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PHASE II ENVIRONMENTAL STUDY

HYDROGEOLOGIC SITE EVALUATION AND PROPERTY ENVIRONMENTAL SITE ASSESSMENT

Bulova Technologies Plant
TOWN OF HEMPSTEAD, NEW YORK

December 4, 1990

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RECOMMENDATIONS AND EXECUTIVE SUMMARY:

Storb Environmental Incorporated completed a Phase II Hydrogeologic Environmental Site Assessment at the Bulova Technologies Plant located at Green Acres Road West, Town of Hempstead, New York. Bulova Technologies is involved in the development, manufacturing and testing of detonator fuses for various weapons systems. The scope of this investigation included the installation of groundwater observation trenches performed to obtain representative samples of groundwater at various locations around the periphery of the subject site. Groundwater samples were collected from five (5) observation trenches and locations up-gradient and down-gradient the subject facility.

The groundwater samples collected in Trench No. 1 and Trench No. 3 were determined to be environmentally clean with no sample showing any outstanding concentrations of E.P.A. Priority Pollutant List (P.P.L.) Volatile Organic or P.P.L. Metal contamination above established background levels. The sample collected in Trench No. 2 was determined to contain trace concentrations of Tetrachloroethene (7.0 PPB). The concentration reported is **above** the E.P.A. Maximum Contaminant Level (MCL) for safe drinking water. The groundwater sample collected from Trench No. 4 was determined to be environmentally clean with one (1) exception. Arsenic (As) concentrations reported in this sample exceeded the State level of 25 PPB. The groundwater sample collected in Trench No. 5 was determined to contain excess concentrations of several Priority Pollutant List (P.P.L.) Volatile Organic compounds and P.P.L. Metals above Federal and State regulatory levels. Groundwater sample results indicate these components are migrating away from the site and are originating somewhere beneath the western building.

Tetrachloroethene and the reported associated derivatives are components of degreasers and solvents currently used at the site. Detection of excess concentrations of chromium and lead in this sample also indicate potential contamination of groundwater by cutting oils also generated at the site.

Groundwater occurs at depths ranging from between two (2) to five (5) feet below facility grade. Groundwater exists in three distinct aquifers beneath the site. The Long Island Aquifer System includes this upper surface aquifer and the lower Magothy Formation and Lloyd Sand Member of the Raritan Formation, both of Cretaceous age. These two (2) deeper aquifers are classified as confined aquifers. The Long Island Aquifer System is classified as a sole source aquifer. The direction of groundwater flow beneath the Bulova Technologies property is directly north to south.

Based on the Phase II Environmental Site Assessment and groundwater sampling program performed at the subject site, Storb Environmental Incorporated offers the following recommendations:

First, Storb Environmental recommends that the New York Department of Environmental Conservation (DEC) and the Nassau County Department of Health be notified by Bulova Technologies concerning detectable concentrations above Federal and State safe drinking water standards for the P.P.L. Volatile Organic compounds and P.P.L. Metal concentrations reported in groundwater samples collected. The need for further monitoring and/or contaminant recovery should be determined by the New York Department of Environmental Conservation and the Nassau County Department of Health.

Second, it is recommended to EQK Green Acres, L.P. that the underground petroleum storage tanks at this location be removed or replaced in accordance with current Federal and State guidelines for removing or upgrading underground petroleum storage tanks prior to property acquisition. Should visible contamination by petroleum hydrocarbons be encountered in soil and/or groundwater, the New York Department of Environmental Conservation and the Nassau County Department of Health should be notified.

Third, the identified surface soil contamination around the area of installation of the underground storage tanks and a number of ground level pipes that exit the west side of the western building be excavated and properly removed from the site as part of the

underground tank removal/upgrade program.

Fourth, concerning PCB content of all transformers at the subject site should be tested for PCB content. Prior to disposal, a determination of PCB content for each transformer is required by New York and Federal regulations. This documentation should be provided prior to any transfer of the subject facility.

Lastly, it is the recommendation of Storb Environmental that the hazardous materials currently used and stored at the site are the responsibility of Bulova Technologies. These substances should be disposed of by Bulova's hazardous waste disposal contractor with appropriate disposal documentation provided prior to any transfer of the subject facility.

