

**REMEDIAL INVESTIGATION AND
INTERIM REMEDIAL MEASURE
(RI/IRM) WORK PLAN**

**THE CONCORD HOTEL & RESORT SITE
Concord Road, Kiamesha Lake
Thompson, NY 12751**

October 2004

Prepared for:

**Concord Associates, LP
115 Stevens Ave
Valhalla, NY 10595**

Prepared By:

**JM Associates, Inc.
225 Railroad Ave
Bedford Hills, NY 10507**

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1.0 INTRODUCTION AND PURPOSE	1
2.0 SITE HISTORY AND DESCRIPTION	2
2.1 General Site Information	2
2.2 Site History	2
2.3 Planned Development	2
2.4 Previous Environmental Investigations	2
2.4.1 Zone 1	3
2.4.1.1 Main Hotel Complex	3
2.4.1.2 Main Parking Area Dump Site	4
2.4.1.3 Gas Station Area	4
2.4.1.4 International Golf Club House and Maintenance Building	5
2.4.2 Zone 2	5
2.4.2.1 Monster Club House	6
2.4.2.2 Chalet House and Chalet Dump Site	6
2.4.2.3 Golf Maintenance Building and Golf Maintenance Dump Site	7
2.4.3 Zone 3	8
2.4.3.1 International Golf Course Dump Site	8
2.5 Site Geology and Hydrogeology	9
3.0 INTERIM REMEDIAL MEASURES FIELD ACITVITIES PLAN	11
3.1 UST Excavations	11
3.1.1 Confirmatory Sampling	11
3.2 Chemical Removal	11
3.3 Asbestos Removal	11
4.0 REMEDIAL INVESTIGATION FIELD ACTIVITIES PLAN	13
4.1 Test Pit Investigation	13
4.2 Soil Sampling	13
4.3 Kiamesha Creek Sampling	13
4.4 Groundwater Investigation	13
4.4.1 Monitoring Well Installation	14
4.4.2 Well Development	14
4.4.3 Groundwater Sampling	14
4.4.4 Survey	15

SECTION	PAGE
5.0 HUMAN HEALTH EXPOSURE ASSESSMENT	16
6.0 FISH AND WILDLIFE IMPACT ANALYSIS	17
7.0 REPORTING AND SCHEDULE	18
7.1 IRM Report	18
7.2 RI Report	18
8.0 PROJECT ORGANIZATION	19
9.0 HEALTH AND SAFETY PLAN	20
10.0 QUALITY ASSURANCE / QUALITY CONTROL	21
11.0 CITIZEN PARTICIPATION	22

FIGURES

Figure 1	Site Location Map
Figure 2	Site Zones
Figure 3	Areas of Concern
Figure 4	Main Parking Area Dump Site
Figure 5	Phase II Main Parking Area Dump Test Pit Locations
Figure 6	Gas Station Sub Surface Investigation
Figure 7	Chalet Dump Site
Figure 8	Phase II Chalet Dump Test Pit Locations
Figure 9	Golf Maintenance Area Sub Surface Investigation
Figure 9A	Golf Maintenance Area 2001 Potable Well Location
Figure 10	Golf Maintenance Dump Site
Figure 11A	Phase II Golf Maintenance Dump Test Pit Locations
Figure 11B	Phase II Golf Maintenance Area Test Pit Locations
Figure 12	International Golf Course Dump Site
Figure 13	Phase II International Golf Course Dump Test Pit Locations
Figure 14	Phase II International Golf Course Dump Test Pit Locations
Figure 15	Phase II International Golf Course Dump Test Pit Locations
Figure 16	USGS Map
Figure 17	Gas Station Groundwater Sample Locations
Figure 18	Golf Maintenance Groundwater Sample Locations
Figure 19	Monitoring Well Detail
Figure 20	Schedule

TABLES

Table 1	Phase II Gas Station Sampling Results
Table 2	Phase II Golf Maintenance Area Sampling Results
Table 3	Phase II International Golf Course Dump Sample Results

APPENDICES

Appendix A	ECSI Phase II Report
Appendix B	March 18, 2002 Memo
Appendix C	Quality Assurance Project Plan
Appendix D	Health and Safety Plan
Appendix E	Citizen Participation Plan

1.0 INTRODUCTION AND PURPOSE

The purpose of this document is to outline the Remedial Investigation (RI) and Interim Remedial Measure (IRM) activities to be performed at the Concord Hotel & Resort Site ("Site") in Thompson, New York, Sullivan County. This RI/IRM Work Plan has been prepared as part of the Brownfield Cleanup Agreement executed between the owner of the site, Concord Associates, LP and the New York State Department of Environmental Conservation (NYSDEC). This Work Plan has been prepared in accordance with the NYSDEC Draft Brownfield Cleanup Program Guide dated May 2004 and the Draft DER-10 Technical Guidance for Site Investigation and Remediation dated December 2002.

The Site is currently improved with several hotel buildings, parking areas, recreational areas including tennis courts and golf courses, maintenance areas and unimproved areas. The Concord property occupies a total area of 1,729 acres and the Site consists of several separate areas that occupy a total of approximately 378 acres. Some of the buildings on the Site will be demolished and the Site will be redeveloped to contain a hotel and complex with retail establishments.

An IRM will be completed to remove underground storage tanks (USTs) located in several areas of the Site that have historically leaked and contaminated the surrounding soils with petroleum products. The RI is designed to investigate the extent of solid waste dump areas and to determine if groundwater at the Site has been impacted.

2.0 SITE HISTORY AND DESCRIPTION

2.1 General Site Information

The Concord Hotel & Resort Site is located in the Catskill Mountains, in the Town of Thompson, Sullivan County. The entire property is approximately 1,729 acres, with approximately 378 acres being the subject of this Work Plan.

The hotel at the site was once operated as a 1,200 room lodging facility with associated recreational facilities, including a swimming pool, tennis courts and golf courses. Two golf courses still remain active at the Site, the International and the Monster. A single club house remains active in close proximity to the golf courses and serves as a hotel, restaurant and retail store to support the golf courses.

The Site is located in a rural area and is surrounded by residential properties. A small shopping center, retail and food establishments are also located in the vicinity of the Site. Kiamesha Lake, a Class A waterbody, is located adjacent to the Site to the west, as shown on Figure 1. Kiamesha Creek and its tributaries flow through the Site. As outlined in the Phase II Report completed by Environmental Compliance Services, Inc. (ECSI), dated September 1998, the Leisure Time Water Company, a drinking water supply bottler, is located on the southwestern banks of Kiamesha Lake. Also noted in the Phase II is the existence of Kiamesha Artesian Spring Water Co. located at the northeast portion of the Lake. The Kiamesha Artesian Spring Water Co. provides potable water to nearby Village and Town residents and businesses, including the Concord facilities. The Phase II Report is attached as Appendix A.

2.2 Site History

The Concord Hotel has existed since the 1920's with several additions to the Resort over the years. According to the Phase II Report, a 1960 survey completed for the Resort indicated that the Swiss Chalet, the Club House, the Concord Service Station and the Golf Maintenance garage all existed in 1960. Several of the Main Hotel Complex structure shown in the 1960 survey no longer exists, and according to the Phase II Report, some of the buildings were removed to construct the new Towers in 1972. The Phase II also states that the former buildings were demolished and buried on site, either at the Main Hotel Complex, or at other Concord owned parcels.

2.3 Planned Development

The planned development for the site consists of the construction of a new hotel and recreation complex with retail establishments.

2.4 Previous Environmental Investigations

Previous environmental investigations performed at the site include a Phase I and Phase II, both completed by ECSI. Both the Phase I information and the Phase II are contained

in one report, entitled Phase II Environmental Site Assessment Report, dated September 1998, and is attached as Appendix A. The Phase II was conducted in 1998 and included areas of the site needing further investigation based on information obtained during the Phase I. The Phase II activities involved an extensive test pit and boring investigation to define the areas of contamination at the Site. Several of the areas investigated in the Phase II are the subject of this Work Plan. The remaining areas of the Concord property are being addressed separately under the New York State Voluntary Cleanup Program and through the NYSDEC Solid Waste Program. The areas that are the focus of this Work Plan, and the information obtained about each area during the Phase I and Phase II is summarized below. For the purpose of this Work Plan, the Site has been divided into Zones, with each zone containing certain areas of concern throughout the Concord property. A map showing each Zone is included as Figure 2 and Figure 3 shows the areas within each Zone. The Phase II is included for reference only and some of the information in the Phase II is outdated.

2.4.1 Zone 1

Zone 1 consists of areas in the northwestern portion of the property and includes the Main Hotel Complex, the Main Parking Area Dump Site, the Gas Station and the International Golf Club House and Maintenance Building. The total area of Zone 1 is approximately 203 acres.

2.4.1.1 Main Hotel Complex

The Main Hotel Complex consists of several buildings on the northwest portion of the Site. According to the Phase II, three tanks exist in the complex, two active 15,000 gallon underground storage tanks (USTs) and one inactive 1,500 gallon UST. The two 15,000 gallon tanks are located near the intersection of Concord Road and Kiamesha Lake Road (County Route 109). The tank registration information with the NYSDEC indicates that both tanks were tightness tested in 1989 and results indicated both tanks were tight. The tanks were also tightness tested on February 3, 1998 as part of the Phase II and both tanks passed. The tanks are no longer active and are empty. The tanks will be closed in place after completion of the RI, as part of the final remedy for the Site. The 1,500 gallon tank is located at the rear of the former bakery. At the time of the Phase II, the tank contained waste oil. The tank was emptied and tightness tested and the tank failed. Due to the failure of the tank, two borings were installed around the tank by ECSI to determine if surrounding soils had been impacted. A Photoionization Detector (PID) was used to screen the samples for potential contamination, and the results showed that there were no indications of a release. However, this UST will be removed after the RI as part of the final remedy for the Site.

Chemicals including solvents and paints are located within the Main Hotel Complex Building. The chemicals require proper disposal. Asbestos containing material (ACM) has also been identified throughout the buildings. Removal of ACM in certain portions of the Complex was initiated in 2002. The removal project was not completed and needs to be addressed due to exposed ACM.

2.4.1.2 Main Parking Area Dump Site

The Main Parking Area Dump Site is located east of the Hotel main parking area and adjacent to an unnamed tributary of Kiamesha Creek and a federally regulated wetland. As determined from the test pit investigation conducted during the Phase II, the area of the dump site is approximately 0.53 acres with an estimated volume of 3,000 cubic yards of waste. Groundwater seeps were observed at three locations at the base of the waste during the Phase II. The material observed in the dump was also stained by leachate. The age of the waste was estimated to be from the 1980's through the early 1990's and consisted of white goods, drapes, cloth, glass bottles, carpeting, assorted wood, bricks, scrap metals and tires. The map of the Dump is shown in Figure 4.

A total of fifteen (15) test pits were installed during the Phase II. The depth of the test pits ranged from 4 feet to 16 feet. Soil samples were collected from the base of the waste from four (4) of the test pits. Two samples were collected at a depth of 15 feet and two from a depth of 16 feet. The samples included RCRA and TCLP tests to determine if the waste was hazardous or nonhazardous. All sample results indicated that the waste is non-hazardous. The locations of the test pits completed in the Phase II are shown in Figure 5.

In 2001 and 2002, surface cleanup of the dump area and removal of solid waste from the streambed was performed. Empty steel tanks located at the southern end of the landfill were also removed and properly disposed of. The cleanup work performed was summarized in a memo to Andrew Lent of the DEC dated March 18, 2002, attached as Appendix B. In late 2002, with NYSDEC oversight, additional surface cleanup was completed and the slope of the dump area was capped with two (2) feet of clean fill. Debris was also removed from the stream bed.

2.4.1.3 Gas Station

The Gas Station is located southeast of the main Hotel entrance and southwest of the Main Parking Area Dump. The gas station was at one time known as the Kiamesha Concord Service Station. Information obtained during the Phase II from the former operator of the gas station indicated that four tanks were located on the Site, three 6,000 gallon gasoline USTs and one 2,000 gallon UST for diesel fuel. The previous operator indicated that the tanks were removed in 1991, but did not have documentation. The site work during the Phase II indicated that two USTs exist at the service station, estimated to be 10,000 gallons each. The tanks were not tested, but soil borings were installed around the tanks. Based on screening results of the soils, it was believed that the upgradient tank may have had a release.

An inactive 550 gallon UST was also located at the service station and was previously used for space heating purposes. The 550 gallon tank was tested during the Phase II and failed. Eight borings were installed around the tank and soils were screened with a PID. There was no indication of a release. The tank was pumped out and the fill pipe was covered.

During the Phase II, a subsurface investigation was completed in areas known to be the location of prior tanks and/or product transfer lines. An area located northeast of the service station building where former USTs were located was investigated and found to contain petroleum contaminated soils and groundwater. Six (6) soil samples and two (2) groundwater samples were collected and analyzed. The results are summarized in Table 1. An area in front of the building where tank islands and USTs were once located was also investigated and determined to be contaminated with petroleum products. Six (6) soil samples were collected and analyzed from this area. Groundwater was not encountered and was not sampled. The results from this area are also summarized in Table 1.

The Phase II also indicated that drains within the service station building were connected to the Town's sewer treatment plant. Three (3) lifts were also discovered during the Phase II located within the building. On-site personnel at the time of the Phase II indicated that an underground hydraulic oil holding tank surrounding each lift did not leak according to inventory records, but an investigation was not performed.

Locations of samples and borings completed during the Phase II investigation at the Service Station are shown in Figure 6.

Containers of chemicals including solvents also remain within the gas station building that require proper disposal.

2.4.1.4 International Golf Club House and Maintenance Building

It is suspected that the International Golf Club House was serviced by a septic system consisting of an above ground trickling filter system located south of the International Golf Course Dump, adjacent to Kiamesha Creek. The trickling filter has been dismantled but no sampling has been completed.

There are two (2) aboveground storage tanks (ASTs) located outside of the Building. The Building also contains miscellaneous chemicals that need to be properly disposed of.

2.4.2 Zone 2

Zone 2 consists of areas in the south/southeastern central portion of the site and includes the Monster Club House, the Chalet House and Chalet Dump Site and the Golf Maintenance Building and Golf Maintenance Dump Site. The total area of Zone 2 is approximately 170 acres.

2.4.2.1 Monster Club House

There is one active 12,000 gallon UST located outside of the Club House Building. The tank currently contains #4 Fuel Oil. The tank was tightness tested in 1989 and was due again in 1994, but no report of a 1994 test was found during the Phase II. The tank was tightness tested during the Phase II and passed. Information obtained during the Phase II indicated that the fuel oil from the tank is dispensed via gravity for furnaces. At one time, a pipe went from the club house to the Chalet, however, this pipe is no longer active. There are three ASTs at the club house, one of which is used for fueling the golf carts.

The Monster Club House and Chalet are serviced by a sand filtration treatment system down gradient from the Club House and west of the Maintenance Shop. The system is active and permitted under the NYSDEC SPDES permit for a pipe that leads from the sand filtration to direct effluent to the Kiamesha Creek. The permit is current, but there is no documentation as to the monitoring and record keeping requirements of the permit and it is unknown what, if any, monitoring has been completed.

2.4.2.2 Chalet House and Chalet Dump Site

The Chalet house and dump are located at the former skiing area. The Chalet house is located southwest of the former ski slope and is no longer active. The Chalet Dump Site is located to the southeast of the former ski slope. As mentioned above, the Chalet was serviced by the sand filtration treatment system that serviced the Chalet and the Monster Club House. Inside the basement of the Chalet House is an inactive 275 gallon AST. A 1,000 gallon AST was also found during the Phase II in a wooded structure outside of the house. The tank was pumped out during the Phase II.

Waste materials in the Chalet Dump consist of mainly C&D debris. The dump area was estimated to be approximately 0.15 acres in size and to contain approximately 1,710 cubic yards of waste during the Phase II. According to the Phase II Report, the waste is suspected to date back to the early to mid 1990's. The waste consists of assorted wood, cardboard boxes, carpeting, yard waste, white goods, tires, piping and electrical conduit. A map of the Dump is included as Figure 7.

A total of twelve (12) test pits were installed in the dump during the Phase II ranging from depths of 5 to 12 feet bgs. One soil sample was collected from a composite of two test pits and analyzed to determine if the waste was hazardous. The results indicated that the waste was nonhazardous. Locations of the test pits completed during the Phase II are shown in Figure 8.

In 2001 and 2002, surface cleanup of the dump area was performed. Logs, tires, metal and empty 55 gallon drums were removed and properly disposed of. Additional surface removal is required. The cleanup work performed was summarized in a memo to Andrew Lent of the DEC dated March 18, 2002, attached as Appendix B.

2.4.2.3 Golf Maintenance Building and Golf Maintenance Dump Site

The golf maintenance building was littered with old vehicles and maintenance equipment scattered around the outdoor of the shop at the time of the Phase II. The Phase II also indicated the existence of four inactive USTs, one 550 gallon, one 1,000 gallon, one 2,000 gallon and one 2,500 gallon. Two kerosene ASTs were also located in this area. All four USTs failed tightness testing completed during the Phase II. Soil borings completed near three of the tanks located north of the maintenance building indicated petroleum contaminated soil. Table 2 summarizes the results of the eleven (11) soil samples collected from this area.

Four soil samples were also obtained from the area around the 550 gallon UST during the Phase II investigation. The results indicated contaminated soils as summarized in Table 2.

Sample and boring locations completed during the Phase II at the Golf Maintenance Building as shown on Figure 9.

The Maintenance building has an active septic/leach tank system. The tank is located in the northwest corner of the shop building, in close proximity to the Concord Well and Kiamesha Creek. Shop floor washings are discharged to floor drains which connect to an underground sump tank located west of the shop building. Two borings were installed adjacent to the sump during the Phase II. Samples did not indicate a release. Sediment collected from the sump was also analyzed and did not indicate contamination.

