCE - 1,2-Dichloroethene
1,2-DCB - 1,2-Dichlorobenzene
1,4-DCB - 1,4-Dichlorobenzene

Table 3 D - Groundwater Contamination

All values in parts per billion (ppb)

WELL	DATE	TCE	PCE	1,1-DCE	1,1-DCA	Freon 11	Freon 12	1,1,1-TCA	Vinyl Chloride	1,2-DCE	MTBE	1,2-DCA	Dibromo-chloro-methane	Methylene Chloride	Chloro-form	1,1,2-TCA	Toluene	1,4-DCB
MWHD4	May-94	27.4		120				1,010		9.7								
	Jun-94	99.4		281	34.9			3,100										
	Sep-95	800	2	3,000	340			16,000	2	84		4		1	2	5	2	
	Mar-96	53	1	270	44			780		9			5					
	Jun-96	38	2	330	36			690		6								
	Sep-96	21	3	130	20			230		7								
	Dec-96	22		190	33			390		3								
	Mar-97	12		150	26			260		2								
	Jun-97 (SM)	25	1	130	68			260		4								
	Jun-97	46		360	71.7			929		18.2								
	Sep-97 (SM)	170		550	110			2,600					26					
	Sep-97	163		640	78.8			2,680		13.6								
	Nov-97	52.2		313	44.7			572										
	Dec-97	44		530	42			640		7								
	Mar-98	8	4	48	22			110		3								
	Jun-98	20	8	130	52			200		2								
	Sep-98	120	8	450	61			1,600	1	28	3							
	Dec-98	33	3	77	22			80										
	Jan-99	13.6	4.8	64.8	18	302		80.7								80.7		1.4
	Jan-99D	14.6	5	69.4	18.7	319		83.2		2.9								1.4
	Apr-99	17.2	7.8	92	28.4		2.8	98.2										1
SCGs		5	5	5	5		5	5	2	5	50	5	5	5	7	1	5	3

J-Estimated Value
SM - Tested by Soil Mechanics concurrently

TCE - Trichloroethene
PCE - Tetrachloroethene
1,1-DCE - 1,1-Dichloroethene
1,1-DCA - 1,1-Dichloroethane

Freon 12 - Dichlorodifluromethane
Freon 113 - Trichlorotrifluoroethane
1,1,1-TCA - 1,1,1-Trichloroethane
1,2-DCE - 1,2-Dichloroethene

1,2-DCA - 1,2-Dichloroethane
1,1,2-TCA - 1,1,2-Trichloroethane
1,2-DCE - 1,2-Dichloroethene
1,4-DCB - 1,4-Dichlorobenzene

Table 3 E - Groundwater Contamination

All values in parts per billion (ppb)

WELL	DATE	TCE	PCE	1,1-DCE	1,1-DCA	Freon 11	Freon 12	1,1,1-TCA	Vinyl Chloride	1,2-DCE	MTBE	Chloroethane	1,3-DCB	1,4-DCB
MWHD5	May-94	3.68	113		8.81			24.7		2.57			0.9	
	Jun-94	3.05	32.6		7.76			37						
	Sep-95	4	1		2				3	7				
	Mar-96	2							1	8	2			
	Jun-96	3			1				1	3				
	Sep-96	4	1		2					9				
	Dec-96	3			1					4				
	Mar-97	2			2					2				
	Jun-97	2.3	1.2							0.65				
	Sep-97	2			1					4				
	Dec-97									2				
	Sep-98	1							2	3				
	Dec-98								2					
MWHD6	Jul-97	2.4	1		11.8			8.1						
	Sep-97	21.6	1.3	1.7	14.5			6.6				14		
	Nov-97	7			9.1			12.2				10.8		
	Jan-99	80.6	12	25	12.5	679		86.1						0.99
	Apr-99	11.1	7.5	10.9	5.69		2.7	38						0.99
SCGs		5	5	5	5	5	5	5	2	5	50	5	3	3

TCE - Trichloroethene
PCE - Tetrachloroethene
1,1-DCE - 1,1-Dichloroethene
1,1-DCA - 1,1-Dichloroethane
Freon 11 - Trichlorofluoromethane
Freon 12 - Dichlorodiflurormethane
1,1,1-TCA - 1,1,1-Trichloroethane
1,2-DCE - 1,2-Dichloroethene
MTBE - Methyl Tertiary Butyl Ether
1,3-DCB - 1,3-Dichlorobenzene
1,4-DCB - 1,4-Dichlorobenzene

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

101 Green Acres Road
Proposed Remedial Action Plan
Valley Stream (V), Nassau County
Site No. 1-30-084

The Proposed Remedial Action Plan (PRAP) for the 101 Green Acres Road Site, was prepared by the New York State Department of Environmental Conservation (NYSDEC) and issued to the local document repository on March 1, 2000. This Plan outlined the preferred remedial measure proposed for the remediation of the contaminated soil and sediment at the 101 Green Acres Road Site. The preferred remedy is No Further Action with groundwater monitoring.

The release of the PRAP was announced via a notice to the mailing list, informing the public of the PRAP's availability.

A public meeting was held on March 15, 2000 which included a presentation of the Remedial Investigation (RI), 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. Written comments were received from the Valley Stream Herald, the environmental consultant for the Bulova Corporation, and one private citizen. The public comment period for the PRAP ended on March 28, 2000.