PHASE II ENVIRONMENTAL STUDY
HYDROGEOLOGIC SITE EVALUATION AND
PROPERTY ENVIRONMENTAL SITE ASSESSMENT
BULOVA TECHNOLOGIES PLANT
TOWN OF HEMPSTEAD, NEW YORK

LOCATION:

BULOVA TECHNOLOGIES PLANT
GREEN ACRES ROAD WEST
TOWN OF HEMPSTEAD, NEW YORK 11581
CONTACT: MR. AL DIETRICH - VICE PRESIDENT, OPERATIONS
(516) 561-2600
(SEE SITE LOCATION MAP ON PAGE 2)

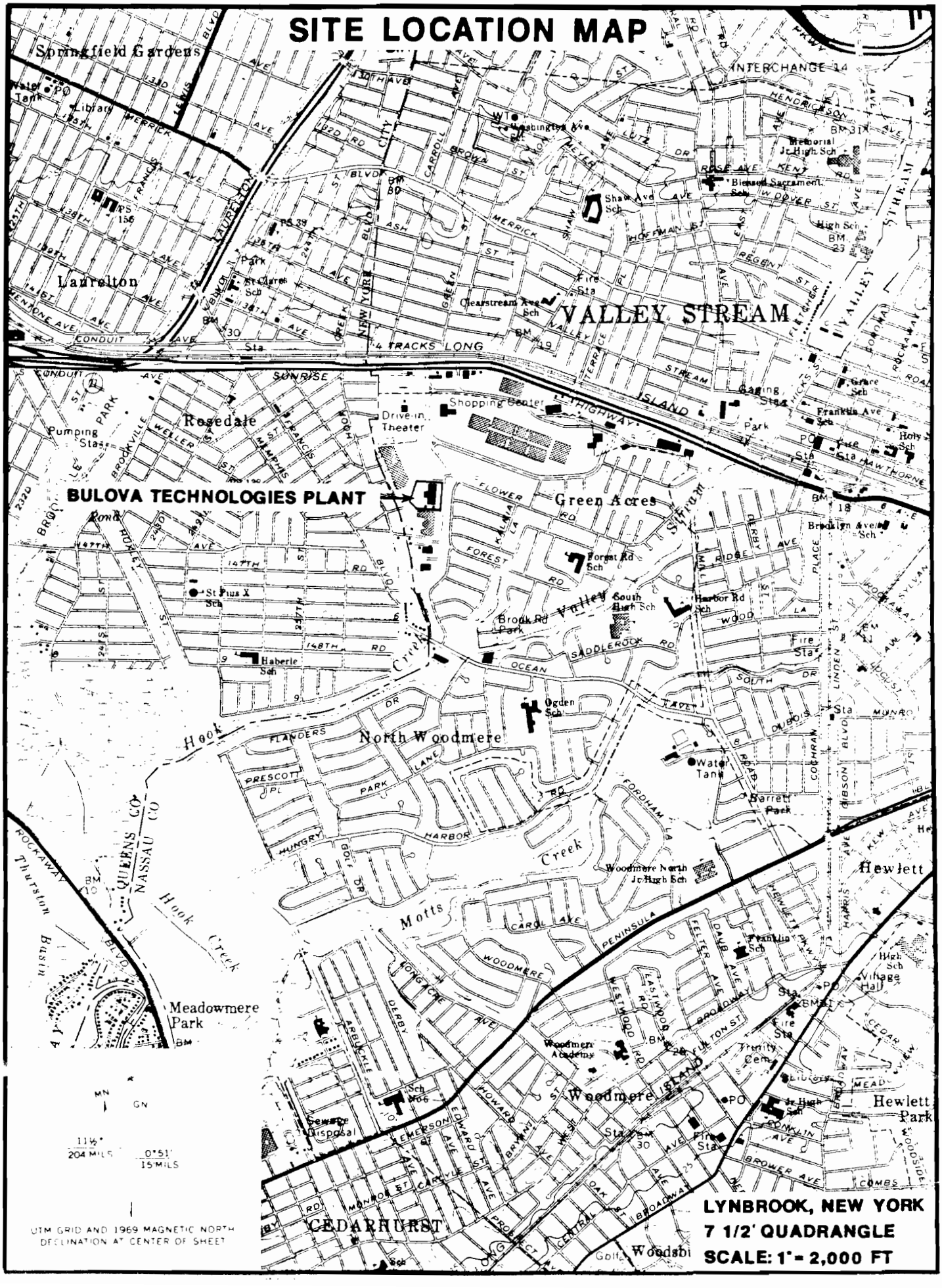
DESCRIPTION OF ACTIVITY:

The subject facility is situated on a seven plus acre site consisting of 314,000 square feet within the Town of Hempstead, Nassau County, New York. The subject location is presently used as a manufacturing and development facility for the development, manufacture, and testing of detonator fuses for various types of weapons systems. Assembly of product components, complete with testing laboratory, clean room, degreasing operations, inspection area, and storage and shipping areas are all performed at the subject site for customers of Bulova Technologies. Company offices for business performance are also located at the site. The property consists of two (2) large interconnected buildings surrounded by asphalt and concrete parking areas. The east and west buildings at the Bulova Technologies Facility were constructed in the 1920's and 1960's respectively.

A history outlining the known past uses of the subject site are detailed in the Phase I Environmental Site Assessment in Appendix I.