Site inspections during the Phase II also revealed the storage of pesticides and herbicides in a shed at the maintenance facility. The chemicals are used by the golf maintenance staff. In 1997, a Quarantine Order was issued by the NYSDEC to dispose of the chemicals. The chemicals were properly disposed of at that time.

Approximately 100 feet upgradient and west of the maintenance building is a dump area estimated during the Phase II to be approximately 2.07 acres in size and to contain a volume of 8,570 cubic yards of waste. The dump area lies within a portion of a flood plain adjacent to Kiamesha Creek. The Phase II estimated the waste to date back to the late 1960s to the early 1990's and the waste consists of assorted wood, scrap metal, ash, tree sections, dishes, pans, bricks, concrete block, glass bottles and piping. A map of the dump is provided as Figure 10.

Three (3) MicroWell monitoring points were installed downgradient of the dump area as part of the Phase II investigation. Thirteen (13) test pits were installed within the dump at depths ranging from 6 to 16 feet below ground surface (bgs). Five (5) soil samples were collected from five test pits at varying depths. Ten (10) test pits were also located within the vehicle storage area around the maintenance building and ranged from 1 to 6 feet bgs. Three (3) soil samples were collected from three of the test pits. A surface water sample was also collected during the Phase II from a stream located between the

dump site and the vehicle storage area. The stream is a tributary to Kiamesha Creek. Locations of the test pits completed during the Phase II are shown in Figures 11A and B.

Soil sample results were analyzed to determine if the material was hazardous or nonhazardous. All sample results indicated that the material was nonhazardous. The surface water sample was tested for Part 360 parameters. The results indicated elevated levels of Toluene (8 ppb) and Benzene (0.9 ppb). Results of water samples from the wells indicated trace levels of toluene and xylene in Wells 2 and 3 located directly downgradient of the dump. The sample from Well 1 was analyzed for Part 360 parameters and indicated elevated levels of metals.

In 2001 and 2002, surface cleanup of the dump area was performed. Tires, metal and miscellaneous debris were removed and properly disposed of. Tires from the streambed were also removed and disposed of. Additional surface removal is required. The cleanup work performed was summarized in a memo to Andrew Lent of the DEC dated March 18, 2002, attached as Appendix B.

2.4.3 Zone 3

Zone 3 consists of the International Golf Course Dump Site, located in the northern central portion of the site, north of Zone 2. The total area of Zone 3 is approximately 5 acres.

2.4.3.1 International Golf Course Dump Site

This dump site is listed with the NYSDEC as a solid waste management facility with violations. The landfill is located at of Chalet Road, adjacent to Kiamesha Creek and was originally estimated to be approximately 1.02 acres in size. The NYSDEC issued an Order on Consent in 1989 to the previous owner of the facility (Kiamesha Concord, Inc.) to address the violations of the Environmental Conservation Law (ECL) at the landfill. The Order was never signed.

The estimated volume of the waste in the dump according to the Phase II is approximately 9,865 cubic yards and consists of assorted wood, scrap metal, ash, piping, bricks and electrical conduit. The waste is estimated to have been disposed from the 1970s to the early 1980's. The analytical results indicate that the waste is non-hazardous. It is unknown of the extent of the landfill has been properly defined.

In 1990 and 1991, a consultant for Kiamesha Concord, Inc. completed an investigation at the dump site with NYSDEC oversight. A test pit investigation was conducted and three (3) monitoring wells were installed and sampled. Monitoring wells 2 and 3 were located downgradient of a waste mass encountered during the investigation and monitoring well 1 was located upgradient. During this time, the NYSDEC collected soil samples, surface water samples from upgradient and downgradient in Kiamesha Creek and a sample of a seep 200 feet west of the Creek that discharges into the Creek. Sample results from the

investigation revealed indications of leachate in monitoring wells 2 and 3 and a soil sample collected 400 to 500 feet west of the Creek indicated petroleum contamination.

During the Phase II investigation, ECSI collected soil samples from three test pits within the dump, samples from the three monitoring wells, a sample of the seep and sediment samples from the Creek from a location upgradient and downgradient of the discharge point of the seep. Sample results indicated elevated levels of metals in the two downgradient monitoring wells (MW-2 and MW-3). Elevated levels of metals were also evident in the sediment samples. A summary of the results is provided in Table 3. A map of the dump site is included as Figure 12. Locations of the test pits completed during the Phase II are shown in Figures 13 through 15.

In 2001 and 2002, surface cleanup of the dump area was performed. Metal was removed from the wooded area and the trickling filter was dismantled. The cleanup work performed was summarized in a memo to Andrew Lent of the DEC dated March 18, 2002, attached as Appendix B.

2.5 Site Geology and Hydrogeology

According to the Phase II Report, the property lies over the NJ Coastal Plain Sole Source Aquifer. The main source of water in Sullivan County is groundwater. An unnamed tributary connects with the south end of Kiamesha Lake, and is classified as a Class C stream, which connects to Kiamesha Creek, also a Class C stream, and flows through the Concord property. Kiamesha Creek flows north through the Concord property and then south/southeast to the Sheldrake Stream, which is a tributary to the Neversink River. The Neversink River is located approximately 2.5 miles southeast of the property and flows to the Delaware River. A USGS Map is provided as Figure 16.

According to a Phase II, the Kiamesha Artesian Spring Water Co. receives water from two groundwater wells and from surface water of Kiamesha Lake to serve the surrounding community. As stated in the Phase II Report, one of the supply wells, the Concord Well, is located adjacent to the Golf Maintenance Shop, along Kiamesha Creek, within Zone 2 of the Site. The Report states that the Concord Well is a bedrock well, 300 feet in depth and is capable of yielding 70 gallons per minute (gpm). The well is surrounded by a well house and a separate chlorination building is located adjacent to the well house which contains an in-line hypochlorinator unit powered by an electrical motor. The Concord Well supplies facilities along Chalet Road and south of Concord Road. The Concord Well was sampled as part of the Phase II investigation. The second supply well is located adjacent to the Kiamesha Artesian Spring Water Co. facility and is used as supplemental source to surface water from Kiamesha Lake. Kiamesha Lake is also the water supply for the Village of Monticello, located approximately 5 miles from the Site. The combined supply from the two wells and the Lake is sampled for VOCs and SVOCs every three years, and according to the Monticello district office of the NYSDOH, there had not been any water quality problems up to the time of the Phase II. It was stated in the Phase II that it was suspected that the Concord well also supplied a

main supply tank (a 1.2 million gallon supply source) located near the intersection of Route 109 and Concord Road.

The Concord Well is still in service and in 2001, two additional wells was installed northwest of the Concord Well on the opposite side of Kiamesha Creek. The first well installed only yielded 6 gallons per minute, so a second well was installed to a depth of 375 feet and has a capacity of 375 gallons per minute. Both the new well and the Concord well are used as part of the potable water supply for the Concord Site. Each well is operated independently of the other and both are sampled in accordance with NYSDOH regulations. Sample results are provided to the NYSDOH and copies are kept on site. Locations of the wells are shown on Figure 9A.

The main hotel and surrounding facilities are serviced by the Town of Thompson Water and Sewer Department wastewater treatment plant. Other areas of the Site, including the International Club House, the Chalet, the Monster Club House and the Golf Maintenance Shop are serviced with individual septic systems as discussed in previous sections of this Work Plan.

3.0 INTERIM REMEDIAL MEASURES FIELD ACTIVITIES PLAN

An IRM will be performed at the site to address the remaining USTs that are suspected to be leaking. Removal of chemicals in the maintenance buildings and the gas station will also be completed, along with addressing asbestos violations with the Main Hotel Complex.

3.1 UST Excavations

The two areas of concern that will be addressed as the IRM are the three tanks at the Gas Station and the four tanks at the Golf Maintenance Shop. The tanks at the both locations are suspected to be leaking and they will be excavated and removed. Impacted soils around the tanks will be excavated and confirmatory sampling will be completed to ensure all of the impacted soils have been removed. The contaminated soil and tanks that are excavated will be properly disposed of off-site at a permitted disposal facility.

3.1.1 Confirmatory Sampling

Confirmatory samples will be collected from each of the tank excavations. Confirmatory samples will be collected at a frequency of one side wall sample per 30 linear feet of side wall and one bottom sample per 900 square feet of bottom area. A minimum of four (4) sidewall and one (1) bottom sample will be collected from each area of concern. The confirmatory samples will be composite samples with the side wall samples collected from one-third up from the bottom of the excavation and a five-point composite sample from the bottom. Samples will be analyzed for VOCs by EPA Method 8021 and SVOCs by EPA method 8270. The laboratory being used for this project is York Laboratory located in Stratford, CT. Quality Assurance/Quality Control Measures to be followed are discussed in the Quality Assurance Project Plan (QAPP) in Appendix C.

Confirmatory sample results will be compared to the NYSDEC Recommended Soil Cleanup Objectives (RSCO) as defined by NYSDEC Technical and Administrative Guidance Memorandum #4046 (TAGM 4046), Determination of Soil Cleanup Objectives and Cleanup Levels. If sample results are above the levels as defined in TAGM 4046, additional excavation will be completed in the direction of the sample failure, and a new confirmatory sample or samples will be collected.

3.2 Chemical Removal

Containers of chemicals remain in the golf maintenance building, the Main Hotel Complex and the Gas Station. The containers of chemicals including paints, solvents and pesticides will be inventoried and properly disposed of off-site.

3.3 Asbestos Removal

Asbestos violations exist in the Main Hotel Complex due to an incomplete asbestos removal project. The asbestos violations will be addressed and remedied through the

proper removal and disposal of asbestos in areas where the removal was begun and not completed. The remaining areas of the Main Hotel Complex requiring asbestos removal will be completed as part of the Remedial Action for the Site.

4.0 REMEDIAL INVESTIGATION FIELD ACTIVITIES PLAN

An RI will be performed after completion of the IRM and will consist of a test pit investigation, soil sampling of suspected septic areas, Kiamesha Creek sampling and a groundwater investigation.

4.1 Test Pit Investigation

The extent of the majority of the dump areas was determined during the Phase II. However, the extent of the International Golf Club Dump was not adequately defined and a test pit investigation will be completed to determine the extent of the contamination. Test pits will be completed outside the areas where previous test pits were completed to confirm the extent of the waste area. Test pits will be completed approximately 10 feet from the previously located test pits. If no waste is apparent, the old location of the test pit will be considered the extent of the waste. If waste is encountered, test pits will continue to be excavated in 10 foot intervals until the edge of the waste mass is found. The test pits will be excavated to determine the depth of the waste mass as well.

4.2 Soil Sampling

Sampling will be conducted in suspected septic areas. The areas to be sampled include the monster club house and chalet house sand filtrations system, the active golf maintenance shop septic field and the trickling filter system located south of the International Golf Course Dump Site. One sample will be taken from each septic system and sampled for VOCs via EPA Method 8260 and VOCs via EPA Method 8270.

4.3 Kiamesha Creek Sampling

Surface water sampling of Kiamesha Creek will be conducted at the effluent discharge of the golf maintenance septic system and the monster club house discharge location. Creek sediment samples will also be collected from these locations. Creek sediments will also be sampled where seeps were observed at the International Golf Club Dump Site.

For surface water samples, one sample will be collected from an upgradient location, and one sample from immediately downgradient of the effluent discharges. Sediment samples will be collected in a similar manner, with a sediment sample collected upgradient of the suspected source and one collected from immediately downgradient.

Creek surface water and sediment samples will be analyzed for VOCs, SVOCs and metals via EPA Methods 8260, 8270 and 6061, respectively.

4.4 Groundwater Investigation

A groundwater investigation will be completed at the site to determine if groundwater has been impacted from the dump sites or from USTs. Monitoring wells currently exist at the International Golf Course Dump Site and in the Golf Maintenance Dump Site. These

wells will be sampled and if results indicate that groundwater has been impacted, additional wells may be installed after consultation with the NYSDEC. The Concord Well and the new well installed in 2001 will also be sampled.

Groundwater sampling will also be conducted in areas where the USTs will be excavated as part of the IRM. Groundwater samples will be collected from upgradient and downgradient locations at the Gas Station and at the Golf Maintenance Building. Groundwater samples will be collected from borings at the locations shown on Figures 17 and 18, respectively. If groundwater has been impacted, monitoring wells will be installed. The proposed locations of additional monitoring wells at the UST locations or in the dump area will be provided to the NYSDEC prior to installation of the wells.

If areas of groundwater contamination are found, additional groundwater sampling will be completed in order to delineate the extent of the contamination.

4.4.1 Monitoring Well Installation

Construction of the monitoring wells will consist of two-inch diameter, threaded well casing with ten feet of Schedule 40 PVC screen and riser. Well screens will be installed intercepting the water table, generally about five to ten feet into the soil-groundwater interface. The annular space in the screened interval will be sand packed with a No. 2 filter sand pack to one to two feet above the top of the screen. The annular space above the screened interval will then be sealed with a layer of bentonite to provide a seal above the sand pack. The surface completion will consist of either a stick-up protective steel casing set in concrete and fitted with a lockable cap, or a flush-to grade, bolt down, gasketed curb box set in concrete and a lockable sanitary plug. A monitoring well detail is provided in Figure 19.

4.4.2 Well Development

Monitoring wells will be developed no sooner than 24 hours after installation. Wells will be purged with dedicated, disposable bailers. Purging will continue until the water is visibly free of suspended materials and field parameters (pH, temperature, conductivity) stabilize, or a maximum of 24 hours.

4.4.3 Groundwater Sampling

After installation and development of the monitoring wells, they will be sampled. Prior to sampling, the wells will be gauged for depth to the water surface from the top of the casing and for the depth to bottom of the well from the casing to determine the elevation of groundwater and the volume of water in each well. Each well will be purged a minimum of three well volumes with a dedicated disposable bailer, and will then be allowed sufficient time to recharge. The pH, temperature, conductivity and turbidity will be measured for each well. Samples for laboratory analysis will be collected using dedicated disposable bailers. Samples will be collected in laboratory provided sample jars and placed on ice for shipping or delivery under chain-of-custody protocols.

Samples will be analyzed for VOCs, SVOCs and metals via EPA Methods 8260, 8270, and 6061, respectively. Quality Assurance/Quality Control Measures to be followed are discussed in the Quality Assurance Project Plan (QAPP) in Appendix C.

An additional round of groundwater sampling will be completed approximately four months after the initial sampling round. The second sampling event will be used to gain a better understanding of groundwater conditions and to confirm results from the initial sampling event.

4.4.4 Survey

At the completion of the RI, a survey will be completed that includes the locations and elevations of the monitoring wells.

5.0 HUMAN HEALTH EXPOSURE ASSESSMENT

A qualitative human health exposure assessment will be performed to evaluate whether the site poses a hazard to the surrounding population by qualitatively evaluating actual or potential exposures to site contaminants. The Exposure Assessment will be completed in accordance with the New York State Department of Health's Qualitative Human Health Exposure Assessment guidance document and will be included in the RI Report.

Sampling data will be reviewed along with the physical conditions of the contaminant sources or physical hazards near the site which may pose a health risk to the community. Potential on-site and off-site exposures will be evaluated. The Exposure Assessment will describe the nature and size of the population exposed, or potentially exposed, to the contaminants that are present at, or migrating from, the site and will characterize the exposure setting, identify exposure pathways, and evaluate contaminant fate and transport.

Site contaminants will be selected for further evaluation based upon consideration of concentrations of contaminants in environmental media both on-site and off-site, field data quality, laboratory data quality and sampling design, and comparison of on-site and off-site contaminant concentrations in environmental media with typical background levels.

Several objectives will be completed for the exposure assessment. First, applicable site information and characterization data for environmental media of concern will be evaluated. Applicable NYSDEC guidance, including NYSDEC TAGM 4046 for soil and Class GA groundwater regulations for groundwater, will be used for purposes of identifying site contaminants of concern (COCs). An assessment of current and future site activities and site use will be conducted in relation to potential human exposure. Next, potential exposure pathways will be identified, and each element of the exposure pathway will be evaluated. Soil and groundwater contamination will be addressed. The surrounding area of the Site is served by a combination of public and private water supplies. The location of private wells in the area will be confirmed with the local health department and water department.

If any complete exposure pathway exists, it will be evaluated in detail and recommendations for ways to eliminate the pathway will be made in the RI Report. These recommendations may include engineering controls, additional remedial activities, and/or monitoring.

6.0 FISH AND WILDLIFE IMPACT ANALYSIS

A Fish and Wildlife Resources Impact Analysis (FWIA) Decision Key will be completed to determine if a FWIA is needed. Contaminant migration pathways and any fish and wildlife exposure pathways will be identified. As stated in the FWIA, "if no resources are associated with the site or if there is no potential for contaminant migration to the resources, then only the necessary information to support that conclusion should be provided." If the results from the RI, along with site inspections, support this conclusion, documentation will be submitted with the RI Report.

If resources are identified, or migration pathways exist, a FWIA will be completed and submitted as part of the RI Report. The FWIA would be completed to identify actual or potential impacts to fish and wildlife resources from site contaminants. The FWIA would qualitatively determine the route, intensity, frequency, and duration of actual or potential exposures to chemicals, describe the nature and size of the population exposed to the contaminants that are present at or migrating from the site and characterize the exposure setting, identifying exposure pathways, and evaluating contaminant fate and transport.

7.0 REPORTING AND SCHEDULE

A schedule of activities has been included as Figure 20. At the completion the IRM, an IRM Report will be prepared and submitted to the NYSDEC. After completion of the RI Activities, an RI Report will be prepared and submitted.

7.1 IRM Report

At the conclusion of the IRM, an IRM Report will be prepared that summarizes the activities completed and will include the tank information, confirmatory sample results and a figure showing the excavations. Details of the IRM and supporting documentation will be included with the IRM Report.