This Responsiveness Summary responds to all questions and comments raised at the March 15, 2000 public meeting and to the written comments received.

There were a number of comments at the public meeting that were unrelated to the site, but which pertained to the Valley Stream/Mill Brook neighborhood. Those comments and questions regarding environmental concerns at local schools, the Mobil Oil spill, Brookhaven National Lab, diesel fuel emissions, MTBE, and the JFK Airport have been excluded from the responsiveness summary for the 101 Green Acres Road Site.

The following are the comments received at the public meeting, with the NYSDEC's responses:

COMMENT 1:
There is still some contamination left in the groundwater at the Site, but nothing is affecting the drinking water. Is nothing going to be done regarding the water at the Site? Why is nothing being done? Why do we have to wait until something happens?

RESPONSE 1:
The Remedial Investigation has shown that no further sources of contamination have been found other than those that have already been cleaned up and no significant concentrations of chemicals have migrated off-site in the direction of groundwater flow. The concentrations of the chemicals in the groundwater on-site have decreased significantly over the past four years, which indicates that a natural attenuation of residual contaminant concentrations is occurring. Because of the decreasing concentrations of these contaminants, and because there are no human or ecological exposures associated with these residuals, active remediation is not warranted at this site. A sentry monitoring well (sometimes called a sentinel or outpost monitoring well) is being installed off-site in the downgradient direction to monitor possible migration of chemicals in the future. The ROD also calls for a deed restriction to prohibit the use of on-site groundwater to be used for potable purposes.

COMMENT 2:
Is groundwater moving underneath the Site?

RESPONSE 2:
Groundwater is flowing under the site toward the southeast.

COMMENT 3:
Since there are a number of spills and inactive hazardous waste sites in the area, there is a concern regarding the increase of cancers in the neighborhood. When is cancer mapping going to be done for the neighborhood? What does the community have to do to get the cancer mapping done for the Green Acres neighborhood? Why can't the DEC and the DOH coordinate efforts to complete cancer mapping for the area? Who decides and makes the determinations for cancer mapping? Why can't the DEC do the cancer mapping? Someone should also plot the spills, hazardous waste sites, landfills, and airports on the cancer maps.

RESPONSE 3:
Re: The New York State Cancer Registry and Cancer Incidence Data
The New York State Cancer Registry, which is part of the New York State Department of Health (NYSDOH) in Albany, is one of the oldest cancer registries in the country and has been collecting information on patients with cancer for more than 50 years. The first State regulation that required the reporting of cancer cases diagnosed in New York State, excluding New York City, was passed in 1940. In 1973, the law was extended to include reporting of information on cancer patients diagnosed in New York City. The Cancer Registry collects this information in order to conduct research.

Cancer incidence data are generally available for the county level. The NYSDOH is currently developing statewide cancer information for areas smaller than counties. This is part of the Cancer Surveillance Improvement Initiative which is discussed below.

Re: New York State Cancer Mapping Activities

In 1998, Governor Pataki directed NYSDOH to develop easy to understand information that would help answer people's questions about the number of cancer cases in their communities. NYSDOH started the Cancer Surveillance Improvement Initiative (CSII) in response to the Governor's request. The CSII, also known as the cancer mapping project, is a comprehensive project which will enhance the State's ability to track the occurrence of cancer by improving the New York State Cancer Registry, and through the use of maps, charts and other graphic representations of the geographic pattern of cancer cases. The initiative will also increase public understanding of cancer, its known or suspected causes and risk factors, in order to promote prevention and early detection.

An advisory committee consisting of cancer activists, environmental advocates, and national experts in cancer issues, geographic information systems (GIS) and health risk communication is working closely with NYSDOH to develop the maps and informational materials. Based on the committee's advice, several maps of cancer incidence have been or will soon be released.

The first set of maps produced under the CSII project, released in 1999, showed the incidence of cancer by county for breast cancer, lung cancer, and colorectal cancer. The second set of maps, published in March 2000, show incidence of cancer by county for the following types (anatomic sites) of cancer: bladder cancer, brain and other nervous system cancer, kidney and renal pelvis cancer, leukemia, liver cancer, non-Hodgkin's lymphoma, prostate cancer, and thyroid cancer. The selection of anatomic sites was based on criteria including overall incidence (number of new cases) of the disease, whether the incidence was increasing, and whether the disease has known or suspected causes or risk factors (lifestyle, genetic or environmental associations).

The county-level maps will be followed, starting in April 2000, by sub-county level maps based on zip code-level cancer data for the years 1993-1997. The sub-county level maps will incorporate state-of -the-art techniques to filter out statistical anomalies and better differentiate true cancer excesses from those caused by chance. The first sub-county map to be released will be for breast cancer and other sub-county level cancer maps will soon follow.

The sub-county cancer maps will help identify areas of elevated cancer incidence in zip codes across the State and, ultimately, will provide NYSDOH guidance on where resources and programs should be targeted. For example, the cancer maps might help guide the direction of future scientific studies, should unusual disease patterns emerge, through epidemiological studies. Other activities of the comprehensive CSII project may also help pinpoint future research needs.