ENVIRONMENTAL ENGINEERING REQUIREMENTS:

In October, 1990, Storb Environmental Incorporated was contracted by EQK Green Acres, L.P. to perform a Phase II Environmental Site Assessment Study for a site in the Town of Hempstead, New York. This study was commissioned to perform Phase II Site Assessment project management, groundwater sampling, laboratory analysis, data evaluation, preparation of a Phase II Property Environmental Site Assessment Report complete with Registered Professional Engineer Certification for the evaluation existing subsurface environmental conditions


SITE LOCATION MAP
BULOVA TECHNOLOGIES PLANT
Springfield Gardens
Laurelton
Rosedale
VALLEY STREAM
Green Acres
North Woodmere
Woodmere Island
Hewlett
Hewlett Park
Meadowmere Park
CEDARHURST
INTERCHANGE 14
4 TRACKS LONG
Shopping Center
Drive-in Theater
Pumping Sta
Water Tank
Fire Sta
Sewage Disposal
Golf
Hook Creek
Motts Creek
Valley Stream
Brook Rd Park
Barrett Park
Woodmere North Jr High Sch
Valley South High Sch
Memorial Jr High Sch
Blessed Sacrament Sch
Shaw Ave Sch
Clearstream Ave Sch
Franklin Ave Sch
Grace Sch
Holy Sch
Brooklyn Ave Sch
Forest Rd Sch
Harbor Rd Sch
St Pius X Sch
Haberle Sch
Ogden Sch
Franklin Sch
Woodmere Academy
Trinity Cem
Village Hall
Jr High Sch
High Sch
PS 156
PS 39
St Clares Sch
Library
Post Office
Gaging Sta
QUEENS CO
NASSAU CO
LYNBROOK, NEW YORK
7 1/2' QUADRANGLE
SCALE: 1" = 2,000 FT
UTM GRID AND 1969 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET
MN
GN
11½°
204 MILS
0°51'
15 MILS

at the above location. This Phase II Site Assessment was initiated to assess the recommendations set forth in the Phase I Environmental Site Assessment performed by Certified Engineering and Testing Company, Incorporated (CERTIFIED) dated July 31, 1990.

The purpose of this study was to determine if existing groundwater beneath the Bulova Technologies site had become environmentally contaminated with any United States Environmental Protection Agency (EPA) Priority Pollutants resulting from prior or present operational use of the subject property. This Phase II Environmental Site Assessment of groundwater was promulgated for the purpose of obtaining bank financing for a pending acquisition of the subject site. This Phase II Study was requested by the prospective buyer of the property.

HYDROGEOLOGIC ASSESSMENT:

The following Phase II Hydrogeologic Assessment at the Bulova Technologies Plant facility is based on existing sub-surface conditions observed during performance of observation trench excavation and groundwater sampling. The environmental assessment of the hydrogeologic conditions at this location was obtained from groundwater samples collected around the periphery of the subject property. Topographic elevations at the site are effectively flat and range from approximately five (5) to ten (10) feet above mean sea-level. An area map showing the site location on a United States Geological Survey 7.5' topographic map is shown on the Site Location Map on page 2.

No rock outcrops at or near the surface at the Bulova Technologies Plant property. The predominant soil type is alternating layers of light to dark brown, fine to medium grained sand of Quaternary age. Long Island is largely covered by glacial deposits, including outwash, which provide excellent groundwater aquifers for the migration of groundwater. The sediments of coastal plain areas consist of complex sequences of interbedded sand, silt, clay and limestone. This type of sequence yields significant volumes of water and is classified as a unconfined aquifer. The hydraulic properties (mainly porosity) of this upper aquifer are generally considered

excellent. The Long Island Aquifer System includes this upper surface aquifer and the lower Magothy Formation and Lloyd Sand Member of the Raritan Formation, both of Cretaceous age. According to Buxton, Fifty-nine (59) percent of groundwater flow is limited to the upper glacial aquifer. Thirty-eight (38) percent of groundwater enters the underlying Magothy aquifer and only three (3) percent migrates into the Lloyd aquifer. These two (2) deeper aquifers are classified as confined aquifers. Groundwater flow decreases with depth. The Long Island Aquifer System is also classified as a sole source aquifer. To classify as a sole source aquifer, the aquifer must supply fifty (50) percent of the people in the region with drinking water. Additionally, any contamination of the aquifer would present significant risk to public health.

Bedrock was not observed in any of the groundwater observation excavations. Groundwater migration in glacial deposits usually has strong radial flow components differentiated from linear flow which is more common in less porous rocks. The overall thickness and lateral extent of these glacial deposits is not known.

The local water table observed at the time of groundwater sampling in the excavations appears to vary between two (2) to five (5) feet below facility grade. This is variable with seasonal fluctuations and local precipitation conditions. The nearest surface water body is Hook Creek which traverses the west side of the property.

The direction of groundwater flow beneath the Bulova Technologies property is directly north to south (See Direction of Groundwater Migration in Appendix III). This conclusion is based on surface geomorphology and related recharge rates of groundwater observed in the observation trench excavations.