7.2 RI Report

Following the completion of the RI activities and the receipt of sample results, a RI Report will be prepared. The Report will summarize the activities completed during the RI and will include analytical results, well logs, the Human Health Exposure Assessment, conclusions from the FWIA, a Data Usability Summary Report (DUSR) and scaled figures showing test pit locations, soil sample locations, locations of Creek samples and monitoring well locations. Sampling results will be summarized and discussed and the need for further remediation will be evaluated. Remedial alternatives will be evaluated in the RI Report and a recommendation will be made for a remedy to be presented in a Remedial Action Work Plan.

8.0 PROJECT ORGANIZATION

The following personnel are involved with this project. The project responsibilities and contact information are also provided.

Name	Company	Project Position	Address	Phone Number
John Manfredi	JM Associates, Inc.	Environmental Project Manager	225 Railroad Ave Bedford Hills, NY 10507	(914) 241-3795
Henry Zabatta	Concord Associates, LLC	Volunteer Contact	Concord Resort PO Box 263 Kiamesha Lake, NY 12751	(845) 794-4000
Michael Kaplan	G.A. Fuller Development Co.	General Contractor	115 Stevens Ave Valhalla, NY 10595	(914) 765-6500
Andrew Lent	NYSDEC	Project Manager	200 White Plains Rd, 5 th Floor Tarrytown, NY 10591	(914) 332-1835
TBD	NYSDOH	Project Manager		

All project personnel will be required to follow on-site health and safety procedures as outlined in the site-specific Health and Safety Plan (HASP), included as Appendix D. Subcontractors have not yet been selected. All subcontractors will be required to read and sign the HASP and follow on-site safety procedures.

9.0 HEALTH AND SAFETY PLAN

A site-specific HASP with sections addressing a Community HASP and Community Air Monitoring Plan (CAMP) has been prepared and is included as Appendix D. All on-site personnel and visitors will be required to read and sign the HASP prior to entry of the Site.

10.0 QUALITY ASSURANCE / QUALITY CONTROL

Quality Assurance and Quality Control (QA/QC) is addressed in the Quality Assurance Project Plan (QAPP) included as Appendix C. The QAPP outlines procedures to be followed for sampling and analysis to ensure quality of the results. A DUSR will be prepared with the final reports to document the reliability of the sample results.

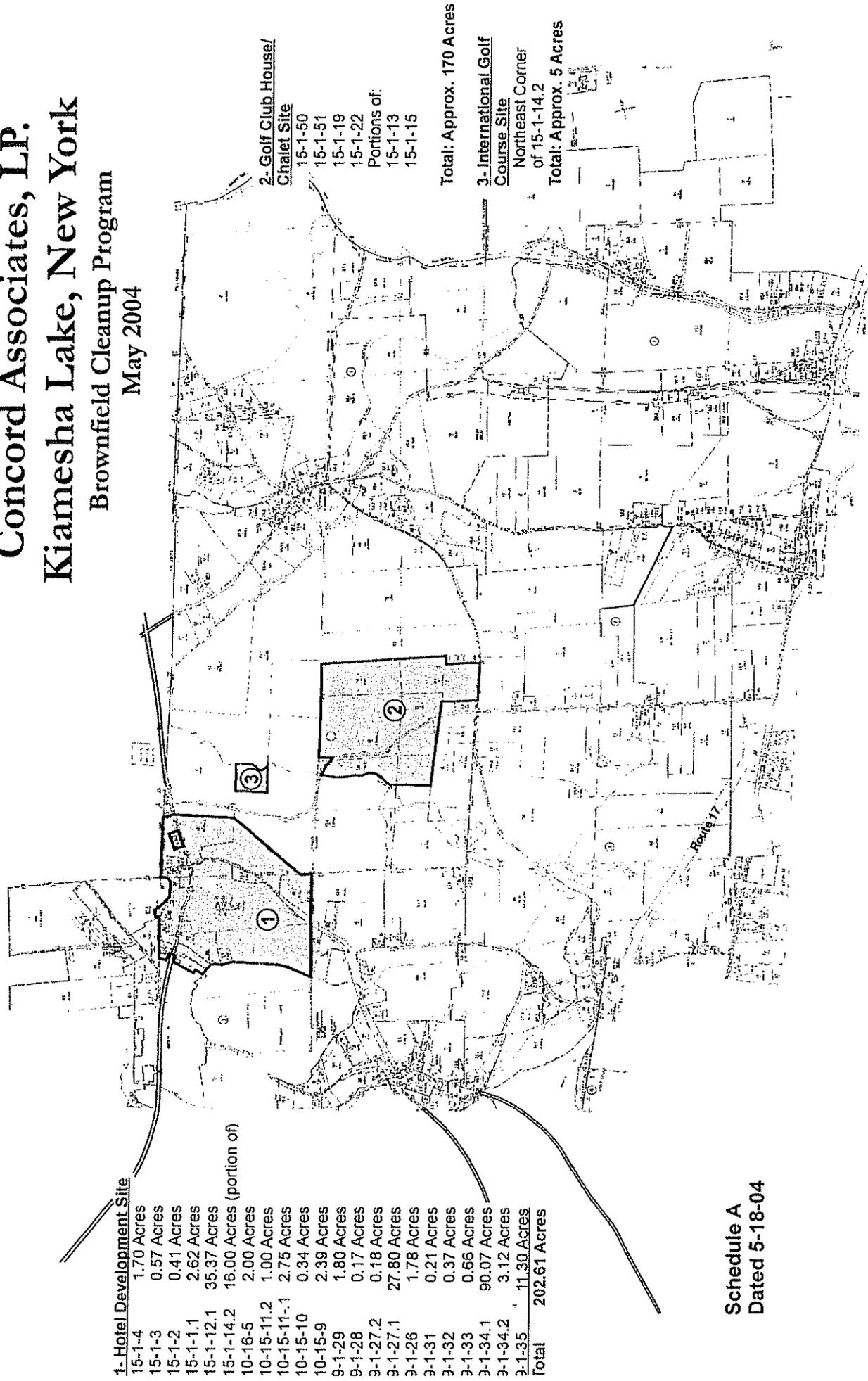
11.0 CITIZEN PARTICIPATION

Citizen participation activities will be performed throughout the RI and IRM process to involve and inform the public. The specific citizen participation activities to be performed are outlined in the Citizen Participation Plan, included as Appendix E.

FIGURE 1
SITE LOCATION MAP



Concord Associates, LP. Kiamesha Lake, New York Brownfield Cleanup Program May 2004



1- Hotel Development Site	
15-1-4	1.70 Acres
15-1-3	0.57 Acres
15-1-2	0.41 Acres
15-1-1.1	2.62 Acres
15-1-12.1	35.37 Acres
15-1-14.2	16.00 Acres (portion of)
10-16-5	2.00 Acres
10-15-11.2	1.00 Acres
10-15-11-1	2.75 Acres
10-15-10	0.34 Acres
10-15-9	2.39 Acres
9-1-29	1.80 Acres
9-1-28	0.17 Acres
9-1-27.2	0.18 Acres
9-1-27.1	27.80 Acres
9-1-26	1.78 Acres
9-1-31	0.21 Acres
9-1-32	0.37 Acres
9-1-33	0.66 Acres
9-1-34.1	90.07 Acres
9-1-34.2	3.12 Acres
9-1-35	11.30 Acres
Total	202.61 Acres

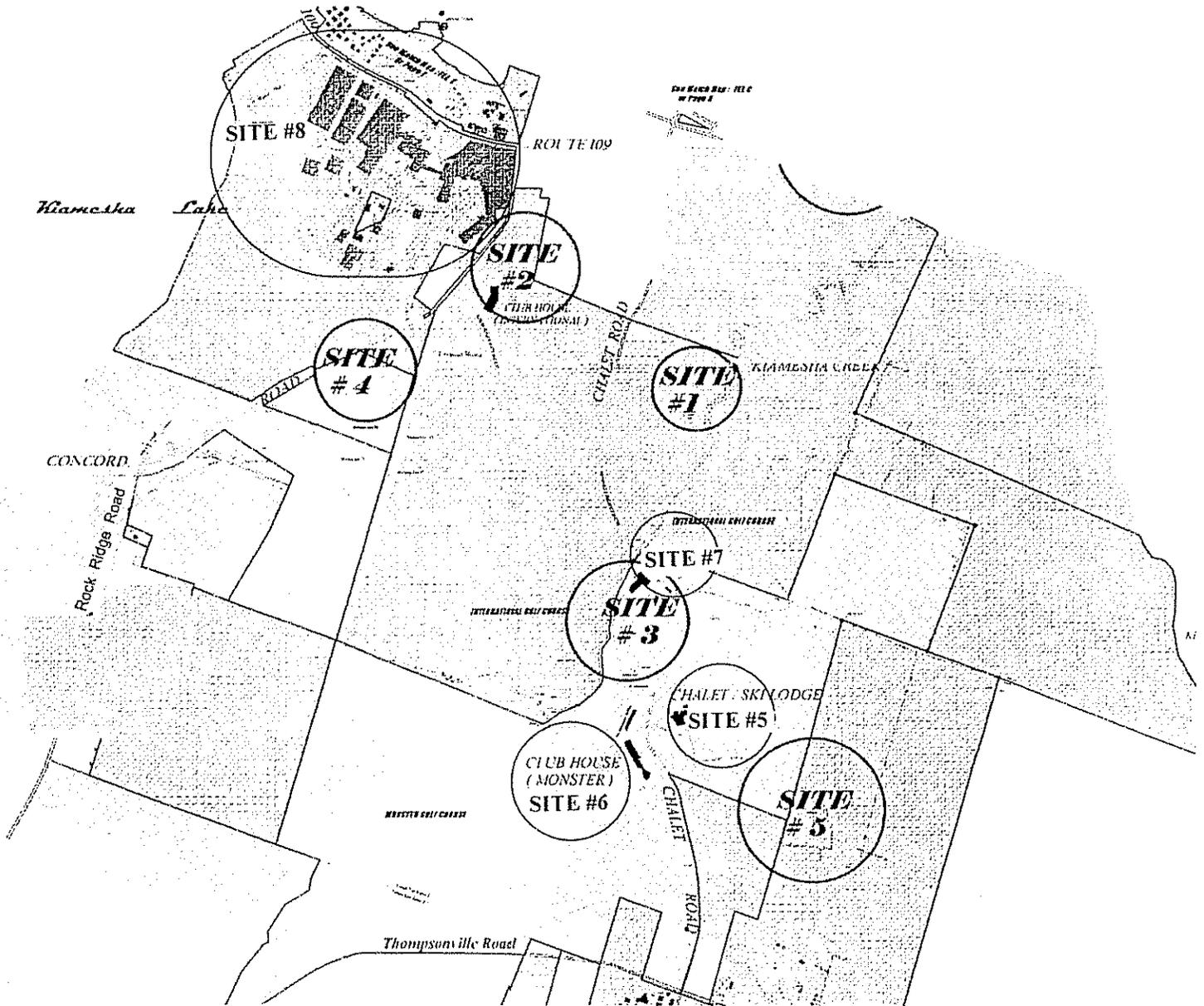
2- Golf Club House/ Chalet Site	
15-1-50	
15-1-51	
15-1-19	
15-1-22	
Portions of:	
15-1-13	
15-1-15	

Total: Approx. 170 Acres

3- International Golf Course Site	
Northeast Corner of 15-1-14.2	
Total: Approx. 5 Acres	

Schedule A
Dated 5-18-04

FIGURE 2
SITE ZONES



Not To Scale

Surveyed By:

ARTHUR D. BRUCE P.E.C.S.

105 South Main Street, Albany, New York 12242

Phone: Fax: (518) 532-5122

DUMP SITE INDEX

- SITE AREA No 1 : Golf Course Dump Site (*International*)
- SITE AREA No 2 : Main Parking Lot Dump
- SITE AREA No 3 : Golf Maintenance Dump and Bldg
- SITE AREA No 4 : Service Station
- SITE AREA No 5 : Chalet Dump and Chalet Bldg
- SITE AREA No 6 : Monster Club House
- SITE AREA No 7 : International Golf House and Maintenance Bldg
- SITE AREA No 8 : Main Hotel Complex

FIGURE 3

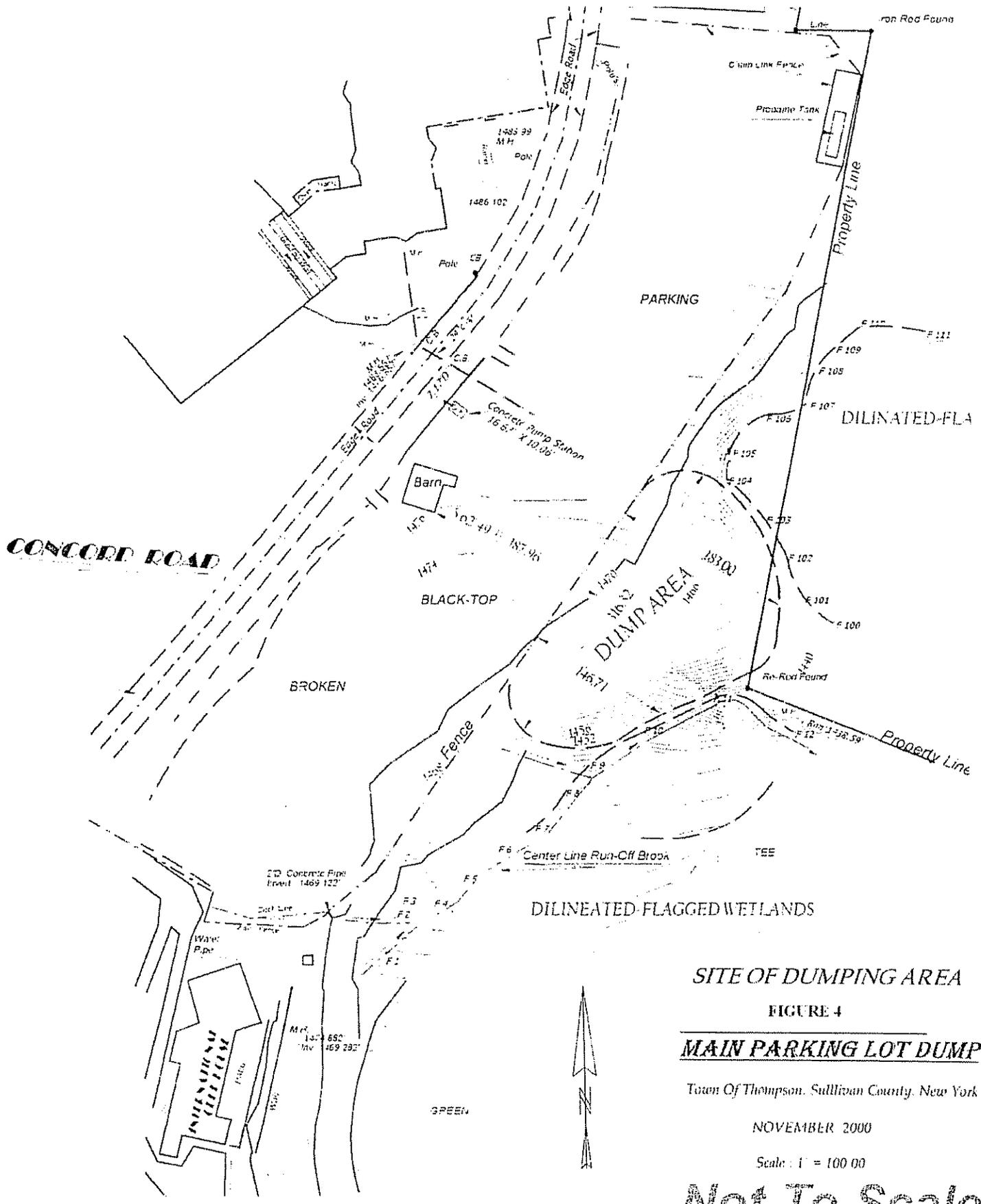
LOCATIONS OF AREAS OF CONCERN

CONCORD ASSOCIATES, L.P.