Re: Mapping of Environmental Risk Factors

Another activity of NYSDOH's Cancer Surveillance Improvement Initiative will be the production of maps of some risk factors, things that may increase the chances of a person getting cancer. About 60 data sets are being considered for mapping, including environmental databases. NYSDEC and the United States Environmental Protection Agency (USEPA) have developed some

of these data sets. NYSDOH has prioritized the data sets. Preliminary maps of indoor air levels of radon and ambient air levels of benzene using USEPA data from its cumulative exposure project (air data from some industrial emissions, automobile emissions, etc.) have been discussed with the advisory committee.

Re: Cancer Incidence Investigations of Local Areas
Anyone with concerns about cancers near 101 Green Acres Road and other inactive hazardous waste sites can call the toll-free telephone number for the New York State Department of Health (NYSDOH) Center for Environmental Health (1-800-458-1158) to discuss their specific concerns. NYSDOH frequently responds to questions and concerns about cancer. Many inquiries result from a need for information about cancer, including its frequency, risk factors, relationship to age, and latency. (Latency refers to the length of time between exposure to a cancer-causing (carcinogenic) agent and the diagnosis of cancer. The latency period for adult cancers is estimated to range from 10 to 30 or more years.) It is often reassuring when information and educational materials are provided about cancer.

Unfortunately, cancer is a very common disease. One in two men and one in three women will be diagnosed with cancer at some time during their life. In New York State, nearly one in four deaths is due to cancer. Eventually, cancer occurs in three out of every four families. Cancer is not one disease, but a group of diseases. There are more than 100 different types of cancer, each with different risk factors. Tumors originating in different organs (sites) are considered to be different diseases because of variation in cause, type of abnormal cells, course of the disease, prognosis and treatment. Cancers develop in people of all ages but most often in the middle-aged and the elderly. The number of cancer cases has risen dramatically over the past 40 years, but much of this increase is a reflection of the increase in the population, especially in older age groups. Prostate, lung and colorectal cancers are the most common types diagnosed among adult males. Breast, lung and colorectal cancers are the most common among adult females.

When an unusual pattern of cancer cases potentially related to a common environmental factor is suspected, NYSDOH is able to evaluate Cancer Registry data for small geographic areas using information on residential addresses at the time of the cancer diagnoses. There are a number of factors NYSDOH researchers look for when evaluating whether cancer patterns in a given area may be unusual. These include: (1) several cases of the same or similar types of cancer in a small geographic area; (2) several cases of the same or similar types of cancer diagnosed in a short time-frame; (3) unusual numbers of a relatively rare cancer or cancers; or (4) a large number of cases of a cancer occurring in an unusual age group for that type of cancer. The issue of latency is also evaluated in order to assess the possibility of a cause and effect relationship between cancer cases and environmental factors.

COMMENT 4:
Many residents have private wells and they are not aware of the Bulova Site or the dangers of the contaminated water. New homeowners and real estate agents especially should be notified about

not using the wells. There is not enough publicity regarding the wells and not using any contaminated groundwater. How are we going to get them notified about this information? Whom do we have to talk to regarding testing for indoor air and private wells? If the homes are using private wells, are they going to tell the Nassau County Department of Health?

RESPONSE 4:
There are several State and County regulations in effect which are intended to discourage the use of non-regulated (i.e., private) sources of water and encourage the use of regulated (i.e., public) water supplies. Nassau County Public Health Ordinance Article IV prohibits the installation of private drinking water wells in areas served by public water supply wells. Also, the New York State Uniform Fire Prevention and Building Code requires the use of public water for all residential buildings within 100 feet, and commercial buildings within 500 feet, of an available public water source. With respect to private wells, the Nassau County Department of Health (NCDOH) mailed surveys to homes immediately adjacent to the Bulova site to determine if any private wells existed. The County received two responses and was able to test one well (no contamination was present). Both homeowners were informed not to consume water from their irrigation wells.

In response to residents suggestions that additional outreach is conducted to homeowners outside the Bulova site area, the NCDOH will be requesting that all water suppliers in Nassau County inform their customers of the potential hazards associated with drinking non-regulated sources of water (i.e., water from private wells). Residents who have a private well can have it tested by contacting the NCDOH Bureau of Water Supply Protection at (516) 571-3323.

Lastly, the NCDOH Bureau of Environmental Investigation and Assessment reviews all complaints and concerns involving indoor air quality. Sampling of indoor air is performed when deemed necessary. Residents who have indoor air concerns should contact the NCDOH at (516) 571-3232.

COMMENT 5:
What kinds of storage tanks were located on the Site? How big were the tanks?

RESPONSE 5:
The underground storage tanks on the site contained fuel oil #2 or fuel oil #4. One tank contained 20,000 gallons of fuel oil and the other three tanks contained approximately 1,000 gallons.

COMMENT 6:
The Long Island Water Corporation never admits to the quality of the water. Who checks on the water quality from the Long Island Water Corporation? What is being done to monitor the groundwater quality for this district?

RESPONSE 6:
The Long Island Water Corporation mails an Annual Water Quality Report to all customers as required by the Federal Safe Drinking Water Act. The Annual Water Quality Report provides the results of all required water quality testing performed on the suppliers distribution water.