GROUNDWATER OBSERVATION TRENCH EXCAVATIONS:

Due to the normally high water table predominant throughout the Long Island area, it was determined that groundwater samples could be obtained more economically through a trenching program utilizing a backhoe than with

the installation of permanent nested monitor wells or test borings. Five (5) trench locations were located around the periphery of the site during a walk-thru of the subject property performed on October 19, 1990. The location of these trenches were placed adjacent previously identified areas of concern at the site and adjacent property boundaries where practical (See Groundwater Sample Location Maps in Appendix V). The backhoe used by the contractor was steam cleaned prior to excavation of each observation trench to prevent introduction of outside contamination into trench groundwater. The groundwater observation trench excavations were performed by the following contractor:

Carmine Fantozzi, Limited
1 Bryant Place
Island Park, New York 11558
(516) 889-4721
Contact: Mr. Thomas Fantozzi

Excavation of the groundwater observation trenches were performed on November 13, and 14, 1990. The trenches were excavated to a depth of six (6) to seven (7) feet below grade depending on elevation (See Vertical Cross-Sections of Excavations in Appendix IV). Upon completion of each observation trench excavation, groundwater was purged and pumped out three (3) times prior to sampling to insure that representative formation water was obtained. The trenches were excavated in sequence and allowed to recharge with representative groundwater prior to pump out performance. No precipitation was reported or observed during the two (2) days of excavation, groundwater sampling. Backfill of the trenches was performed at a later date.

SITE GEOLOGY:

The soil profiles observed in each observation excavation consisted of a very thin layer of topsoil or "A" Horizon ranging from four (4) to six (6) inches in true width. The predominant soil type of the "A" Horizon was grassy sod with associated root structure (See Vertical Cross-Sections of Excavations in Appendix IV). The "B" Horizon consisted of alternating layers of light to dark brown, fine to medium grained sand. The thickness of the "B"

Horizon varied from the depth below the "A" Horizon, to groundwater depth. The top of bedrock was not encountered in each of the excavations performed to varying depths below facility grade. Minor to moderate quartz pebbles were encountered in each excavation profile. The soil horizons observed in each excavation were extremely porous and typical of glacial deposits of soil resulting from receding glacial activity. The overall depth to bedrock is not known.

GROUNDWATER SAMPLING:

Groundwater sampling and laboratory analysis were performed in accordance with the strictest standards of quality control. Upon completion of each observation trench excavation, groundwater was developed and purged three (3) times prior to sampling performance. This was performed to insure that representative formation water was obtained. Groundwater was allowed to recharge prior to each subsequent pump-out. Pump-out of each excavation was performed using a fifty (50) gallon-per-minute pneumatic pump. The pump housing and transfer hoses were cleaned and decontaminated prior to each trench pump-out with Alconox soap and distilled water.

Seven (7) representative groundwater samples were collected. One (1) groundwater sample was obtained in each of the five (5) groundwater observation trench excavations installed around the periphery of the subject property (SAMPLE POINT 1 through SAMPLE POINT 5 at Trench No. 1 through Trench No. 5 respectively). Two (2) additional samples were also collected from a drainage bordering the west side of the subject property. This drainage is identified as Hook Creek. The sample collected from the up-gradient drainage (SAMPLE POINT 6) was performed to verify any if any E.P.A. Priority Pollutants may be originating from another unrelated pointsource relative to the subject location. Another groundwater sample (SAMPLE POINT 7), was collected to determine background levels for any potential environmental contamination discharging to surface water from the surrounding area (See Groundwater Sample Location Maps in Appendix V). Surface examination of drainage swales on the property indicate that groundwater beneath the Bulova Technologies Plant drains into the

Hook Creek temporary drainage (See Direction of Groundwater Migration in Appendix III). Samples were collected on Tuesday, November 13, and Wednesday, November 14, 1990 and submitted to the laboratory for analysis on Thursday, November 15, 1990.

Groundwater samples collected for Priority Pollutant (P.P.L.) Volatile Organic analysis were sealed in 40 cc smoked glass containers equipped with Teflon seal lids. Four (4), forty (40) milliliter (ml) samples were collected at each sample point with great attention taken to assure that no air bubbles were trapped in the samples collected. Samples collected for Polychlorinated Biphenyl (PCB) concentration determination were filled in two (2) separate one (1) liter amber glass containers and sealed. Additionally, the samples analyzed for E.P.A. Priority Pollutant List (P.P.L.) Metals concentration determination were collected in a single one (1) liter plastic container and sealed. Lastly, samples collected for Total Organic Halogen (TOX) determination were filled in three (3) separate 250 milliliter amber glass containers and sealed. Each container was filled for the analytical parameter requested and marked with the corresponding sample number relative to each separate trench excavation. All sample containers were immediately stored on ice after collection in coolers and transported at 4 degrees Celsius to the laboratory and accompanied with proper chain of custody documentation. All sample containers requiring preservation were preserved in conformance to ASTM D-4220-83 at the laboratory prior to sample collection. Analytical results were received by our office from the laboratory on November 27, 1990.