Town Of Thompson, County Of Sullivan, State Of New York

Scale 1" = 500' 00"

November 2006



SITE OF DUMPING AREA

FIGURE 4

MAIN PARKING LOT DUMP

Town Of Thompson, Sullivan County, New York

NOVEMBER 2000

Scale : 1" = 100.00

Not To Scale

Surveyed By :

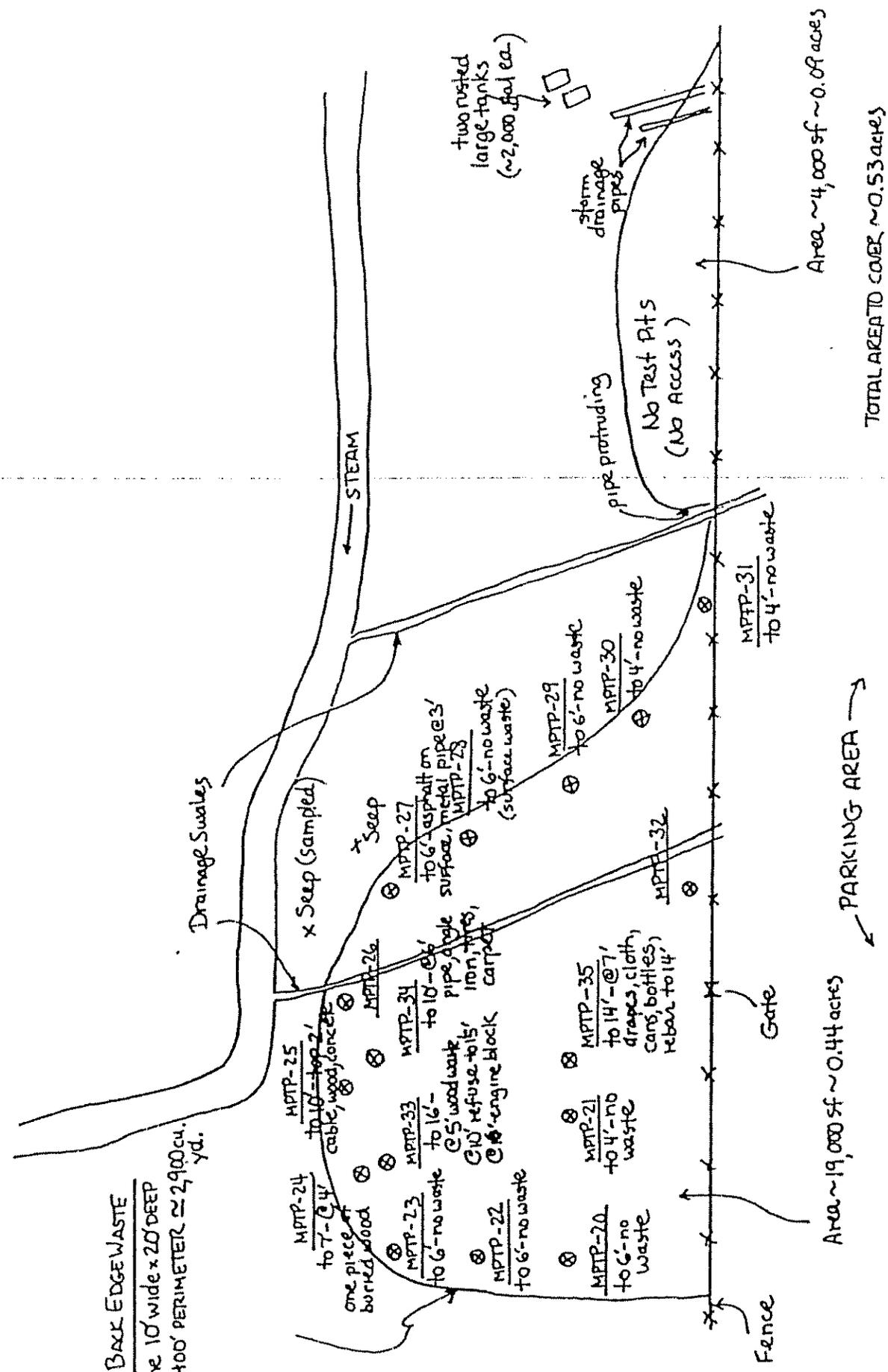
ARTHUR C. VILLE P.E.S.

448 North Main Street, Liberty New York 12754

Phone / Fax (914)-292-3322

© Copy Right NOVEMBER 2000 AOV

• PULL BACK EDGE WASTE
 Assume 10' wide x 20' DEEP
 x 400' PERIMETER ≈ 2,900 cu. yd.



MPTP-24 to 7'-@ 4' buried wood

MPTP-25 to 10'-top 2' cable, wood, concrete

MPTP-26

MPTP-27 to 6'-asphalt on pipe, angle surface, metal pipes

MPTP-28 to 6'-no waste (surface waste)

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

MPTP-32

MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

MPTP-35 to 14'-@ 7' drapes, cloth, cans, bottles, rebars to 14'

MPTP-20 to 6'-no waste

MPTP-21 to 4'-no waste

MPTP-22 to 6'-no waste

MPTP-23 to 6'-no waste

MPTP-29 to 6'-no waste

MPTP-30 to 4'-no waste

MPTP-31 to 4'-no waste

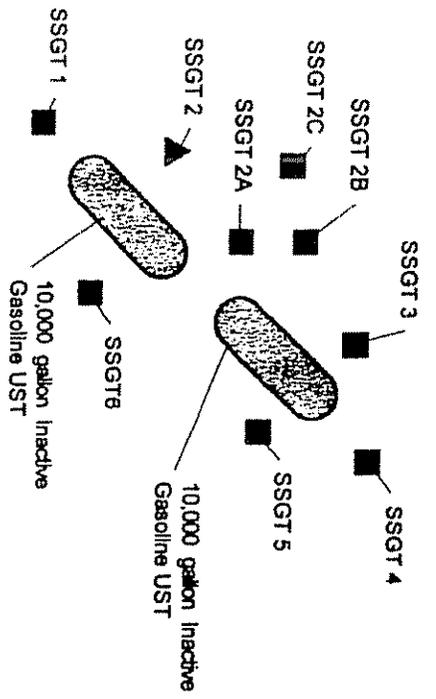
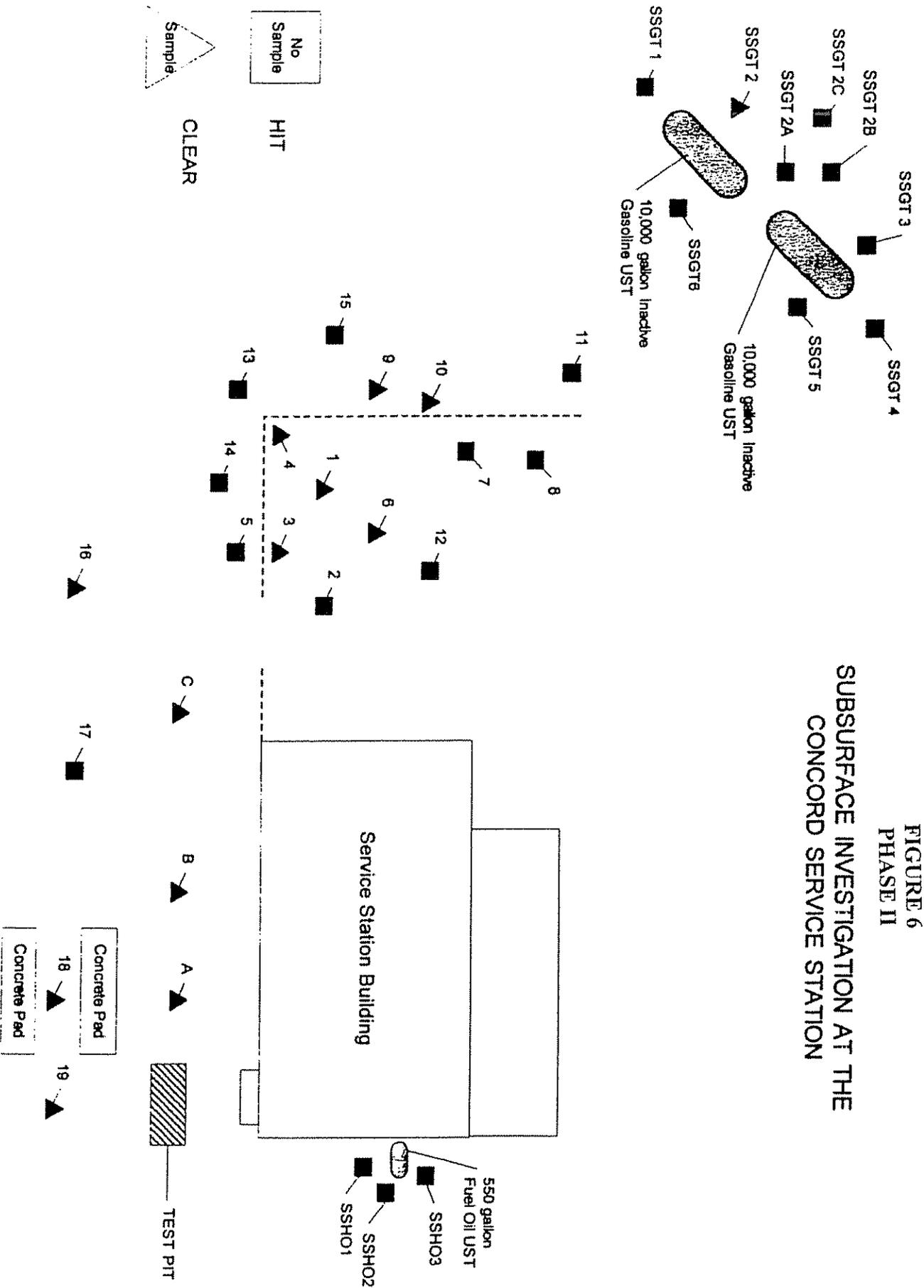
MPTP-32

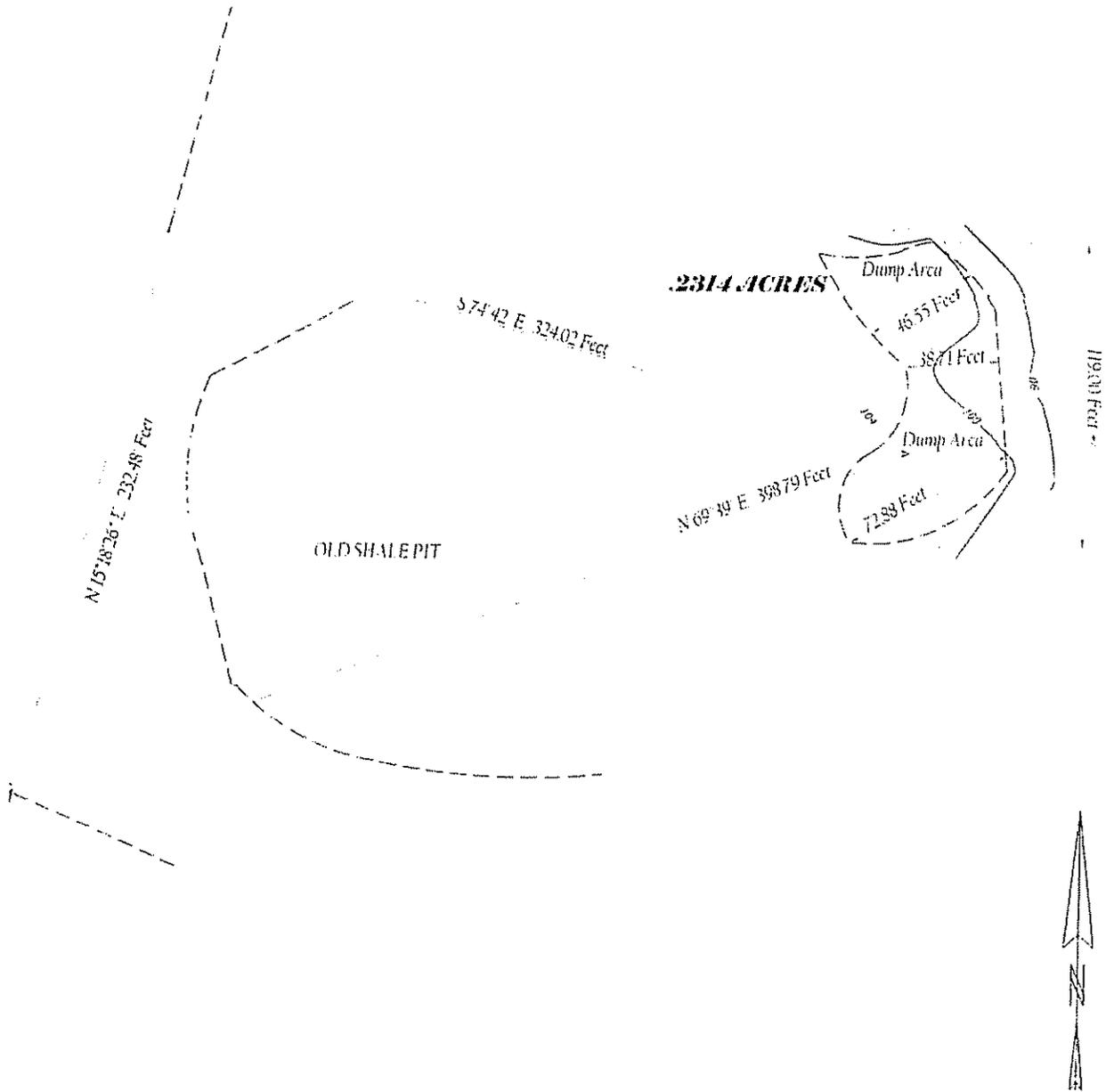
MPTP-33 to 16'-@ 5' wood waste @ 10' refuse to 15' iron, tires, @ engine block carpet

MPTP-34 to 10'-@ pipe, angle

FIGURE 6
PHASE II

SUBSURFACE INVESTIGATION AT THE
CONCORD SERVICE STATION





SITE OF DUMPING AREA
FIGURE 7
CHALET DUMP SITE

Town Of Thompson, County Of Sullivan, State Of New York

OCTOBER 2000

Scale: 1" = 30'

Not To Scale

SURVEYED BY
ARTHUR O. VIELE P.E.S.
 448 North Main Street, Liberty, New York 12754
 Phone/Fax: (845) 292-3322