With respect to monitoring drinking water quality, Part V of the New York State Sanitary Code requires that the Long Island Water Corporation test each in-use supply well quarterly for bacteria and organic chemicals (including the organic chemicals found at the Bulova site), annually for inorganic chemicals. In addition, the district is required to collect and analyze 152 samples on a monthly basis from its distribution system for bacteria, 16 samples annually for organic chemicals, and eight samples annually for inorganic chemicals, and at least once every four years for radioactivity. All water analyses are performed by a private laboratory certified by the New York State Department of Health and all results are reviewed by the Nassau County Department of Health. The Nassau County Department of Health supplements the district sampling by collecting surveillance samples for bacteria, organic and inorganic chemicals on at least a monthly basis. Samples are collected from several locations within the Long Island Water Corporation's distribution system and analyzed at a County laboratory.

The district is required by law to notify all customers if testing detects any violation of stringent New York State Maximum Contaminant Levels for drinking water. The Long Island Water Corporation is in compliance with all required testing and the quality if water served to its customers meets all Federal and State drinking water standards.

COMMENT 7:
Columbia Aircraft used to construct planes in the 1940's. This company should also be included in the Site history since they disposed of paints, paint thinners, solvents, hydraulic fluids, and other chemicals. Chemicals used at the Columbia Aircraft property add to the cumulative effect of chemicals on illnesses in the Mill Brook neighborhood.

RESPONSE 7:
Columbia Aircraft was already included in the Site history of the Proposed Remedial Action Plan and is included in the Record of Decision. There is no information in the NYSDEC's files regarding the disposal practices of Columbia Aircraft. The wastes noted in the comment, if disposed of in significant quantities at the site, would have been discovered during the extensive environmental testing conducted at the site in the 1990's. With respect to the issue of cumulative effects of chemical exposure, the environmental testing at the site did not indicate any exposures of residents to contaminants from this site. Without exposure to site-related contaminants, no adverse health effects would be expected that could be attributed to these contaminants. In general, however, as the frequency and magnitude of exposures (that is, how often, how much, and for how long) from various chemical sources increases, the risk for adverse health effects also increases. As suggested in Response 3 above, the issue of cumulative exposure will be considered in the cancer and environmental risk factor mapping activities.

COMMENT 8:
The Mill Brook neighborhood has 847 homes previously named Green Acres Estates. The homes were built on top of the Curtis Wright Airfield and soil from the airfield was used as fill around the homes. What about the fill from the Curtis-Wright Airfield? Can there be a spot check in the neighborhood for contamination in the soil vapors and groundwater?

RESPONSE 8:
The files regarding the 101 Green Acres Site do not mention using soil from any of the potentially contaminated on-site areas as fill around the foundations of the homes in the Mill Brook community. Even if the Columbia Aircraft / Bulova property had already been contaminated by 1950, when construction of the Mill Brook homes began, it is not likely that soil would be excavated from an active operating facility to be used as construction fill elsewhere. We have not found any other documentation that this practice occurred. In addition, the contaminated soil from the Bulova - 101 Green Acres Road excavations in 1991 and 1993 were characterized and disposed in the proper off-site disposal facility. The State investigated the 101 Green Acres Road Site and the adjacent properties that were potentially impacted by the contamination. Extensive soil, soil vapor, air, and groundwater tests were conducted at and near the site and significant contamination was found only at certain areas of the site. Therefore, we do not expect that there would be site-related contamination on any of the nearby residential properties. If individuals have complaints regarding odors or water quality, the Nassau County Department of Health may be able to collect samples, as noted in response 6 above.

COMMENT 9:
In 1991, contamination was found during the investigation, but nothing else was found. In 1993, more contaminated soil and an additional tank were found. Is it only during Site redevelopment that contamination is generally found? Were the excavations the only time that the tanks were found on-site?

RESPONSE 9:
The excavations were not the only reason that tanks were found on the Site. Three of the underground storage tanks were already known to Bulova and removed in 1991 to prevent further leaking and soil contamination. During demolition of the buildings and redevelopment of the Site in 1993, the second interim remedial measure occurred when an additional underground storage tank was found at the site under one of the buildings. In general, contaminated sites are often discovered indirectly by routine testing of the State's water resources. Other sites are discovered during environmental assessments conducted for lending institutions or lenders prior to the purchase of potentially contaminated properties.

COMMENT 10:
As monitoring has continued, there have been decreasing concentrations of chemicals in the groundwater, which means that there were elevated levels in the past. Have the concentrations

affected the groundwater and possibly the community by contributing to cancers in the neighborhood? What health effects are associated with these chemicals?

RESPONSE 10:
The groundwater contaminants at this site are not known to have affected any private or public water supply wells. When investigating the possibility of a link between health effects and environmental contamination, the nature and magnitude of exposure (if any) to the contaminants must be evaluated. In order for a substance to potentially affect a person's health there must be direct contact with the substance either through inhalation, ingestion, or direct skin contact. Without any such exposure, the contaminants cannot affect public health. There have been no known exposures of residents to contaminants from this site.