Groundwater sampling in the excavations was performed on groundwater at depths of approximately two (2) to five (5) feet below existing grade of the excavated trenches. The samples collected up-gradient and down-gradient the Bulova Technologies Plant facility were collected at depths of approximately five five (5) to eight (8) feet below facility grade. Samples were collected at the following times:

SAMPLE NUMBER	TYPE	DATE COLLECTED	TIME COLLECTED
SAMPLE POINT 1	WATER	11/13/90	14:55 EST
SAMPLE POINT 2	WATER	11/13/90	15:20 EST
SAMPLE POINT 3	WATER	11/13/90	15:40 EST
SAMPLE POINT 4	WATER	11/13/90	16:05 EST
SAMPLE POINT 5	WATER	11/13/90	16:30 EST
SAMPLE POINT 6	WATER	11/14/90	11:40 EST
SAMPLE POINT 7	WATER	11/14/90	12:25 EST

LABORATORY ANALYSIS:

Laboratory analysis was performed by the following New York Department of Environmental Conservation Certified Analytical Laboratory:

Lancaster Laboratories Incorporated
2425 New Holland Pike
Lancaster, Pennsylvania 17601-5994
(717) 656-2301
New York Department of Environmental Conservation Laboratory Certification Identification Number: **10670**

A detailed spectrum of analytical parameters was performed on groundwater samples collected from each observation trench excavation (SAMPLE POINT 1 through SAMPLE POINT 7). The samples were analyzed for E.P.A. Priority Pollutant List (P.P.L.) Purgeable Volatile Organic determination by E.P.A. Method 624. This list includes thirty (30) volatile organic compounds determined to be Priority Pollutants by the United States Environmental Protection Agency (EPA). Additionally, each sample was submitted for a Volatile Organic analysis library search to potentially identify any additional volatile concentrations not included in the P.P.L. list. This list includes fifteen (15) additional volatile organic compounds. The concentration determination reported using this procedure enhances a parts-per-billion (PPB), or ug/l, Contract Required Quantitative Limit (CRQL) from Gas Chromatography/Mass Spectrometry (See Groundwater Sample Certificates of Analysis and Sample Chain of Custody Record in Appendix II).

Groundwater samples were also analyzed for Polychlorinated Biphenyl (PCB) concentration determination by E.P.A. Method 8080. This method also has a PPB (parts-per-billion), or ug/l, detection limit from Gas Chromatography/Mass Spectrometry. The list of PCB compounds reported using this procedure and the quantitative analytical detection limits are as follows:

COMPOUND TRADE NAME	DETECTION LIMIT
Aroclor 1016	2.0 PPB or ug/l
Aroclor 1221	2.0 PPB or ug/l
Aroclor 1232	2.0 PPB or ug/l
Aroclor 1242	2.0 PPB or ug/l
Aroclor 1248	2.0 PPB or ug/l
Aroclor 1248	2.0 PPB or ug/l
Aroclor 1254	2.0 PPB or ug/l
Aroclor 1260	2.0 PPB or ug/l

The groundwater samples were also analyzed for E.P.A. Priority Pollutant List (P.P.L.) Metals concentration. This list includes thirteen (13) elemental metals determined to be Priority Pollutants by the United States Environmental Protection Agency. The concentration determination reported using these procedures enhances a parts-per-million (PPM) Contract Required Quantitative Limit (CRQL) from Atomic Absorption Spectrophometry (See Groundwater Sample Certificates of Analysis and Sample Chain of Custody Record in Appendix II). The list of Priority Pollutant List Metals concentrations reported using this procedure and the quantitative analytical detection limits are as follows:

METAL	E.P.A. METHOD	LIMIT OF DETECTION
Antimony (Sb)	EPA 204.1	0.01 PPM or mg/l
Arsenic (As)	EPA 206.3	0.05 PPM or mg/l
Beryllium (Be)	EPA 210.1	0.005 PPM or mg/l
Cadmium (Cd)	EPA 213.1	0.005 PPM or mg/l
Chromium (Cr)	EPA 218.1	0.05 PPM or mg/l
Copper (Cu)	EPA 220.1	0.02 PPM or mg/l
Lead (Pb)	EPA 239.1	0.05 PPM or mg/l
Mercury (Hg)	EPA 245.1	0.0005 PPM or mg/l
Nickel (Ni)	EPA 249.1	0.04 PPM or mg/l

METAL	E.P.A. METHOD	LIMIT OF DETECTION
Selenium (Se)	EPA 270.3	0.005 PPM or mg/l
Silver (Ag)	EPA 272.1	0.01 PPM or mg/l
Thallium (Tl)	EPA 279.1	0.1 PPM or mg/l
Zinc (Zn)	EPA 289.1	0.02 PPM or mg/l

Lastly, the groundwater samples were analyzed for Total Organic Halogen (TOX) determination by E.P.A. Method 9020. This was performed to determine background levels entering the subject site from up-gradient groundwater migration and the presence of halogenated volatile organic hydrocarbons resulting from past or present uses of the subject site.