© Copy Right October 2000 AOV

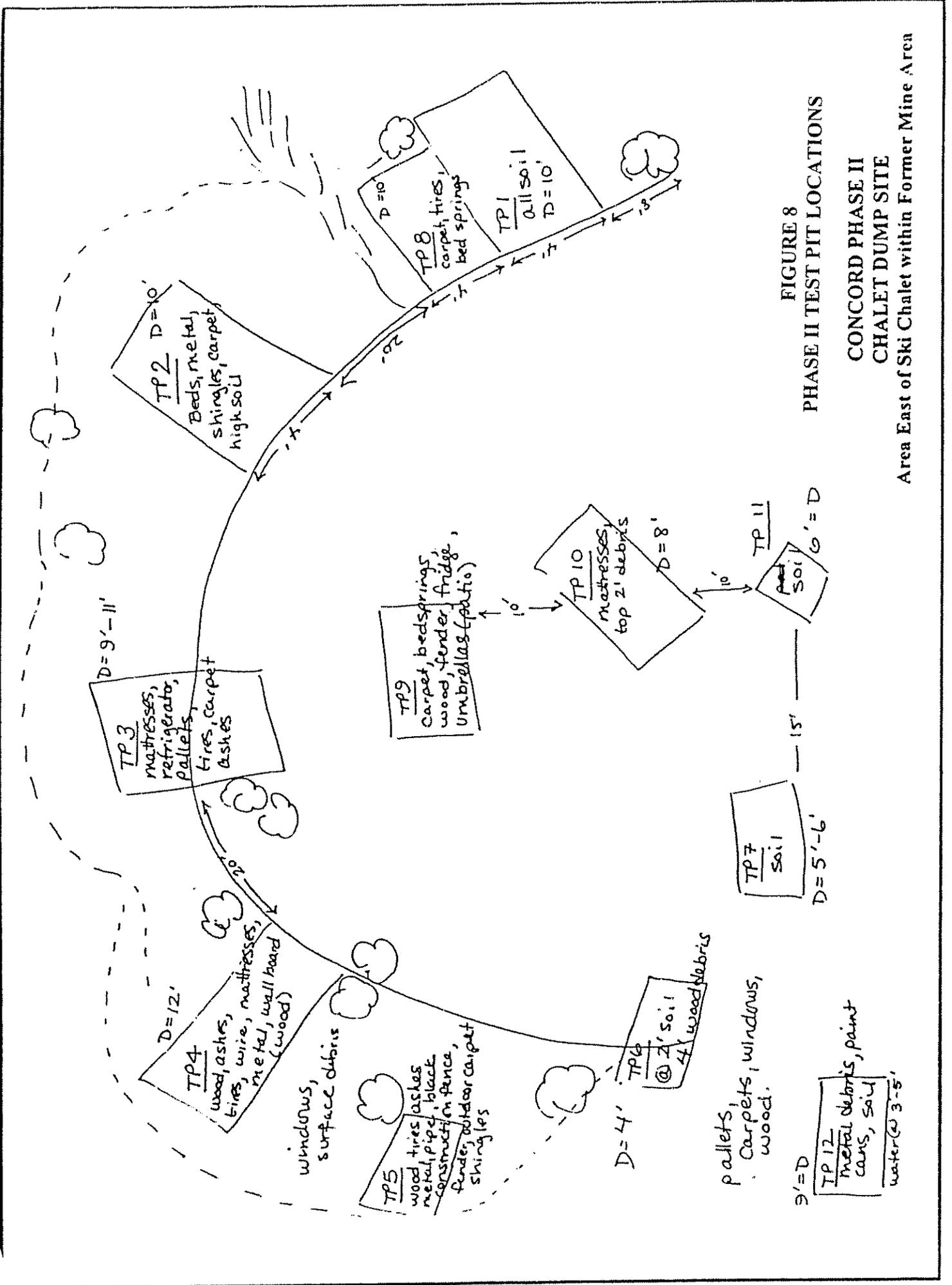


FIGURE 8
PHASE II TEST PIT LOCATIONS

CONCORD PHASE II
CHALET DUMP SITE

Area East of Ski Chalet within Former Mine Area

FIGURE 9
 PHASE II
 SUBSURFACE INVESTIGATION AT THE GOLF MAINTENANCE SHOP

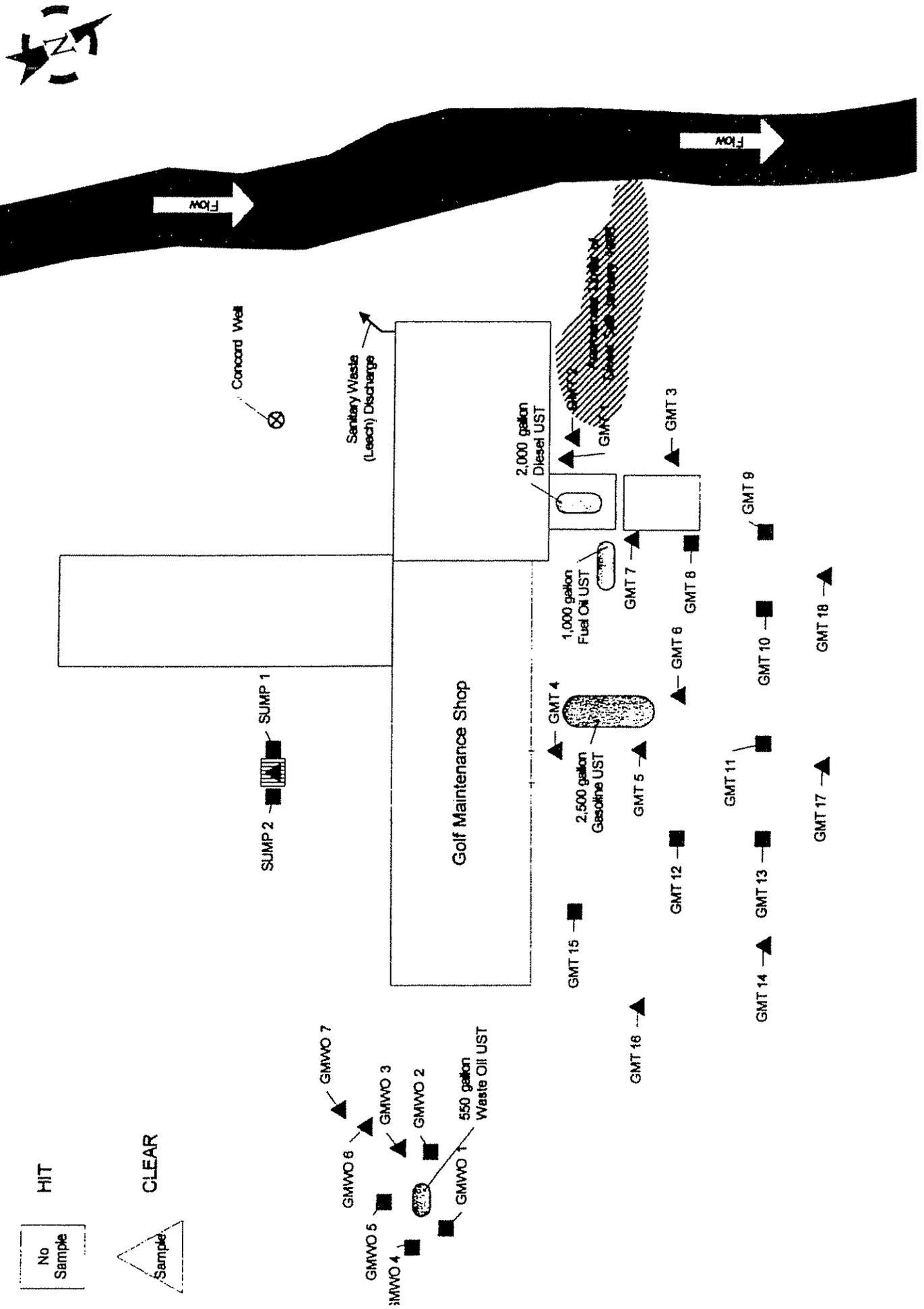
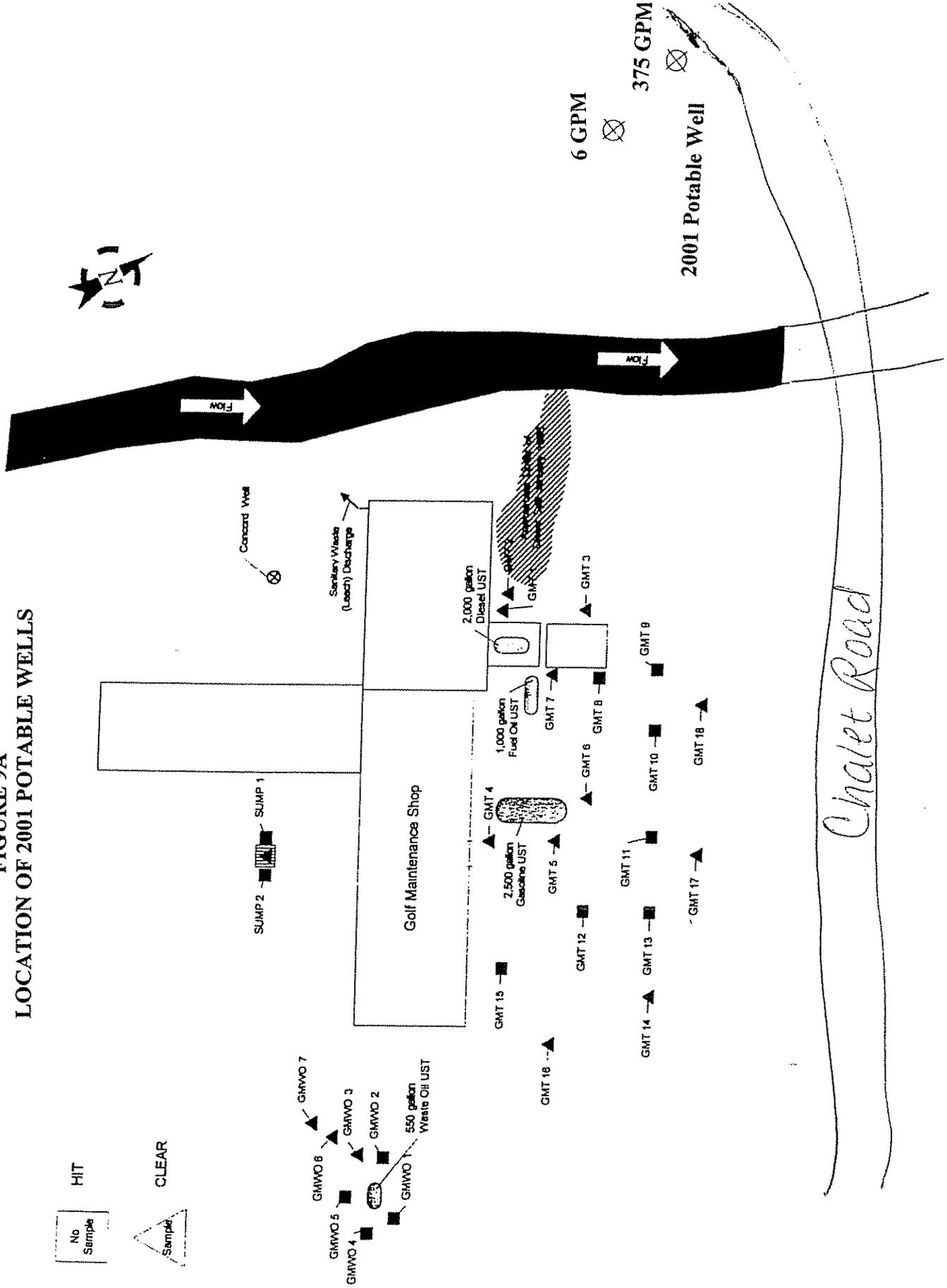
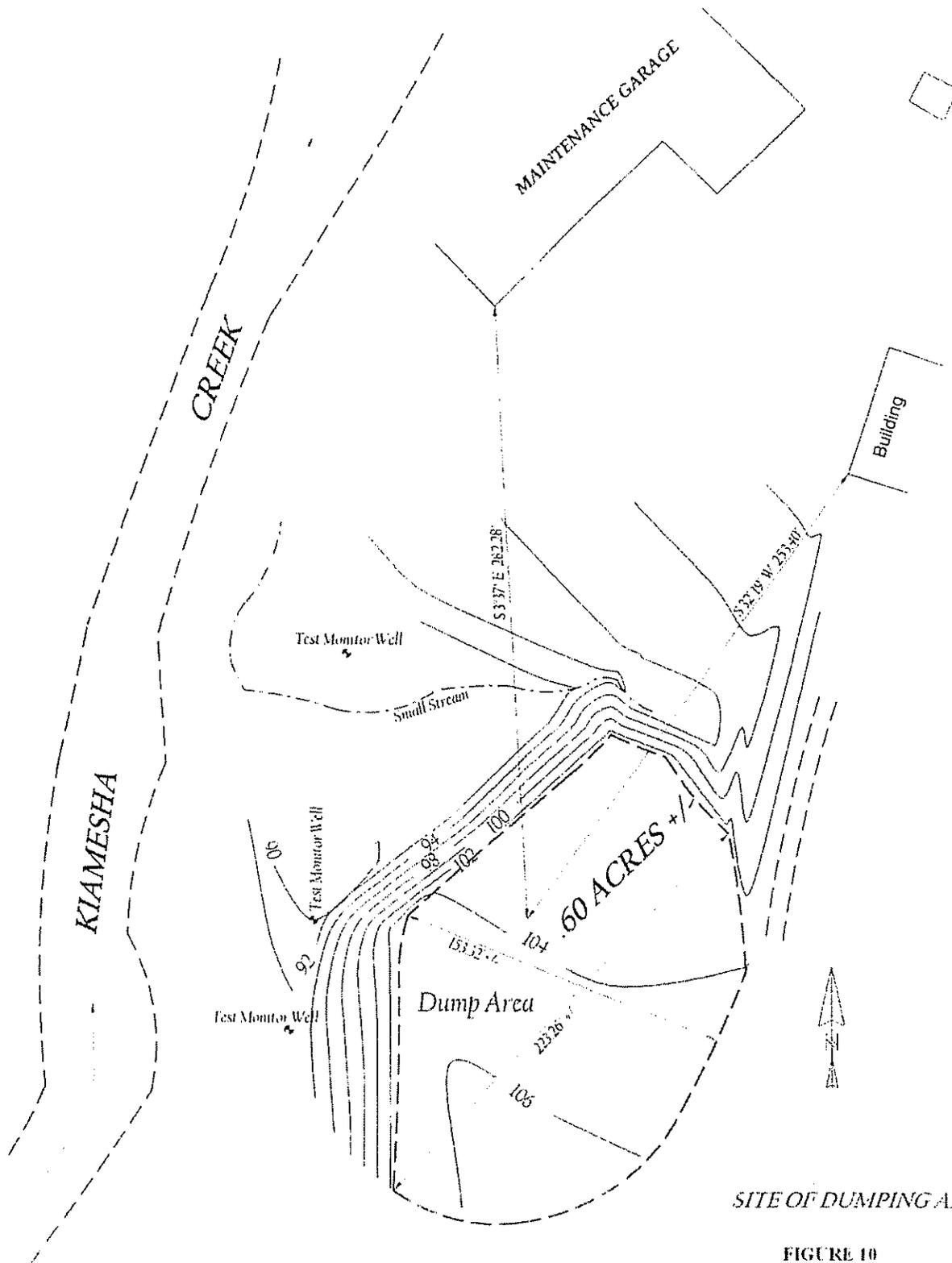


FIGURE 9A
LOCATION OF 2001 POTABLE WELLS





SITE OF DUMPING AREA

FIGURE 10

GOLF MAINTENANCE DUMP

Town Of Thompson, County Of Sullivan, State Of New York

Scale : 1" = 4000'

Not To Scale

SURVEYED BY

ARTHUR G. VIELLE P.E.

448 North Main Street, Liberty, New York 12754

Phone/Fax: (845) 292-3322

© Copy Right November 2000/ACV

MW-2 ●

MW-3 ●

Total Area ~ 1.1 acres

Area to be Covered ~ 0.5 acres

GMP-9 to 12'-@ 4'p' ash

GMP-13 to 6' (rock) @ 0-5' refuse, pipes, wood, wires, bricks (refuse odor)

GMP-5 to 2' (rock) - no waste

POTENTIAL LIMIT OF WASTE TO BE REMOVED 960 sf = 0.02 acres vol. of waste @ 6' thick = 215 cu. yd.

GMP-6 to 3' (rock) - no waste

Heavy Surface Debris

GMP-4 to 4' (rock) - no waste

POTENTIAL EXTENT OF WASTE DEPOSITION TO BE REMOVED ~ 1960 sf = 0.05 acres vol. of waste @ 3' thick = 220 cu. yd.

GMP-3 to 6' (rock) - no waste

Drums

GMP-1 to 8' @ 4'p' glass & sand

GMP-2 to 6' - no waste

Surface soil Sample SS-1

SHED

GMP-7 to 16'-@ 3'-16' bottles, wood, scrap metal, wire, kitchen pans

GMP-12

GMP-8 to 13'-@ 3'-13' bottles, wire, plaster, cedar block 4'-5'-ash Heavy Surface Debris

GMP-11 to 10'-@ 1'-10' burned garbage with glass, metal, wood, brush, concrete block, dishes & cups

GMP-10 to 12'-@ 0'-8' burned garbage, glass, metal, wood, concrete block @ 8'-12' clean-fill with base grade vegetation

FIGURE 11A
PHASE II TEST PIT LOCATIONS
CONCORD PHASE II
GOLF MAINTENANCE DUMP

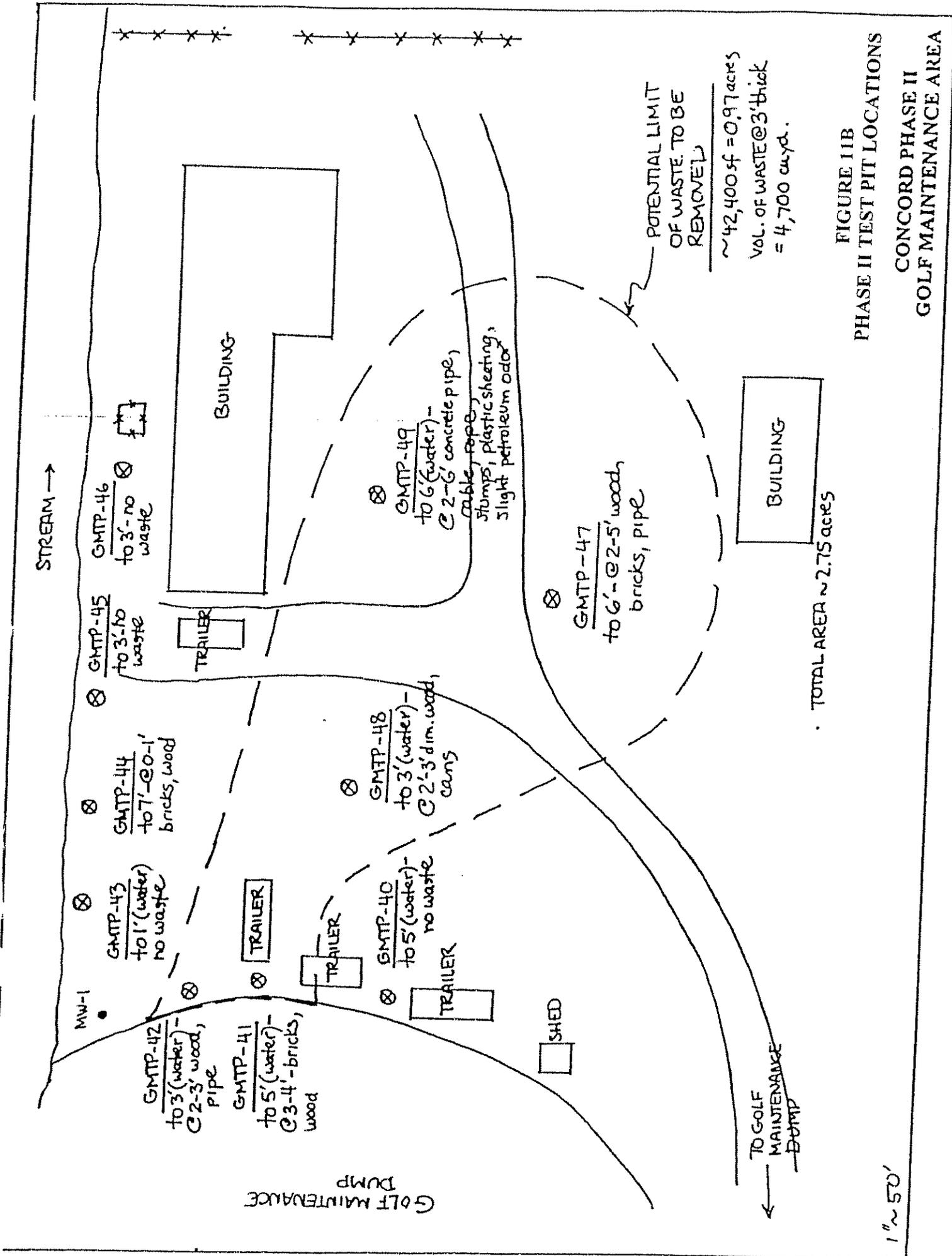
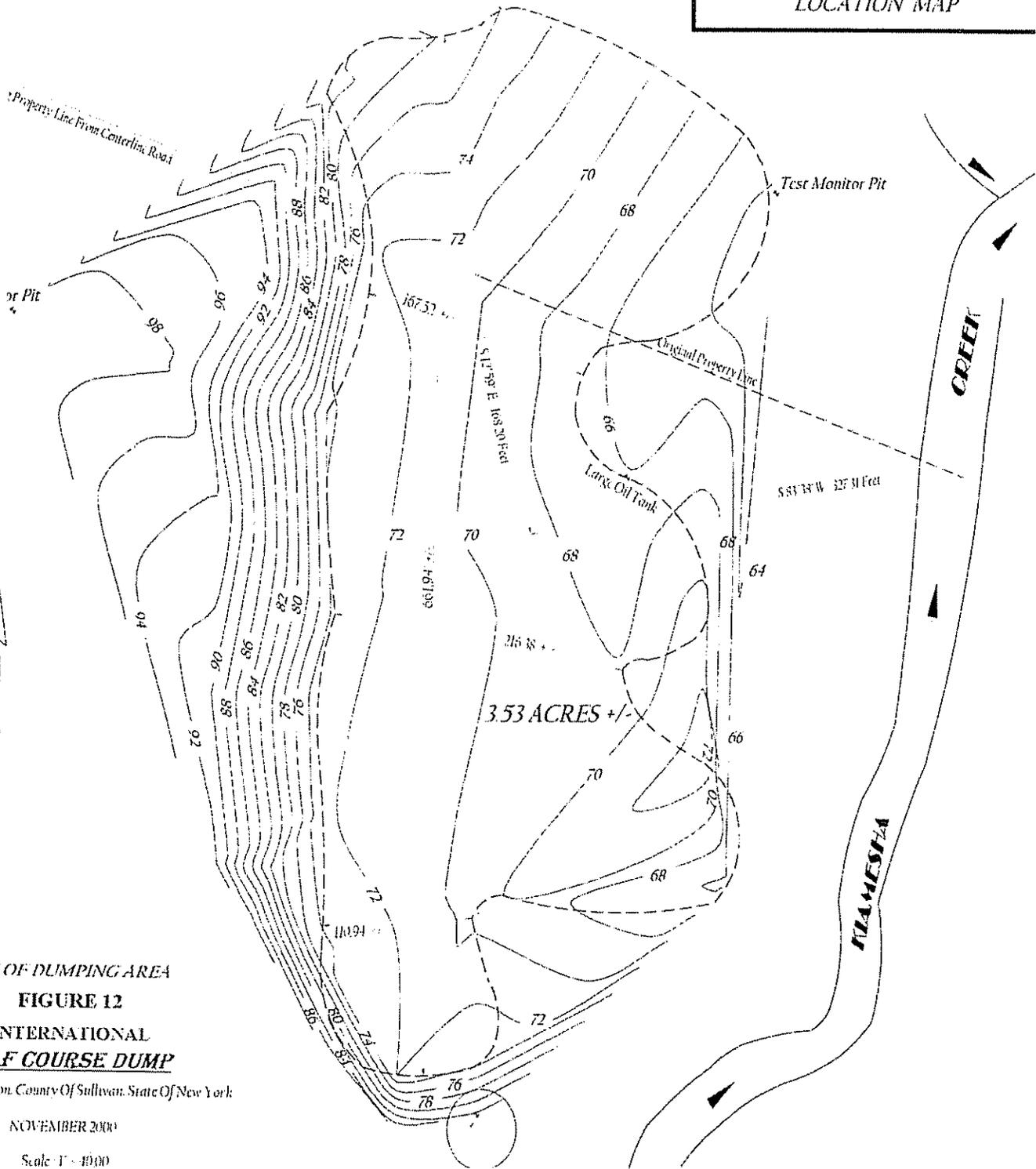