The contaminants of concern at the former Bulova site are common solvents that have historically had widespread use. Some of these chemicals, particularly 1,1,1-trichloroethane, 1,1-dichloroethene, tetrachloroethene, and trichloroethene, have caused nervous system and liver damage in humans (such as industrial workers) exposed to high concentrations of the chemicals. Similar adverse effects have been observed in laboratory animals exposed to high concentrations of these chemicals. Exposure to high concentrations of some of these chemicals may also result in damage to the cardiovascular system, immune system, lungs, kidneys, and blood. Additionally, of the four chemicals listed above, all but 1,1,1-trichloroethane cause cancer in laboratory animals exposed to high levels over their lifetimes. Chemicals which cause adverse health effects in humans and laboratory animals exposed to high concentrations may also pose a risk of adverse health effects in humans who are exposed to lower levels over long periods of time. As stated above, there have been no known exposures of residents to contaminants from this site.

COMMENT 11:
What point in Bulova's history did the contamination begin?

RESPONSE 11:
The records do not indicate when the contamination at the Bulova - 101 Green Acres Road Site began.

COMMENT 12:
The homes that had indoor air sampling were not located behind the Bulova property. The other homeowners that have their homes behind the Bulova property were never told or notified about the contamination. How can three houses that aren't close to the Bulova property been tested?

RESPONSE 12:
An investigation of subsurface soil vapors on the Bulova property indicated elevated levels of volatile organic compounds (VOCs) in soil vapor at one corner of the property. Indoor air testing was done in the home immediately adjacent to this area and in the two homes next to (one on either side) this one. The testing did not indicate any impacts from the VOC vapors in these three homes,

the ones that were closest to the vapors. Consequently, there was no need to investigate a larger area with respect to the soil vapors. Because groundwater contaminants typically migrate further than vapors, the Nassau County Department of Health notified a greater number of residents (approximately 40 homes nearest the site in a downgradient direction) about the investigation and requested permission to sample any irrigation wells that these residents might have.

COMMENT 13:
There are numerous cancer deaths in the neighborhood. In 17 homes, 10 people died of cancer. One home also had three successive owners that died of cancer. There's proof of cancer in the community. How can this be explained? How is it related to the Site?

RESPONSE 13:
Unfortunately, cancer is a very common disease. As noted above in Response 3, one in two men and one in three women will be diagnosed with cancer at some time during their life. In New York State, nearly one in four deaths is due to cancer. Eventually, cancer occurs in three out of every four families. Cancer is not one disease, but a group of diseases. There are more than 100 different types of cancer, each with different risk factors. Risk factors are things that have been associated with an increased chance of getting a disease, although they are not necessarily a direct cause of the disease. For cancer, risk factors include personal risks (family history of cancer, diet, and many others) as well as exposure to cancer causing agents (smoking, sunlight, X-rays, certain chemicals, etc.).

There are several factors that the DOH researchers look for when evaluating whether cancer patterns in a given area may be unusual. These are discussed in Response 3 above.

When investigating the possibility of a link between health effects and environmental contamination, the nature and magnitude of exposure (if any) to the contaminants must be evaluated. As noted above in Response 10, in order for a substance to potentially affect a person's health there must be direct contact with the substance either through inhalation, ingestion, or direct skin contact. Without any such exposure, the contaminants cannot affect public health. Often, geographic areas where exposures may have occurred have too small a population for conducting a health study that would provide conclusive findings about exposure and effect. There are no known exposures to neighboring residents from residual contaminants at the 101 Green Acres Road site.

Anyone with concerns about cancer in a particular vicinity can contact the NYSDOH Center for Environmental Health at 1-800-458-1158 to discuss their concerns. If an unusual pattern of cancer is described, NYSDOH will determine if additional follow-up is needed. If the cancer cases involve a variety of different cancer types diagnosed over many years and among many older people, it would not represent an unusual pattern.

COMMENT 14:
Where is the public record for this Site? How long will the documents be there? Can the documents be viewed on the internet?

RESPONSE 14:
The public records for the Site are located at the Valley Stream Public Library, the NYSDEC Region 1 office in Stony Brook, and the NYSDEC Central office in Albany. The library has control over the length of time that the public record remains. However, the records will be kept in the Region 1, and in the Central office for 30 years. The documents cannot be viewed on the internet.

COMMENT 15:
Were wells at the Forest Road School tested and included in the investigations at the 101 Green Acres Road Site? Are the Forest Road School wells planned to be tested in the Operations and Maintenance Plan?

RESPONSE 15:
The irrigation well at the Forest Road School was not included in the Remedial Investigation at the 101 Green Acres Road Site due to the distance from the Site and the lack of significant contamination leaving the Site. For this reason, the Forest Road School well is not planned to be included in the Operations and Maintenance Plan. However, the Nassau County Department of Health, will test the well in the near future for the types of chemicals at the former Bulova site. This testing will supplement the tests for gasoline compounds already completed for that well.

COMMENT 16:
Metals were detected in the site investigations. Which metals were found at the site? Will metals be tested in the Operations and Maintenance plan? How much arsenic was found and where did it come from?

RESPONSE 16:
Copper, lead, and arsenic were found at the Site during the Phase I Investigation in 1990 at low levels. Since metals are not contaminants of concern at the Site, testing for metals will not be included in the O&M Plan. Arsenic was found in the groundwater at 40 ppb, above the standard of 25 ppb. There is no indication in the records that arsenic was used on the Site, but a common reason for arsenic contamination is from the use of pesticides.

COMMENT 17:
Were there any radioactive materials at Bulova? Would Bulova have covered up any usage of radioactive materials at the Site?