SOIL CONTAMINATION EVALUATION:

Visual surface examination of the Facility conducted at the time of groundwater sampling indicated no unusual accumulation of petroleum contaminated soils. No soil samples were collected. Please note that no definitive limits have been established by State or Federal Agencies concerning contaminated soil. All contaminated soil designation is done on a case-by-case, site specific basis.

The Phase I Study identified surface soil contamination around the area of installation of the underground storage tanks and a number of ground level pipes that exit the west side of the western building. It is the recommendation of Storb Environmental that this material be excavated and properly removed from the site as part of the underground tank removal/upgrade program. Areas of excavation should be sampled and analyzed to ensure complete removal of potential soil contamination from each of these locations. Soil from these excavations should be segregated by location and properly stockpiled for disposal at facilities approved by the New York Department of Environmental Conservation.

SAMPLE ANALYTICAL EVALUATION:

Representative groundwater samples were collected as

noted from each observation trench excavation and locations up-gradient and down-gradient relative to the Bulova Technologies site (See Groundwater Sample Location Maps in Appendix V). The water samples collected in each observation trench was determined to be representative of groundwater conditions discharging through the subject site (See Direction of Groundwater Migration in Appendix III). The up-gradient and down-gradient samples of surface water were collected to determine background levels for the requested analytical parameters relative to the subject site. The following table summarizes detected concentrations of analytical parameters for all samples submitted for laboratory analysis:

SAMPLE POINT 1:

TOX	50 PPB or ug/l
Copper	30 PPB or ug/l
Lead	80 PPB or ug/l
Zinc	90 PPB or ug/l

SAMPLE POINT 2:

Trichloroethene	7 PPB or ug/l
TOX	20 PPB or ug/l
Copper	30 PPB or ug/l
Zinc	80 PPB or ug/l
Selenium	6 PPB or ug/l

SAMPLE POINT 3:

TOX	50 PPB or ug/l
Copper	40 PPB or ug/l
Zinc	80 PPB or ug/l

SAMPLE POINT 4:

TOX	40 PPB or ug/l
Arsenic	40 PPB or ug/l
Copper	50 PPB or ug/l
Lead	90 PPB or ug/l
Zinc	220 PPB or ug/l

SAMPLE POINT 5:

trans-1,2-Dichloroethene	7 PPB or ug/l
1,1,1-Trichloroethane	18 PPB or ug/l
Trichloroethene	28 PPB or ug/l
TOX	10 PPB or ug/l
Arsenic	20 PPB or ug/l
Cadmium	9 PPB or ug/l
Chromium	110 PPB or ug/l
Copper	560 PPB or ug/l
Lead	140 PPB or ug/l
Nickel	70 PPB or ug/l
Zinc	630 PPB or ug/l

SAMPLE POINT 6: (Up-Gradient)

TOX	70 PPB or ug/l
Copper	20 PPB or ug/l
Lead	50 PPB or ug/l
Zinc	140 PPB or ug/l

SAMPLE POINT 7: (Down-Gradient)

TOX	70 PPB or ug/l
Copper	20 PPB or ug/l
Zinc	120 PPB or ug/l

The groundwater samples collected in Trench No. 1 and Trench No. 3 were determined to be environmentally clean with no sample showing any outstanding concentrations of E.P.A. Priority Pollutant List (P.P.L.) Volatile Organic or P.P.L. Metal contamination above established background levels. The sample collected in Trench No. 2 was determined to contain trace concentrations of Tetrachloroethene (7.0 PPB). The concentration reported is **above** the present E.P.A. Maximum Contaminant Level (MCL) for safe drinking water concerning this compound. Tetrachloroethene is a component of degreasers currently used at the site. Detection of selenium in this sample also indicates potential contamination of groundwater by cutting oils also generated at the site although P.P.L. Metal concentrations for this sample (Sample Point 2) were determined to be within acceptable Federal and State limits.

The groundwater sample collected from Trench No. 4 was

determined to be environmentally clean with one (1) exception. Arsenic (As) concentrations reported in this sample exceeded the State level of 25 PPB. However, the concentration reported were within acceptable Federal limits. State requirements supersede Federal limits in this case.