FIGURE 11B
 PHASE II TEST PIT LOCATIONS
 CONCORD PHASE II
 GOLF MAINTENANCE AREA

LOCATION MAP



SITE OF DUMPING AREA
FIGURE 12
INTERNATIONAL
GOLF COURSE DUMP

Town Of Thompson, County Of Sullivan, State Of New York

NOVEMBER 2000

Scale: 1" = 100'

Not To Scale

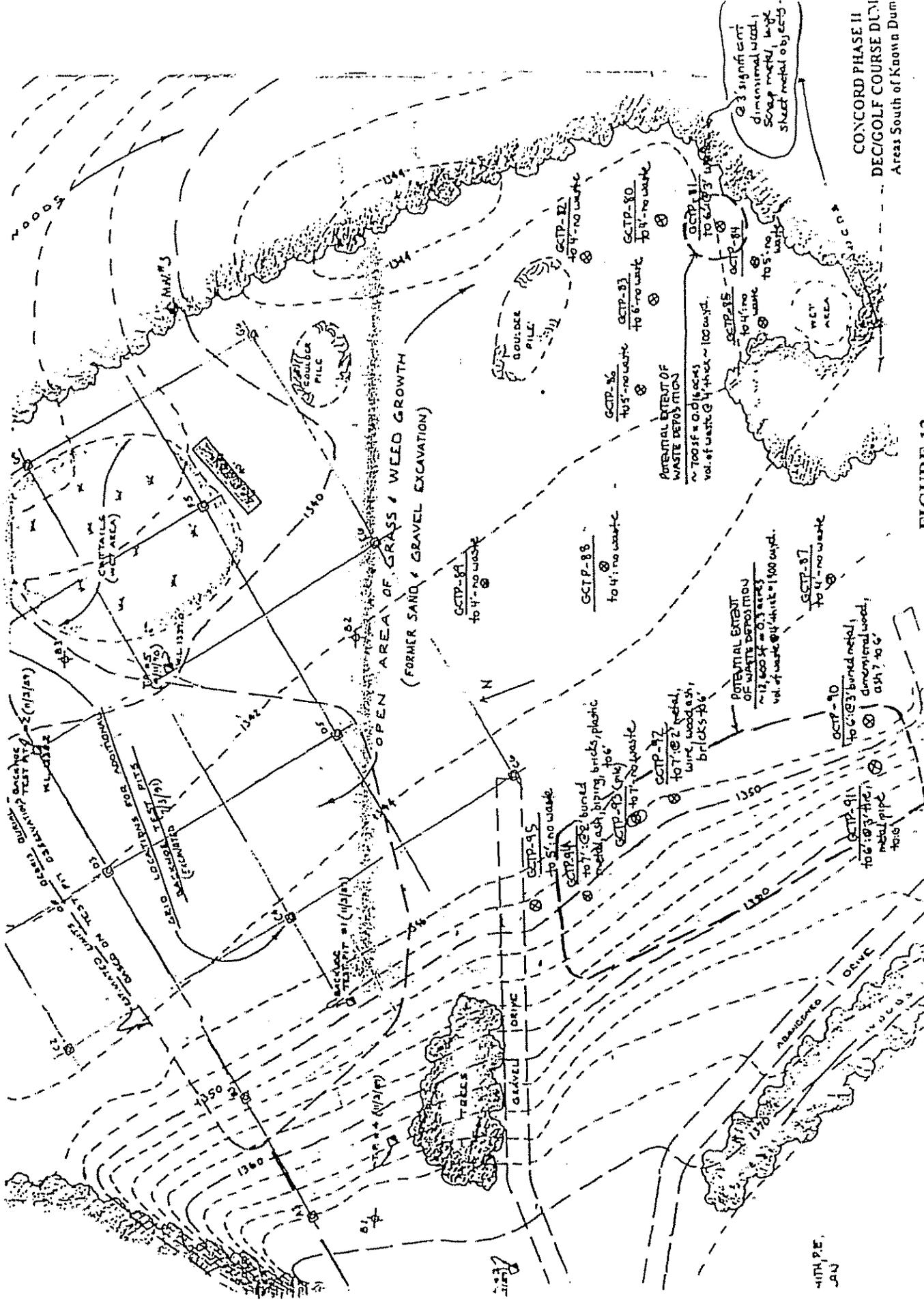
SURVEYED BY

ARTHUR O. VIELE P.L.S.

48 North Main Street Liberty, New York 12751

Phone/Fax: (845)-292-3322

Copyright November 2000 / A.C.T.



CONCORD PHASE II
DEC/GOLF COURSE DUM
Areas South of Kaonua Dum

FIGURE 13

PHASE II TEST PIT LOCATIONS - INTERNATIONAL GOLF COURSE DUMP

4/14 P.E.
JAN

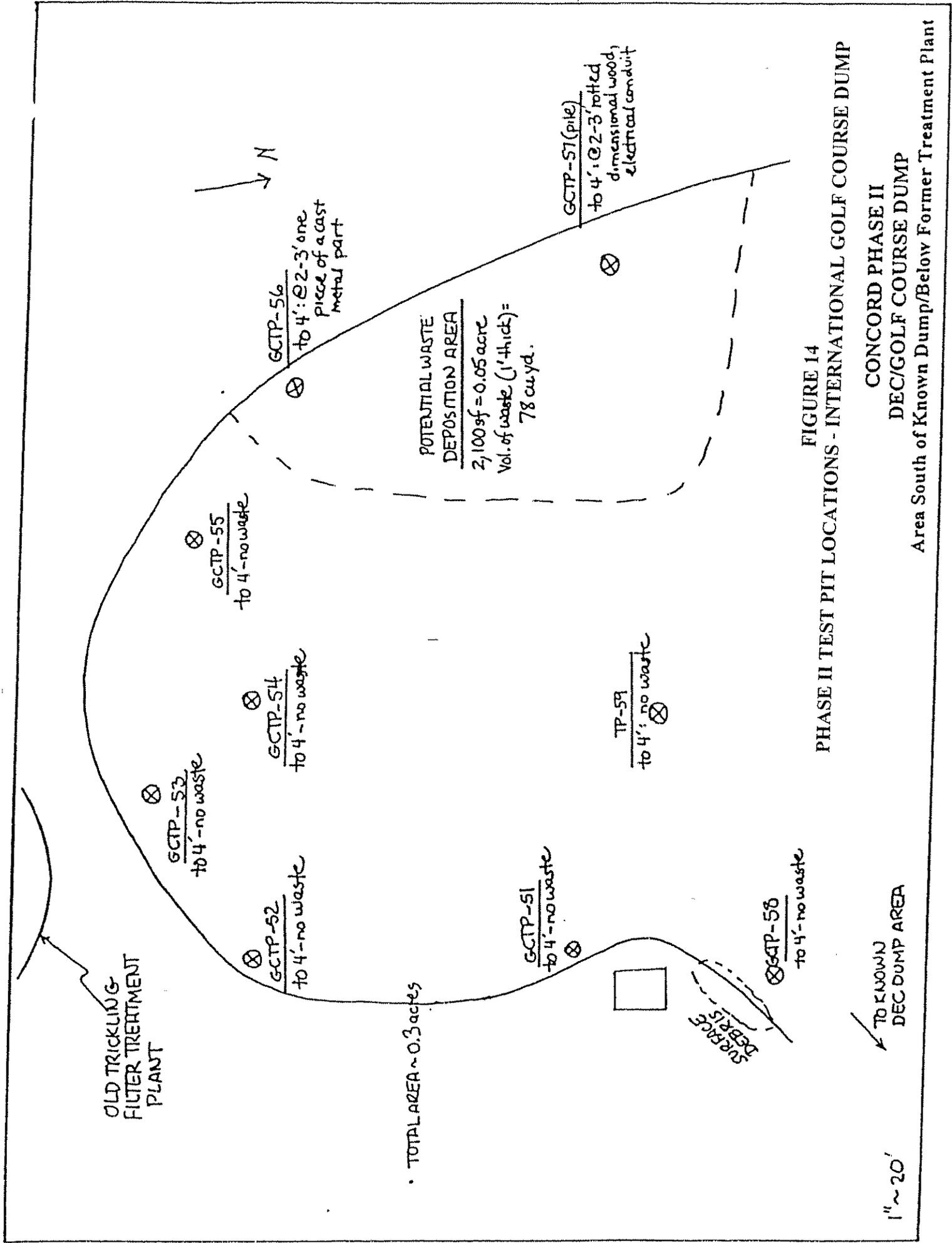
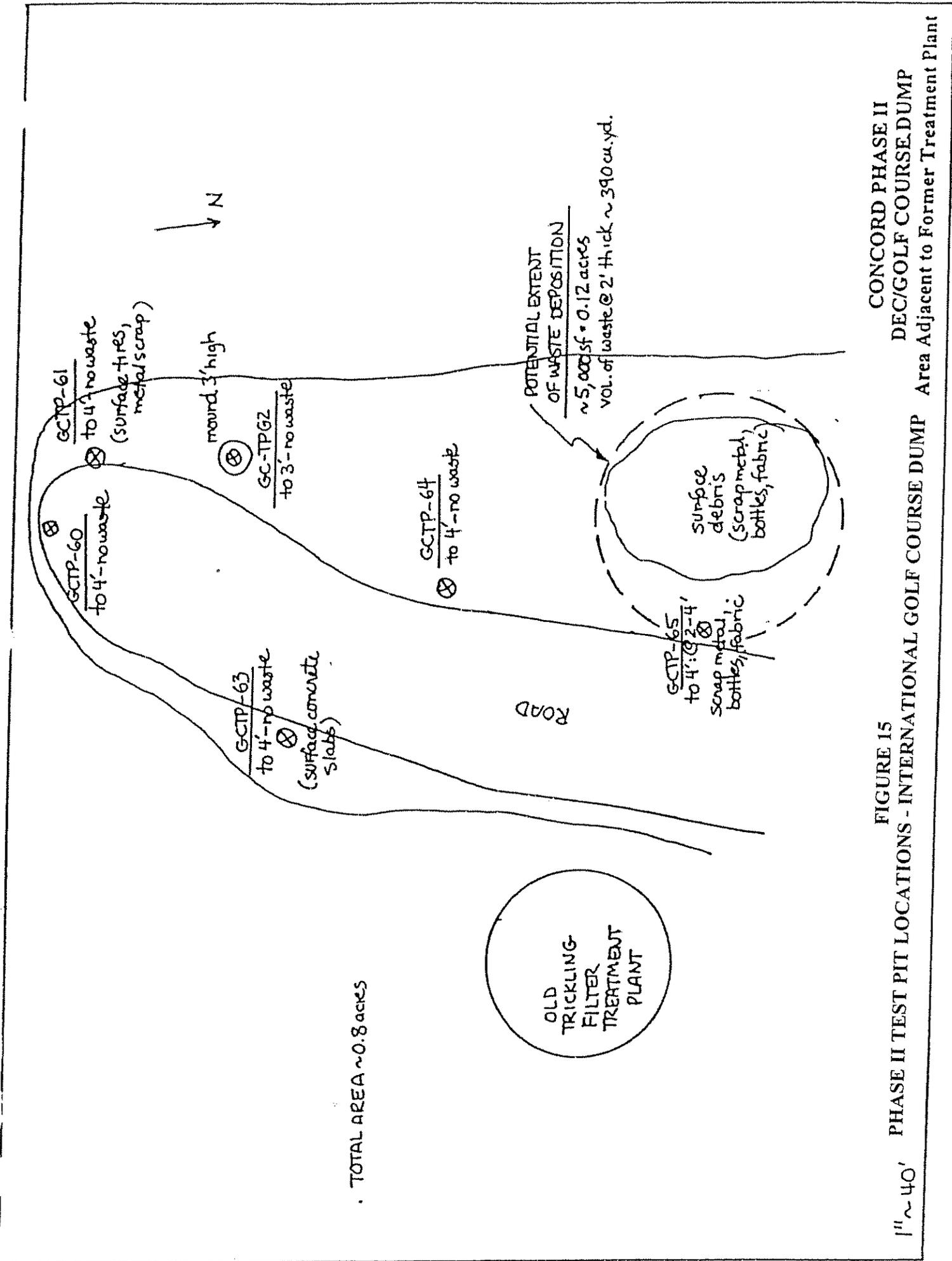


FIGURE 14
 PHASE II TEST PIT LOCATIONS - INTERNATIONAL GOLF COURSE DUMP
 CONCORD PHASE II
 DEC/GOLF COURSE DUMP
 Area South of Known Dump/Below Former Treatment Plant



CONCORD PHASE II
 DEC/GOLF COURSE DUMP
 Area Adjacent to Former Treatment Plant

FIGURE 15
 PHASE II TEST PIT LOCATIONS - INTERNATIONAL GOLF COURSE DUMP

1" ~ 40'