RESPONSE 17:
This issue was raised by NYSDEC and NYSDOH during previous discussions with Bulova. In response, Bulova provided information about the company's use of radioactive materials. Bulova Corporation is licensed to import, distribute, and repair products containing tritium and promethium only at its locations in Woodside and Maspeth. The Valley Stream facility was not listed on these licenses as there was no activity requiring the use of any radioactive materials at the site.

Because of concerns about the historic use of radium in early aircraft dials and gauges, NYSDOH walked the property with a micro-R radiation detection meter. No unusual readings were recorded at the site. Additionally, two soil samples were collected from the site and tested for radionuclides by gamma spectroscopy. Only background levels of naturally occurring radioactive materials were detected in those samples.

COMMENT 18:
Who was held responsible for the contamination in 1991 and 1993 at the Site? Who paid for the expenses related to the excavations and investigations? Were there any penalties related to the contamination?

RESPONSE 18:
The Bulova Corporation has accepted responsibility for the contamination that was found in 1991 and 1993. Bulova paid the expenses relating to the site investigations and the interim remedial measures. There were no penalties associated with this work.

COMMENT 19:
When is the groundwater monitoring starting and stopping at the Site?

RESPONSE 19:
Groundwater testing at the site began in 1991 and has been occurring on a regular basis since that time. The Bulova Corporation and the present site owner each carry out their own program of testing. The formal groundwater monitoring program required by this Record of Decision, will begin when the Operations and Maintenance Plan has been approved by the DEC, which is expected in the summer of 2000. The monitoring will continue for two years. At that time, the Site data will be evaluated to determine if further monitoring or additional investigations are necessary.

COMMENT 20:
There are monitoring wells in the neighborhood that are regularly tested. Can this data be included in the monitoring for the Site?

RESPONSE 20:
The data referred to, from Nassau County Department of Public Works monitoring wells, has been reviewed and will continue to be reviewed (as new future test results become available) in the context of this and other environmental investigations in the Valley Stream area.

COMMENT 21:
Since there were tanks on the Site, how big was the spill? What kind of spill did it look like? Was there a large spill?

RESPONSE 21:
The size of the spill could not be determined, but there was some dark soil staining evident at the location of the underground storage tanks. There was no indication in the records that there was a large spill at the 101 Green Acres Road Site. By way of comparison, a spill of 1,1,1-trichloroethane (the primary contaminant at the former Bulova site) occurred in 1988 in the nearby village of Freeport. It is estimated that several hundred gallons of the solvent were released into that site's environment on that occasion. Groundwater contamination at the Freeport site, which is currently being addressed under the NYSDEC inactive hazardous waste site program, is approximately ten times greater than the highest levels ever detected at the former Bulova site.

LETTER #1 - An email dated March 20, 2000 was received from Robert Remler from the Valley Stream Herald which included the following comments:

COMMENT 1A:
Is this 101 Green Acres Road Site going to remain a Class 2 site?

RESPONSE 1A:
The site is being reclassified from a Class 2 site to a Class 4 site. Eventually, the Site will be removed from the registry altogether when there is no longer any contamination that presents a potential threat to human health or the environment at the Site.

COMMENT 1B:
A breast cancer study, referenced at the public meeting, was conducted four or five years ago in the Town of Islip, Suffolk County. A NYSDEC representative stated that she had worked on that study and "they did not find any link to breast cancer in the environment." Please comment.

RESPONSE 1B:
The statement is correct, except that the NYSDEC did not work on the study. The study was done by the NYSDOH to investigate cancer incidence near the Dzus Fasteners inactive hazardous waste site for the years 1982-1991. In summary, the investigation, which included three census tracts in the Town of Islip, found that the overall cancer incidence among males was similar to expected and the overall cancer incidence among females was significantly lower than expected. Among

males, no statistically significant elevations or deficits were found for any specific cancer site. Among females, statistically significant deficits were found for cancers of the breast and uterine cervix, and no statistically significant elevations were found. None of the types of cancer that have been linked to cadmium exposure (the contaminant of concern at the Dzus site) in the scientific or medical literature was found to be elevated.

COMMENT 1C:
A NYSDEC representative stated at the public meeting that, "unfortunately cancer is no longer an anomaly on Long Island." Please comment.

RESPONSE 1C:
The statement was made and its intent was to underscore the fact that cancer incidence in Long Island, as with the rest of New York State, is unfortunately a common occurrence. This is discussed in greater detail above in Responses 3 and 13.

COMMENT 1D:
When there is a land transaction an environmental assessment is made of the site. Is this always the case?

RESPONSE 1D:
Although there is not legal requirement, many businesses in general conduct an environmental assessment (sometimes called an environmental audit) prior to purchasing a property to make sure that they are not buying into any environmental problems.

COMMENT 1E:
In response to a question from the audience, the DEC said that they had no documentation that soil had been moved and used in foundations of existing homes in the Mill Brook community. Please comment.

RESPONSE 1E:
There is no documentation in the files of soils being removed from the 101 Green Acres Road - Bulova Site for use on residential properties. See Response 8 above for additional information.

COMMENT 1F:
At the public meeting a NYSDEC representative said that having a leaking underground tank is not illegal as long as you fix the problem. Please comment.