The groundwater sample collected in Trench No. 5 was determined to contain excess concentrations of several Priority Pollutant List (P.P.L.) Volatile Organic compounds and metals above Federal and State regulatory levels. Analytical results discovered volatile organic concentrations of trans-1,2-Dichloroethene, 1,1,1-Trichloroethane and Trichloroethene (TCE). The concentration level of Trichloroethene exceeds Federal limits. Levels of the other two detected compounds are within acceptable Federal limits. The location of the sample location point indicate these components are migrating away from the site and originating somewhere beneath the western building. Tetrachloroethene and the reported associated derivatives are components of degreasers and solvents currently used at the site. Detection of excess concentrations of chromium and lead in this sample also indicate potential contamination of groundwater by cutting oils also generated at the site. Levels of these metals were also **above** acceptable Federal levels. Additionally, cadmium was detected in this sample (9.0 PPB) below the maximum Federal limit of 10 PPB.

Analytical results obtained from all the groundwater samples collected indicated no detectable concentrations (<2.0 PPB) of Polychlorinated Biphenyls (PCB's) whatsoever. These results indicate that PCB contamination of groundwater at this site is not a significant factor.

Total Organic Halogen (TOX) concentrations reported in samples collected from the observation trench excavations indicate **below** background levels relative to the up-gradient and down-gradient surface water samples collected. Both off-site surface water samples reported background levels of TOX at 70 PPB, or ug/l, above and below relative the subject site (See Groundwater Sample Location Maps in Appendix V). All concentrations of TOX reported in samples obtained from the observation trench

excavations were **below** background levels. These results also indicate that TOX contamination of groundwater at this site is not a significant factor.

Federal primary maximum contaminant levels (MCL's) for safe drinking water standards provide the basis for acceptable groundwater cleanup levels for these compounds. These levels have been established by the United States Environmental Protection Agency (EPA) and provide for the protection of public health. The Federal MCL levels for safe drinking water for the volatile organic compounds and metals detected in groundwater samples collected for this Phase II Environmental Assessment are as follows:

SUBSTANCE	MCL LIMIT
Trichloroethene	< 5.0 PPB or ug/l
trans-1,2-Dichloroethene	< 100.0 PPB or ug/l
1,1,1-Trichloroethane	< 200.0 PPB or ug/l
Total Organic Halogens	None Established
Arsenic	< 50.0 PPB or ug/l
Cadmium	< 10.0 PPB or ug/l
Chromium	< 50.0 PPB or ug/l
Copper	None Established
Lead	(At Source) < 5.0 PPB or ug/l (Proposed, Currently Under Review)
Nickel	< 100.0 PPB or ug/l
Selenium	< 50.0 PPB or ug/l
Zinc	< 5.0 PPM or mg/l

These MCL limits for safe drinking water are available in the "Drinking Water Regulations and Health Advisories" dated November, 1990 published by the Environmental

Protection Agency.

As previously noted, the Long Island Aquifer System is designated a sole source aquifer by the New York Department of Environmental Conservation. Under this designation, the groundwater protection standards that facilities must meet is either the background level for the site or the level reported in the following chart, whichever is **higher.** These levels have been established by the State for the protection of public health.

SUBSTANCE	MAXIMUM CONCENTRATION
Arsenic	< 25.0 PPB or ug/l
Cadmium	< 10.0 PPB or ug/l
Chromium	< 100.05 PPM or mg/l
Lead	< 100.25 PPM or mg/l
Selenium	< 10.0 PPB or ug/l

PETROLEUM STORAGE TANKS:

Visual examination performed during facility inspection and confirmation by Bulova Technologies Plant management verified the existence of three (3) underground and one (1) above-ground petroleum storage tanks currently in service on the property. The underground storage tanks (UST's) consist of one (1) 1,080 gallon no. 4 fuel oil, one (1) 1,800 gallon no. 4 fuel oil, and one (1) 20,000 gallon no. 4 fuel oil tank. The 1,080 gallon and 1,800 gallon UST's serve two (2) separate boiler systems used to heat the eastern building. The 20,000 gallon UST supplies fuel to a single boiler system used to heat the western building.

All existing underground petroleum storage facilities were required to be equipped with overfill prevention, consisting of special valves and gauges, by 1983. As part of this Environmental Assessment Report, it has been recommended to EQK Green Acres, L.P. that the underground storage tanks at this location be removed or replaced in

accordance with current Federal and State guidelines for removing or upgrading the UST's prior to property acquisition. This should be performed prior to transfer of ownership of the property. Federal regulations require tank owners to test for environmental damage resulting from the operation of the underground tank. Proper notification should be provided to the New York Department of Environmental Conservation (DEC) to meet the United States Environmental Protection Agency (EPA) technical regulations requiring thirty (30) days notification prior to performance of UST closure or change-in-service.

Identification of any past discharge of petroleum product from the operation of these tanks should be performed during the tank removal process. Additionally, surface staining of petroleum product around the two (2) smaller underground tanks identified in the Phase I Study should be removed and disposed of at facilities approved by the New York Department of Conservation. Soil from each excavation should be stockpiled separately on and covered with tarps at the site. Collection of soil and groundwater samples is recommended at the time the underground tanks are removed from service.