FIGURE 1*
GAS STATION
GROUNDWATER SAMPLING LOCATIONS

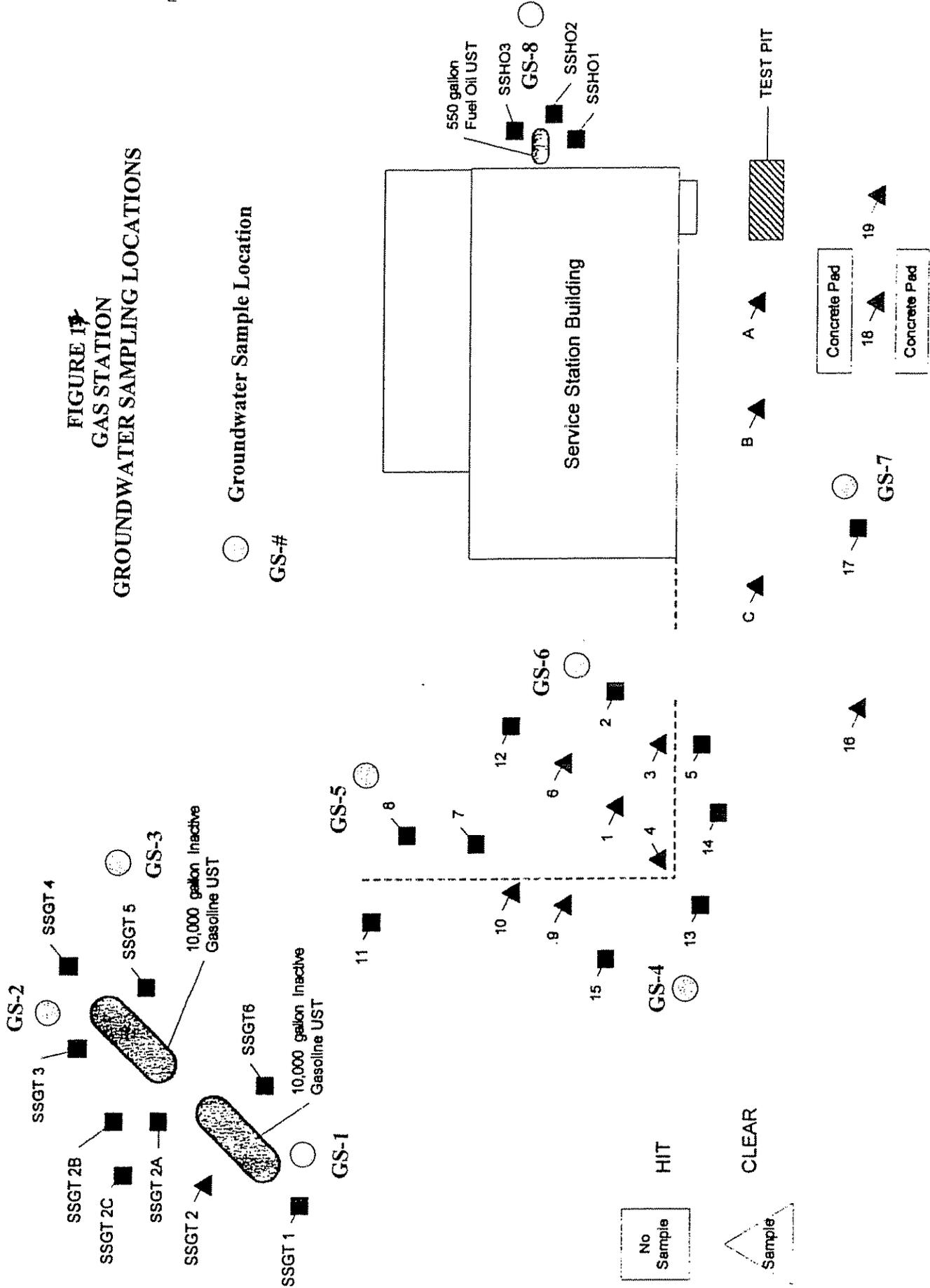
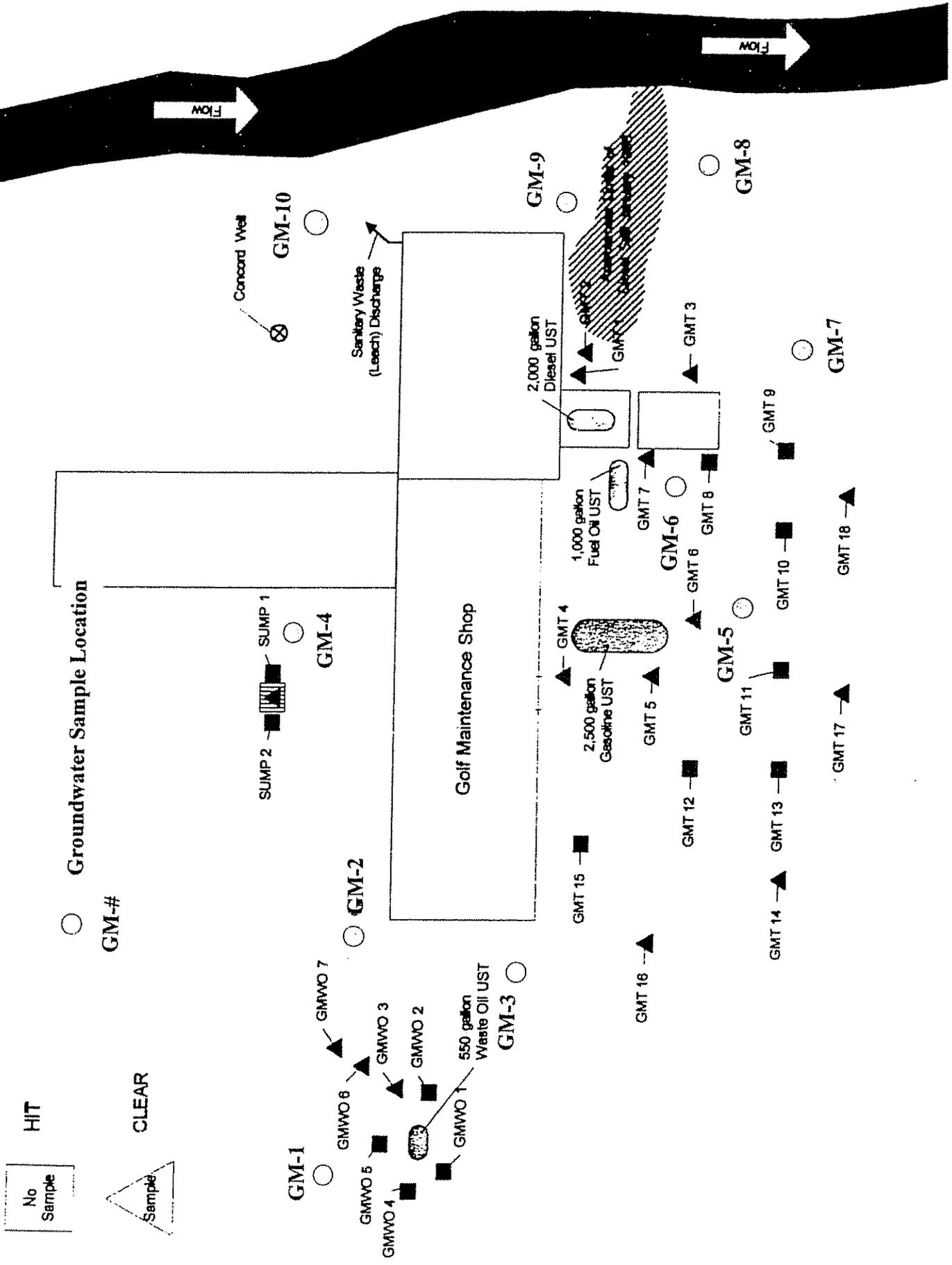


FIGURE 100
GOLF MAINTENANCE AREA
GROUNDWATER SAMPLING LOCATIONS



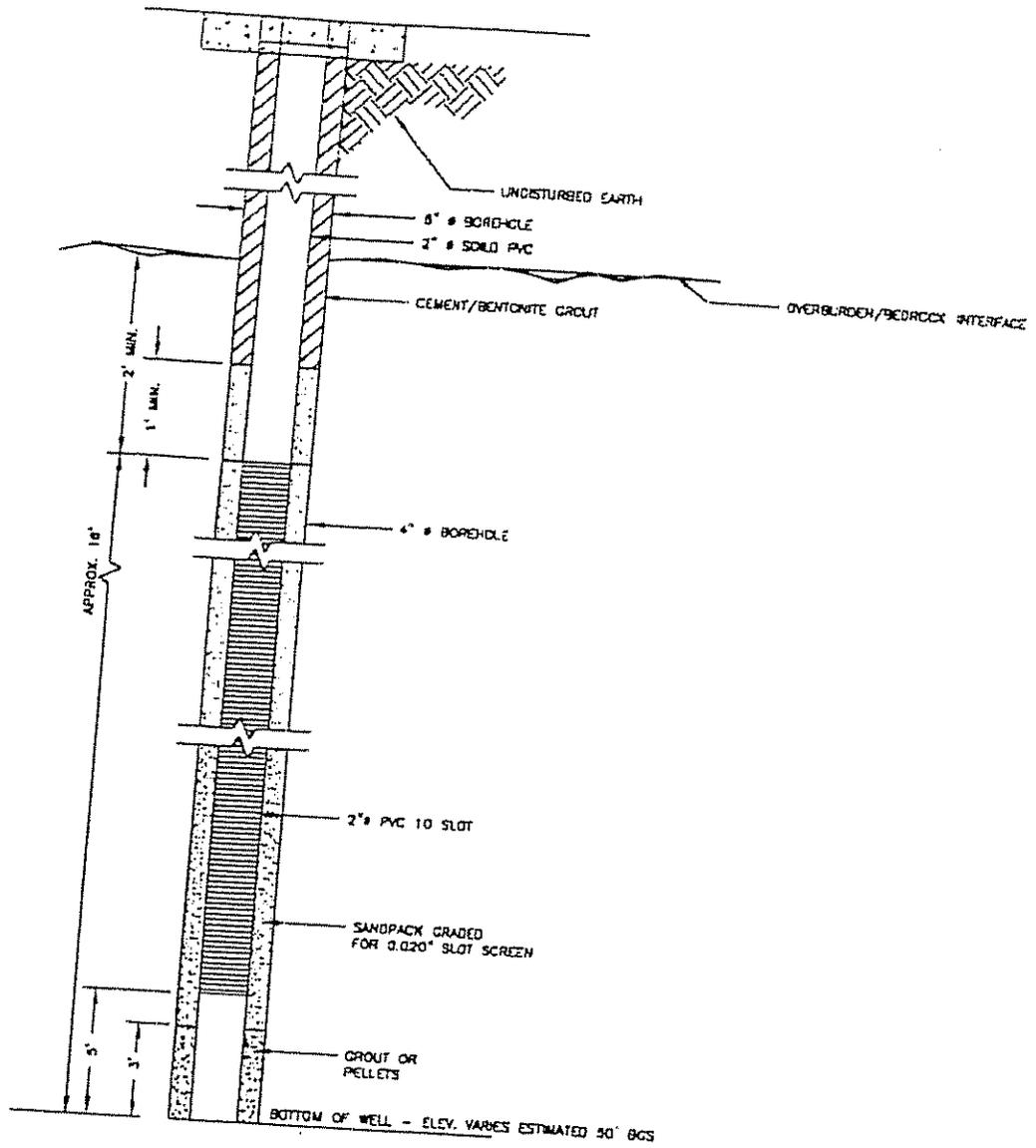


FIGURE 19
MONITORING WELL DETAIL

**FIGURE 20
CONCORD SITE
SCHEDULE**

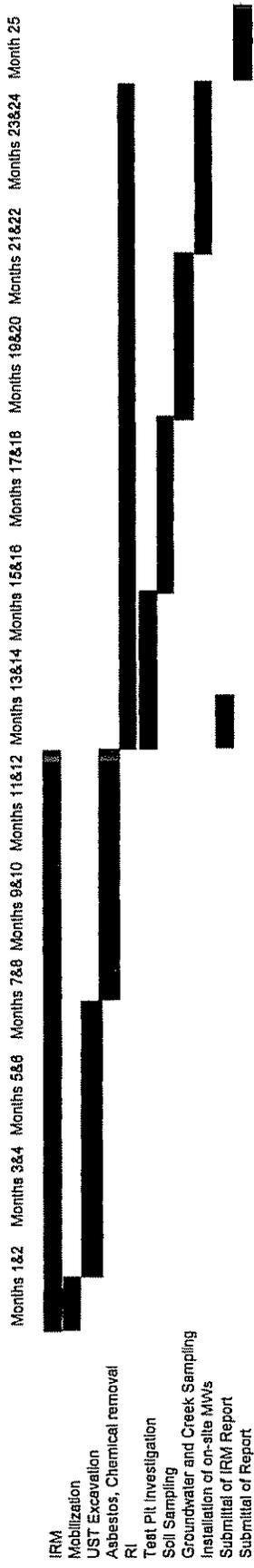


TABLE I
STARS ANALYTICAL RESULTS
Concord Service Station Subsurface Investigation

METHOD 8021

Parameter	Sample Identification Number														Test Pit
	SSB 1	SSB 1 (W)	SSB 3	SSB 4	SSB 4 (W)	SSB 6	SSB 9	SSB 10	SSB 16	SSB 18/19	SSB A	SSB B	SSB C upper	SSB C lower	
Depth of Sample (feet)	6 - 12	12	8 - 12	8 - 12	12	10 - 14	4 - 12	8 - 12	1 - 4	1 - 3	1 - 3	3 - 8	1 - 4	4 - 8	4
Parameter	Analytical Results (ug/kg)														
Benzene	35	24	2,600	230	1,000	15	ND<27	ND<6	ND<7	3,600	ND<5	2,000	37	ND<160	3,100
Toluene	24	18	7,200	210	380	38	180	15	ND<7	16,000	ND<5	7,500	110	1,070	4,900
Ethylbenzene	140	63	22,000	1,500	1,200	150	880	ND<6	ND<7	19,000	ND<5	9,200	130	960	24,000
p-Xylene/m-Xylene	940	400	96,000	11,000	7,000	650	5,300	13	14	60,000	10	51,000	830	8,200	95,000
o-Xylene	280	66	27,000	840	580	90	1,100	ND<6	ND<7	12,000	ND<5	16,000	260	2,500	34,000
Isopropylbenzene	35	5	3,200	420	ND<50	40	310	ND<6	ND<7	4,200	ND<5	1,500	ND<26	ND<160	5,900
n-Propylbenzene	72	8	8,500	640	63	87	670	ND<6	ND<7	7,600	ND<5	4,300	68	540	1,000
1,3,5-Trimethylbenzene	380	63	22,000	4,500	570	540	1,900	ND<6	ND<7	20,000	ND<5	16,000	330	2,400	35,000
tert-Butylbenzene	ND<7	ND<2	ND<1400	ND<150	ND<50	ND<12	ND<27	ND<6	ND<7	ND<14	ND<5	ND<280	ND<26	ND<160	ND<1400
1,2,4-Trimethylbenzene	1,100	190	76,000	1,400	1,800	1,400	5,800	14	ND<7	60,000	ND<5	44,000	1,000	6,800	100,000
sec-Butylbenzene	ND<7	ND<2	ND<1400	ND<150	ND<50	ND<12	98	ND<6	ND<7	ND<1400	ND<5	ND<280	ND<26	360	ND<1400
4-Isopropyltoluene	ND<7	ND<2	ND<1400	ND<150	ND<50	33	110	ND<6	ND<7	2,400	ND<5	ND<280	ND<26	ND<160	3,200
n-Butylbenzene	650	51	28,000	6,900	280	1,100	3,200	8	ND<7	25,000	ND<5	17,000	460	2,600	6,600
Naphthalene	230	13	16,000	3,000	200	250	1,000	50	ND<7	9,900	ND<5	8,300	330	1,100	87,000
Methyl-tert-butyl-ether (MTBE)	ND<1	ND<25	ND<14000	ND<1500	ND<500	ND<120	ND<270	ND<57	ND<71	ND<14000	ND<54	ND<2800	ND<260	ND<1600	ND<14000

LEGEND:

- SSB = Borings taken at the Concord Service Station, at former gasoline tank and piping locations.
- W = Water samples, all other samples noted are soil samples.
- ND = Non detect, less than detection limit noted.

TABLE I
STARS ANALYTICAL RESULTS
Concord Service Station Subsurface Investigation
(Continued)
METHOD 8270

Depth of Sample (feet)	Sample Identification Number													Test Pit	
	SSB 1	SSB 1(W)	SSB 3	SSB 4	SSB 4 (W)	SSB 6	SSB 9	SSB 10	SSB 16	SSB 18/19	SSB A	SSB B	SSB C upper		SSB C lower
6 - 12	12	12	8 - 12	8 - 12	12	10 - 14	4 - 12	8 - 12	1 - 4	1 - 3	1 - 3	3 - 8	1 - 4	4 - 8	4
Parameter	Analytical Results (ug/kg)														
Naphthalene	1	12	1.9	0.15J	390	0.16J	0.15J	ND<0.28	ND<0.25	8.5	ND<0.28	0.83	ND<0.27	0.67	0.22J
Acenaphthylene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Acenaphthene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	0.06J	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Fluorene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	0.12J	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Phenanthrene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	0.21J	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Anthracene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Fluoranthene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	0.12J	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Pyrene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	0.11J	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Benzo-(a)-anthracene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Chrysene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Benzo-(b)-Fluoranthene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Benzo-(k)-fluoranthene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Benzo-(a)-pyrene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Indeno-(1,2,3-cd)-pyrene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Dibenzo-(a,h)-anthracene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Benzo-(g,h,i)-perylene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27

LEGEND:

SSB = Borings taken at the Concord Service Station, at former gasoline tank and piping locations.
W = Water samples, all other samples noted are soil samples.
ND = Non detect, less than detection limit noted.
J = Estimated Value, under the laboratory detection limit.

Taken From Phase II Environmental Site Assessment Report,
Environmental Compliance Services, Inc., September 1998

TABLE 2
STARS ANALYTICAL RESULTS
Golf Maintenance Shop Subsurface Investigation

METHOD 8021

Parameter	Sample Identification Number																	
	GMT 1	GMT 2	GMT 3	GMT 4	GMT 5	GMT 6	GMT 7	GMT 14	GMT 16	GMT 17	GMT 18	GMT 3 Upper	GMT 3 Lower	GMT 6	GMT 7			
Depth of Sample (feet)	1 - 4	1 - 3	4 - 8	6 - 8	4 - 6	6 - 9	4 - 8	4 - 8	4 - 8	4 - 7.5	3 - 6.5	1 - 4	6 - 10	6 - 10	6 - 10			
	Analytical Results (ug/kg)																	
Benzene	ND<14	ND<7	ND<7	120	1,200	25	ND<6	ND<7	ND<6	ND<6	ND<6	900	68	94	ND<8			
Toluene	180	ND<7	200	2,200	20,000	95	ND<6	ND<7	ND<6	ND<6	ND<6	16,000	560	1,500	ND<8			
Ethylbenzene	160	ND<7	58	885	6,500	30	ND<6	ND<7	ND<6	ND<6	ND<6	5,300	95	380	ND<8			
p-Xylene/m-Xylene	610	ND<7	222	3,800	25,000	98	ND<6	ND<7	ND<6	ND<6	ND<6	21,000	380	1,600	11			
o-Xylene	130	ND<7	96	1,400	9,800	43	ND<6	ND<7	ND<6	ND<6	ND<6	8,100	140	610	9			
Isopropylbenzene	160	ND<7	ND<7	170	880	12	ND<6	ND<7	ND<6	ND<6	ND<6	800	14	47	ND<8			
n-Propylbenzene	142	ND<7	17	510	2,000	63	ND<6	ND<7	ND<6	ND<6	ND<6	2,400	41	130	ND<8			
1,3,5-Trimethylbenzene	420	ND<7	38	1,000	4,300	33	ND<6	ND<7	ND<6	ND<6	ND<6	5,200	94	260	8			
tert-Butylbenzene	190	ND<7	33	ND<45	ND<140	ND<6	ND<6	ND<7	ND<6	ND<6	ND<6	ND<140	ND<7	ND<9	ND<8			
1,2,4-Trimethylbenzene	400	ND<7	110	3,600	16,000	77	ND<6	ND<7	ND<6	ND<6	ND<6	18,000	290	900	29			
sec-Butylbenzene	400	ND<7	ND<7	ND<45	ND<140	ND<6	ND<6	ND<7	ND<6	ND<6	ND<6	ND<140	ND<5	27	ND<8			
4-Isopropyltoluene	290	ND<7	ND<7	ND<45	320	ND<6	ND<6	ND<7	ND<6	ND<6	ND<6	3,200	30	54	ND<8			
n-Butylbenzene	1,600	ND<7	58	1,700	4,500	46	ND<6	ND<7	ND<6	ND<6	ND<6	7,500	180	250	13			
Naphthalene	1,300	ND<7	ND<7	750	2,800	48	ND<6	ND<7	ND<6	ND<6	ND<6	7,200	120	170	15			
Methyl-tert-butyl-ether (MTBE)	ND<14	ND<70	340	910	ND<1400	ND<62	ND<64	ND<71	ND<64	ND<64	ND<64	ND<1400	390	390	ND<79			

LEGEND:

- GMT = Borings taken at the Golf Maintenance Tanks, at front of golf maintenance shop near gasoline, heating oil, and diesel tanks.
- GMWO = Borings taken at the Golf Maintenance Waste Oil tank, located at the eastern side of the golf maintenance shop building.
- ND = Non detect, less than detection limit noted.
- J = Estimated Value, under the laboratory detection limit.