RESPONSE 1F:
Many thousands of underground storage tanks (USTs) were in use prior to the promulgation of regulations for USTs. However, a contaminant release to groundwater is a violation. Under existing law and regulations, the operators and owners of leaking tanks and the owners of the

properties on which they exist are responsible to remediate such tanks and to cleanup the associated contamination.

COMMENT 1G:
How would NYSDEC respond to the resident who stated after the public meeting: "When the DEC rep Susan McCormick said that an environmental study found no links between breast cancer and the environment on Long Island, she was spreading serious and detrimental misinformation?"

RESPONSE 1G:
Susan McCormick doesn't believe that she is spreading misinformation, only recalling her reading of several studies issued between 1988 and 1992. During that period, four reports were issued as part of the Long Island Breast Cancer Study, a collaborative effort by NYSDOH, the Department of Community and Preventive Medicine at SUNY-Stony Brook, the Nassau County Department of Health and the Suffolk County Department of Health Services. The second report, "Risk Factors, Regional Distribution, Pathology Appraisal, Evaluation of Selected Bias, and Water Sources and Landfills," looked at two potential environmental risk factors: residence in regions that at one time had a known contaminated water supply and residence in a census tract that had one or more landfills. The findings suggested that water source is not a risk for breast cancer in Nassau County, and the investigation did not indicate an increased risk for women residing near landfills. The fourth report, "Termiticide Use and Breast Cancer risk," noted that the data analyzed provided no consistent evidence of an association between residential termiticide or chlordane application and the risk of breast cancer among women in Nassau or Suffolk Counties. An additional study published by NYSDOH during this time, "Small Area Analysis of Breast Cancer Incidence Rates, 1978-1987," examined the relationship between breast cancer incidence and contaminated drinking water wells and hazardous waste sites based on actual incidence rates for individual census tracts. That study did not find any consistent association between high breast cancer incidence rates and residence in a water district with one or more contaminated wells or hazardous waste sites. In addition, living in a census tract with a hazardous waste site was not found to be related to breast cancer incidence rates.

A subsequent study issued by NYSDOH in 1994, "Residence Near Industries and High Traffic Areas and the Risk of Breast Cancer on Long Island," found an association between living near chemical facilities on Long Island and the risk of breast cancer in post-menopausal women. The association was more pronounced for post-menopausal women who lived near chemical plants from 1965 to 1975 compared to 1975 to 1985 when State air pollution control standards had become more stringent. The study found no association between residence near industry and breast cancer for pre-menopausal women. No association was found between breast cancer risk and traffic volume.

A major new study sponsored by the National Cancer Institute, the Long Island Breast Cancer Study Project, is currently in progress. This project is a $21 million, multi-study effort to examine if environmental factors are responsible for breast cancer in Suffolk, Nassau, and Schoharie

counties in New York State and Tolland County, Connecticut. This effort will examine a number of potential environmental risk factors including select pesticides and polychlorinated biphenyls (PCBs), electromagnetic fields (EMFs) and power lines, and polycyclic aromatic hydrocarbons (PAHs) which result from burning fossil fuels, cigarettes and other things. Preliminary results from the first component of this study are expected to be released some time in the year 2000.

LETTER #2 - A letter dated March 24, 2000 was received from Thomas Fusillo and Michael Potts from the ENVIRON International Corporation which included the following comments:

COMMENT 2A:
Based on information from former Bulova personnel, former weapons systems related operations at the Site involved the final assembly of fuses for artillery and safety and arming devices for missiles. Components containing explosives were provided to the Site on a pre-assembled basis and Site operations did not involve loading or handling of bulk explosives.

RESPONSE 2A:
The NYSDEC acknowledges the additional historical information provided by ENVIRON for Bulova, but a previous ENVIRON Phase III Site Evaluation Report (July 1991) states that TNT was loaded into fuses on-site.

COMMENT 2B:
The Storb Environmental 1990 site investigation was not performed for Bulova, but for a potential buyer of the property.

RESPONSE 2B:
The NYSDEC acknowledges the additional historical information provided by ENVIRON.

COMMENT 2C:
Figure 2 from the PRAP should be revised to depict the correct locations of the underground storage tanks.

RESPONSE 2C:
Figure 2 has been modified to illustrate the more appropriate locations of the underground storage tanks.

COMMENT 2D:
The PRAP states that the regional area of the site is underlain by the Jameco Gravel. As stated in ENVIRON's "Geologic Review and Well Record Search Results," the Jameco Gravel is not present at the Site. Also, the PRAP states that the Raritan Clay may act to prevent further migration of contaminants into the aquifer. The remedial investigation did not detect contamination below the Gardiners Clay so the investigation did not continue to the Raritan Clay, which is located 485 feet below the ground surface. Local groundwater flow patterns may vary

from regional patterns due to presence of groundwater discharge areas, such as Valley Stream and Clear Stream.

RESPONSE 2D:
The comment has been acknowledged and the Record of Decision has been amended to include the additional geologic information provided by ENVIRON. The information in the cited reference depicts the boundary of the "inferred extent" of the Jameco Gravel very close to the site. Without a confirmatory on-site investigation to that depth, some uncertainty would still remain.

COMMENT 2E:
Two well searches were also completed by ENVIRON for Bulova in addition to the well searches conducted by the Nassau County Department of Health and the New York State Department of Health.