Per New York Department of Conservation requirements, soil samples should be collected approximately one (1) foot beneath the base of each tank in the middle and at each end along the entire width of each separate tank excavation. The need for further excavation of potential petroleum contaminated material should be based on the analytical results from the soil samples collected. It is recommended that the soil samples be analyzed for current State analytical requirements regarding closure/change-in-service of underground petroleum storage tanks. Soil samples should be analyzed for Benzene, Ethylbenzene, Toluene and Xylene determination by E.P.A. Method 8240 and semi-volatile organic concentration determination by E.P.A. Method 8270. Additionally, groundwater encountered during the course of tank removal should also be sampled for each separate excavation. Should visible contamination by petroleum hydrocarbons be encountered in soil and/or groundwater during the course of tank excavation and removal (either by odor or free floating product on groundwater), the New York Department of Environmental Conservation should be

notified at (516) 457-7362 by telephone within two (2) hours of discovery. Additionally, the Nassau County Department of Health should also be notified to determine local requirements. Excavation should be performed to "background levels" or the approval of regulatory authorities.

TRANSFORMERS:

There are six (6) or seven (7) electric transformers potentially containing dielectric fluid at the subject site. These transformers are all owned and operated by Bulova Technologies. The location and a description of these transformers are outlined in the Phase I Environmental Site Assessment in Appendix I. Written requests have been submitted to the Long Island Lighting Company and Bulova Technologies by Certified Engineering and Testing Company, Inc. concerning PCB content of all transformers at the subject site. Prior to disposal, a determination of PCB content for each transformer is required by New York and Federal regulations. No documentation or follow-up correspondence has been received by EQK Green Acres, L.P. concerning this matter. It is the recommendation of Storb Environmental that this documentation be provided prior to any transfer of the subject facility.

PCB's are considered a hazardous waste and should be disposed of accordingly. Fluid staining beneath the transformer located in the southern courtyard adjacent to the east building is not considered significant. Analytical results from the groundwater sample collected from Trench No. 5 indicate that PCB contamination of groundwater from any past leak of any of the transformers at this site is not a factor (See Groundwater Sample Location Maps in Appendix V). The location of this trench was proximal to this transformer.

ASBESTOS CONSTRUCTION MATERIALS:

Visual examination of the Bulova Technologies property indicate the occurrence of asbestos related materials used in the construction of both the east and west buildings at the site. The asbestos was observed in the

form of insulation used for hot water pipe insulation for the building heating systems. Visual examination of the asbestos insulation observed during facility inspection indicates that the insulation is in good to excellent condition and is presently not decaying or decomposing at excessive levels. No visible deterioration of the insulation was observed. As long as asbestos materials are left in place and not disturbed, the material poses little to no threat to the health of individuals using the facility. Observable condition of the insulation indicate exposure to individuals is below action levels. There appears no reason that exposure in the areas of non-contained insulation is in excess of action levels. The areas at the subject site with exposed insulation are not occupied by anyone for any extended lengths of time.

The Environmental Protection Agency (EPA) addresses the removal of friable (crumbly) asbestos material prior to building demolition or renovation. These Federal regulations presently apply to removal of friable asbestos from larger structures. The State of New York follows Federal asbestos requirements. However, asbestos removal contractors **must** be licensed by the New York State Labor Department. For more information and a list of qualified removal contractors, contact:

New York State Labor Department
State Campus
Building 12
Albany, New York 12240
(518) 457-9000

HAZARDOUS SUBSTANCES:

The Phase I Environmental Site Assessment in Appendix I defined a wide assortment of various hazardous substances used at the subject site. No evidence of leakage was observed in any of the containers or process areas where these substances are stored and used. Written requests have been submitted to Bulova Technologies by Certified Engineering and Testing Company, [illegible] ncerning various items outlined in the Phase I Study performed at the subject site. No documentation or follow-up correspondence has been received by EQK Green Acres, L.P. concerning these requests. It is the recommendation of

Storb Environmental that these hazardous materials currently used and stored at the site are the responsibility of Bulova Technologies. These substances should be disposed of by Bulova's hazardous waste disposal contractor with appropriate disposal documentation provided prior to any transfer of the subject facility.

NOTIFICATION OF REGULATORY AGENCIES:

The New York Department of Environmental Conservation (DEC) and the United States Environmental Protection Agency (EPA) have not been notified of any potential environmental groundwater pollution problem at the subject site. Storb Environmental Incorporated recommends that the New York Department of Environmental Conservation (DEC) and the Nassau County Department of Health be notified by Bulova Technologies concerning detectable concentrations above Federal and State safe drinking water standards for the P.P.L. Volatile Organic compounds and P.P.L. Metal concentrations reported in groundwater samples collected. The need for further monitoring and/or contaminant recovery should be determined by the New York Department of Environmental Conservation and the Nassau County Department of Health.

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