RESPONSE 2E:
The NYSDEC acknowledges the previous file searches done by ENVIRON for Bulova to locate existing wells in the area. The NCDOH homeowner specific well survey supplements these well searches with very localized information.

COMMENT 2F:
Upgradient wells at the Site have detected concentrations of volatile organic compounds, which may indicate that an upgradient source may be contributing to the contamination on-site.

RESPONSE 2F:
The NYSDEC acknowledges that there may be an upgradient source that may contribute to some of the contamination on-site.

COMMENT 2G:
Bulova believes that the reported concentrations of several VOCs in the OS-5 groundwater sample are unrelated to the conditions at the Site. OS-5 is located approximately 1,000 feet south of the Site and several industrial properties are located between the Site and sample location OS-5. Samples taken at the Airport Industrial Office Park (AIOP), located between the Site and sample OS-5, did not suggest that the site-related contaminants were migrating beneath the AIOP and in the direction of OS-5.

RESPONSE 2G:
The opinion of Bulova and ENVIRON is acknowledged.

COMMENT 2H:
Freon compounds were not detected at the Site at the southeast corner until 1997. Bulova has not owned or operated the Site since 1993. Based on recent detections of Freons in the groundwater and that no Freon source areas were detected in the investigations, Bulova believes that the

reported concentrations of Freon are related to recent activities at or in the vicinity of the Site and that no further action is warranted on the part of Bulova regarding the Freons in groundwater.

RESPONSE 2H:
Freon will be included in the analysis of groundwater samples during the continued groundwater monitoring on-site and off-site. The NCDOH has interviewed Home Depot regarding any recent usage of Freon on-site. Home Depot has not or does not use the Freons that have been detected in recent groundwater samples. However, Bulova did use and store Freon during operations at the site, according to NYSDEC and NCDOH records.

COMMENT 2I:
Site specific data gathered during the investigations at the Site have not identified evidence of disposal activities. Prior to connection to the municipal sanitary sewer system, Bulova discharged sanitary and wastewater discharges to the on-site septic systems. No records have been identified which indicate that Bulova's operations at the Site involved the discharge of hazardous substances to the ground surface or that the septic systems were used for hazardous waste disposal.

RESPONSE 2I:
The information regarding the on-site septic systems has been included in the ROD.

LETTER #3 - A letter was received from Howard Wollman, a resident from Valley Stream, on March 15, 2000. The concerns expressed in Mr. Wollman's letter were also verbalized at the public meeting and are responded to above in Responses 1, 3, 7, 8, and 13.

APPENDIX B

Administrative Record

Administrative Record Index File
101 Green Acres Road Site
Site #1-30-084

1. File Index: 101 Green Acres Road Site, Site #1-30-084

2. 101 Green Acres Road , Record of Decision, March 2000

3. Correspondence File that consists of the following:

   a. ENVIRON Corporation to NYSDEC, August 4, 1994
   b. NYSDEC Correspondence to Home Depot, November 22, 1995
   c. ENVIRON Corporation to NYSDEC, Proposed Supplemental Ground Water Investigation, October 29, 1997
   d. NYSDEC Correspondence to Robert Weber, August 14, 1998
   e. Soil Mechanics to NYSDEC, Groundwater Results, January 26, 1999
   f. NYSDEC Correspondence to Home Depot, March 16, 1999
   g. Nassau County Department of Health (NCDOH), December 21, 1999
   h. ENVIRON to NYSDEC, Supplemental Remedial Investigation, March 26, 1999
   i. NYSDOH to NYSDEC, Comments Regarding Work Proposal, April 8, 1999
   j. NYSDEC to NCDOH, August 26, 1999
   k. Howard Wollman to NYSDEC, March 13, 2000

4. Phase I Environmental Site Assessment, Certified Engineering and Testing Company (CET), July 1990

5. Phase II Environmental Study, Storb Environmental, Inc., December 1990

6. Phase III Site Evaluation, ENVIRON Corporation, July 1991

7. Phase II Environmental Assessment, AKRF, Inc., February 1993

8. Results of August 4, 1993 Post Demolition Soil Sampling, ENVIRON Corporation, September 1, 1993

9. Inactive Hazardous Waste Disposal Report, NYSDEC, April 4, 1997

10. Geologic Review and Well Records Search, ENVIRON Corporation, April 16, 1998

11. Groundwater Delineation Investigation, ENVIRON Corporation, May 27, 1998

12. Groundwater Delineation Investigation Results, ENVIRON Corporation, August 5, 1998

13. Supplemental Soil Characterization, ENVIRON Corporation, December 16, 1998

14. Geotechnical Advisory Memorandum, NYSDEC, January 13, 1999

15. Geotechnical Advisory Memorandum, NYSDEC, February 12, 1999

16. Remedial Investigation Results, ENVIRON Corporation, June 15, 1999

17. Historical Site Assessment Reports and Investigation Summary, ENVIRON Corporation, September 22, 1999

18. Fact Sheet for Availability of Proposed Remedial Action Plan, NYSDEC, February 2000

19. Fact Sheet for Record of Decision, NYSDEC, March 2000

20. Operations and Maintenance Plan, ENVIRON Corporation, March 2000

21. QA/QC Data 1990-1999