TABLE 2
STARS ANALYTICAL RESULTS
Golf Maintenance Shop Subsurface Investigation
(Continued)

METHOD 8270

Parameter	Sample Identification Number																	
	GMT 1	GM T 3	GMT 4	GMT 5	GMT 6	GMT 7	GMT 14	GMT 16	GMT 17	GMT 18	GMWO 3 Upper	GMWO 3 Lower	GMWO 6	GMWO 7				
Depth of Sample (feet)	1 - 4	1 - 3	4 - 8	6 - 8	4 - 6	6 - 9	4 - 8	4 - 8	4 - 7.5	3 - 6.5	1 - 4	6 - 10	6 - 10	6 - 10				
Analytical Results (ug/kg)																		
Naphthalene	ND< 0.28	3.1	ND< 0.28	0.77	5.5	0.11J	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	0.94	ND< 6	0.08J	3.7				
Acenaphthylene	ND< 0.28	ND< 0.26	ND< 0.28	ND< 0.25	ND< 0.28	ND< 0.28	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	ND< 0.28	ND< 6	ND< 0.29	ND< 0.29				
Acenaphthene	ND< 0.28	0.44	ND< 0.28	ND< 0.25	ND< 0.28	ND< 0.28	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	ND< 0.26	ND< 6	ND< 0.29	0.77				
Fluorene	2.4	1.1	ND< 0.28	ND< 0.25	0.06J	ND< 0.28	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	0.10J	ND< 6	ND< 0.29	1.4				
Phenanthrene	3.4	2.6	ND< 0.28	ND< 0.25	0.08J	0.07J	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	0.37	ND< 6	ND< 0.29	3.0				
Anthracene	0.71	0.15J	ND< 0.28	ND< 0.25	ND< 0.28	ND< 0.28	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	ND< 0.28	ND< 6	ND< 0.29	0.14				
Fluoranthene	0.71J	0.05J	ND< 0.28	ND< 0.25	ND< 0.28	ND< 0.28	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	0.07J	ND< 6	ND< 0.29	0.09J				
Pyrene	ND< 0.28	0.06J	ND< 0.28	ND< 0.25	ND< 0.28	ND< 0.28	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	0.18J	ND< 6	ND< 0.29	0.08J				
Benzo-(a)-anthracene	ND< 0.28	ND< 0.26	ND< 0.28	ND< 0.25	ND< 0.28	ND< 0.28	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	ND< 0.28	ND< 6	ND< 0.29	ND< 0.29				
Chrysene	0.07J	ND< 0.26	ND< 0.28	ND< 0.25	ND< 0.28	0.06J	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	0.06J	ND< 6	ND< 0.29	0.06J				
Benzo-(b)-Fluoranthene	ND< 0.28	ND< 0.26	ND< 0.28	ND< 0.25	ND< 0.28	ND< 0.28	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	0.06J	ND< 6	ND< 0.29	ND< 0.29				

TABLE 2
STARS ANALYTICAL RESULTS
Golf Maintenance Shop Subsurface Investigation
(Continued)

METHOD 8270
(continued)

Benzo-(k)-fluoranthene	ND< 0.28	ND< 0.26	ND< 0.28	ND< 0.25	ND< 0.28	ND< 0.27	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	ND< 0.26	ND< 0.28	ND< 6	ND<0.29	ND<0.29
Benzo-(a)-pyrene	ND< 0.28	ND< 0.26	ND< 0.28	ND< 0.25	ND< 0.28	ND< 0.27	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	ND< 0.26	ND< 0.28	ND< 6	ND<0.29	ND<0.29
Indeno-(1,2,3-cd)-pyrene	ND< 0.28	ND< 0.26	ND< 0.28	ND< 0.25	ND< 0.28	ND< 0.27	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	ND< 0.26	ND< 0.28	ND< 6	ND<0.29	ND<0.29
Dibenzo-(a,h)-anthracene	ND< 0.28	ND< 0.26	ND< 0.28	ND< 0.25	ND< 0.28	ND< 0.27	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	ND< 0.26	ND< 0.28	ND< 6	ND<0.29	ND<0.29
Benzo-(g,h,i)-perylene	ND< 0.28	ND< 0.26	ND< 0.28	ND< 0.25	ND< 0.28	ND< 0.27	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	ND< 0.26	ND< 0.28	ND< 6	ND<0.29	ND<0.29

LEGEND:

- GMT = Borings taken at the Golf Maintenance Tanks, at front of golf maintenance shop near gasoline, heating oil, and diesel tanks.
- GMWO = Borings taken at the Golf Maintenance Waste Oil tank, located at the eastern side of the golf maintenance shop building.
- ND = Non detect, less than detection limit noted.
- J = Estimated Value, under the laboratory detection limit.

Taken From Phase II Environmental Site Assessment Report,
 Environmental Compliance Services, Inc., September 1998

6NYCRR PART 360 ANALYTICAL RESULTS SUMMARY

GOLF MAINTENANCE AREA

Golf Maintenance MicroWell	Golf Maintenance In-Stream
ND	0.9 ppb
ND	8 ppb
ND	3.0 ppm
10 ppm	1.18 ppm
105 ppm	82.0 ppm
0.273 ppm	0.215 ppm
50.9 ppm	17.3
ND	0.174 ppm
5.91 ppm	3.45 ppm
3.15 ppm	0.052 ppm
5.16 ppm	ND
0.008 ppm	ND
ND	ND
0.022 ppm	ND
ND	ND
0.017 ppm	ND
0.20 ppm	ND
0.006 ppm	ND
0.032 ppm	ND
1.30 ppm	ND
ND	ND
0.005 ppm	ND
0.0022 ppm	ND
ND	ND

LEGEND

ppm = parts per million ppb = parts per billion ND = None Detected
 Shaded areas indicate an exceedence of applicable New York State regulatory thresholds.

Taken From Phase II Environmental Site Assessment Report,
 Environmental Compliance Services, Inc., September 1998

6NYCRR PART 360 ANALYTICAL RESULTS SUMMARY
INTERNATIONAL GOLF COURSE DUMP

Parameter	NYSDEC Dump MW1	NYSDEC Dump MW2	NYSDEC Dump MW3	NYSDEC Dump Seep
Benzene	ND	ND	ND	ND
Toluene	ND	ND	ND	ND
TOC	5.9 ppm	8.8 ppm	8.4 ppm	ND
Potassium	6.68 ppm	18.7 ppm	14.8 ppm	2.19 ppm
Sodium	28.4 ppm	18.8 ppm	2.39 ppm	22.1 ppm
Barium	0.294 ppm	1.69 ppm	1.77 ppm	0.162 ppm
Calcium	16.0 ppm	31.0 ppm	44.6 ppm	24.8 ppm
Iron	50.8 ppm	113 ppm	216 ppm	76.7 ppm
Magnesium	10.7 ppm	47.2 ppm	43.9 ppm	5.75 ppm
Manganese	1.06 ppm	1.85 ppm	16.3 ppm	1.95 ppm
Aluminum	26 ppm	163 ppm	119 ppm	0.18 ppm
Arsenic	0.016 ppm	0.062 ppm	0.13 ppm	0.005 ppm
Beryllium	0.002 ppm	0.013 ppm	0.014 ppm	ND
Chromium	0.037 ppm	0.164 ppm	0.165 ppm	ND
Cobalt	0.018 ppm	0.119 ppm	0.124 ppm	ND
Copper	0.046 ppm	0.313 ppm	0.366 ppm	ND
Lead	0.062 ppm	0.01 ppm	0.44 ppm	0.020 ppm
Vanadium	0.027 ppm	0.099 ppm	0.102 ppm	ND
Nickel	0.049 ppm	0.267 ppm	0.298 ppm	ND
Zinc	0.141 ppm	0.595 ppm	0.619 ppm	0.067 ppm
Boron	ND	0.061 ppm	0.061 ppm	ND
Cadmium	ND	0.022 ppm	0.022 ppm	0.013 ppm
Mercury	ND	0.0002 ppm	0.0002 ppm	ND
Selenium	ND	ND	0.003 ppm	ND

LEGEND

ppm = parts per million ppb = parts per billion ND = None Detected
Shaded areas indicate an exceedence of applicable New York State regulatory thresholds.

Taken From Phase II Environmental Site Assessment Report,
Environmental Compliance Services, Inc., September 1998

APPENDIX A

Phase II Report

**PHASE II
ENVIRONMENTAL SITE ASSESSMENT REPORT**

FOR THE

**CONCORD RESORT HOTEL
KIAMESHA LAKE, NEW YORK**

VOLUME I

Prepared For:

**RESORTCO, LLC
(FORMERLY VALUE RESORT & SPA, INC.)
300 EAST 42ND STREET
NEW YORK, NEW YORK 10017**

Prepared By:

**ENVIRONMENTAL COMPLIANCE SERVICES, INC.
9 ACADEMY AVENUE
MIDDLETOWN, NEW YORK 10940**

SEPTEMBER 1998

**PHASE II ENVIRONMENTAL SITE ASSESSMENT
CONCORD RESORT HOTEL
KIAMESHA LAKE, NEW YORK**

TABLE OF CONTENTS

VOLUME I

	<u>Page No.</u>
1.0 INTRODUCTION	1
1.1 Phase II Investigation Summary	3
1.2 Limiting Conditions and Methodology	5
2.0 GENERAL SITE DESCRIPTION	5
2.1 Area Soils	6
2.2 Water Resources	6
3.0 PHASE I FINDINGS	8
3.1 Water Supply and Sanitary Wastewater Treatment	8
3.2 Electric and Gas	10
3.3 Facility Emissions	12
3.4 Underground and Aboveground Storage Tanks	12
3.5 Asbestos and Radon	16
3.6 Facility Waste Generation	17
3.7 Pesticide Storage	17
4.0 GENERAL HISTORICAL INFORMATION	18
5.0 PHASE I ENVIRONMENTAL RECORD REVIEW AND EVALUATION	20
5.1 Government Records Search	20
5.2 Reports of Spills/Releases	21
5.3 Past Waste Disposal Practices	22
6.0 PHASE II METHODOLOGY	26
6.1 Test Pit Investigation Program	26
6.2 Tank Integrity Testing Program	27
6.3 Boring Program	27
6.4 UST Sampling and Analytical Protocols	28
6.5 Concord Well Water	29

**PHASE II ENVIRONMENTAL SITE ASSESSMENT
CONCORD RESORT HOTEL
KIAMESHA LAKE, NEW YORK**

**TABLE OF CONTENTS
(CONTINUED)**

	<u>Page No.</u>
7.0 DUMP SITE PHASE II INVESTIGATIVE FINDINGS	29
7.1 Concord Service Station Dump Site - Section 13, Block 3, Lot 19.1	30
7.2 Main Parking Lot Dump Site - Section 15, Block 1, Lot 14	31
7.3 Golf Maintenance Dumpsite and Vehicle Storage Area - Section 15, Block 1, Lot 50	34
7.4 NYSDEC / Golf Course Dump Site - Section 15, Block 1, Lots 11 and 13	36
7.5 Chalet Dump Site - Section 15, Block 1, Lot 13	40
7.6 Casino Dump Site - Section 13, Block 3, Lot 20	41
7.7 Thompsonville Road Site - Section 23, Block 1, Lot 48	42
7.8 Horse Farm Dump Site - Section 60, Block 1, Lot 75	43
7.9 Cemetery Dump Site - Section 23, Block 1, Lot 11.3	45
8.0 UST PHASE II INVESTIGATION FINDINGS	46
8.1 Concord Main Hotel - Section 9, Block 1, Lot 34.1	47
8.2 Raymond's Restaurant/Club House - Section 15, Block 1, Lot 50	47
8.3 Concord Service Station USTs - Section 9, Block 1, Lot 35	47
8.4 Golf Maintenance USTs - Section 15, Block 1, Lot 50	49
8.5 Residential Parcels	50
8.6 Carlton Hotel and Pussycat Lounge - Section 9, Block 1, Lot 34.1 and Section 15, Block 1, Lot 1.1	53
9.0 CONCORD WATER SUPPLY WELL	54
10.0 REMEDIATION COST ESTIMATES	54
10.1 Dumps and Leaking USTs	55
10.2 Replacement of Existing USTs	57
10.3 Pesticide Removal and Disposal	57
10.4 Total Remediation and Compliance Costs	57
11.0 CONCLUSION AND RECOMMENDATIONS	58

**PHASE II ENVIRONMENTAL SITE ASSESSMENT
CONCORD RESORT HOTEL
KIAMESHA LAKE, NEW YORK**

**TABLE OF CONTENTS
(CONTINUED)**

APPENDICES

- APPENDIX A -** Preliminary Phase I Environmental Site Assessment Reports
Electrical Transformer Package
Pesticide Quarantine Order
NYSDEC Order On Consent
- APPENDIX B -** Village of Monticello Public Water Supply Regulations
- APPENDIX C -** Past PBS Registration
- APPENDIX D -** Concord Services Station UST Questionnaire
- APPENDIX E -** Dump Site Photographs
- APPENDIX F -** Test Pit Investigation Sketches

VOLUME II

- APPENDIX G -** Analytical Results - Test Pit Investigation Program

VOLUME III

- APPENDIX H -** Analytical Results - GeoProbe Subsurface Investigation Program

LIST OF TABLES

	<u>Follows Page No.</u>
1-1 Phase I / Phase II Evaluated Properties	1
1-2 Dump Site Characteristics	4
1-3 On-Site UST Systems	4
7-1 6 NYCRR Part 360 Analytical Results Summary - Concord Resort Hotel Dump Sites	33

**PHASE II ENVIRONMENTAL SITE ASSESSMENT
CONCORD RESORT HOTEL
KIAMESHA LAKE, NEW YORK**

**TABLE OF CONTENTS
(CONTINUED)**

**LIST OF TABLES
(Continued)**

	<u>Follows Page No.</u>
8-1 NYSDEC STARS Memo #1 Thresholds - TCLP Alternative Guidance Values	46
8-2 STARS Analytical Results - Concord Service Station Subsurface Investigation	48
8-3 STARS Analytical Results - Golf Maintenance Shop Subsurface Investigation	49
8-4 STARS Analytical Results - Carlton Hotel and Mountain View Residence Subsurface Investigation	52

LIST OF FIGURES

	<u>Follows Page No.</u>
1-1 Site Location Map	1
8-1 Subsurface Investigation at the Concord Service Station	48
8-2 Subsurface Investigation at the Golf Maintenance Shop	49
8-3 Subsurface Investigations at the Carlton Hotel and the Mountain View Residence	52

1.0 INTRODUCTION

This report has been prepared for Resortco of New York (affiliated with Value Spa & Resort, Inc) a Manhattan development firm, which is interested in purchasing properties owned and operated by Kiamesha Concord, Inc., Frepar, Nalou Realty and Concord Development Corporation. A total of 67 parcels have been evaluated under a Phase I Environmental Site Assessment process which began during September 1996. These properties are mostly located within the Town of Thompson, 3 are located within the Town of Fallsburg and 2 in the Village of Monticello. Of the 67 parcels, 18 were recommended for further investigation under a Phase II Environmental Site Assessment to determine the level of environmental risk and liability suspected by way of conclusions drawn under the Phase I Assessment process. Figure 1-1 presents a perimeter site location map that includes land areas which comprise most of the 67 parcels evaluated under the Phase I work effort, as well as those targeted for investigation under the Phase II Assessment process. Table 1-1 lists the 67 parcels, by location, with an indication of which were evaluated under the Phase II investigation work effort.

Portions of four parcels investigated under the Phase II work effort are owned by Sullivan County, via past foreclosure proceedings. The County owns 16 parcels listed in Table 1-1. County owned parcels are indicated with an asterisk. As shown in the Table, five County owned parcels were determined to be suspect and were investigated under the Phase II investigation. Four of these parcels were confirmed to be contaminated as a result of past waste dumping activities.

The remaining parcels outside those investigated under the Phase II Assessment process were not investigated further because they did not exhibit potential indications of environmental contamination under the Phase I assessment process. However, important compliance issues related to the operation/registration of aboveground storage tank systems, operation and permitting of septic systems, facility emissions, questionable discharges to groundwaters and surface waters of the State and disposal of stored pesticides were cited on some the remaining parcels. These matters are further discussed in Section 11.0, Regulatory Compliance Issues.

During August 1996, Environmental Compliance Services, Inc. (ECSI) was retained by representatives of Kiamesha Concord, Inc. (Kiamesha) to conduct a Phase I Environmental Site Assessment of the property holdings listed under the ownership of the Kiamesha Concord, Inc., Frepar Laboratories, Nalou Realty Corp. and the Concord Development Corporation. The approximate area of property holdings totaled 1,700 acres. The project commenced in September 1996 under the oversight of George and Robert Parker, representatives of the Concord Resort Hotel, who provided ECSI with a listing of parcels to target for the Phase I assessment process.

Kiamesha retained ECSI's services to evaluate whether or not environmental risks or liabilities existed for the 1,700 acres of parcel listings designated by the Parker family, and to report on immediate regulatory compliance problems associated with daily facility operations. The project continued through the beginning of April 1997, however, assessment activities were temporarily suspended by George Parker during the later part of April 1997 through August 1997. ECSI was requested to reinitiate activities in September 1997. By this time ECSI had

**TABLE 1-1
PHASE I / PHASE II EVALUATED PROPERTIES
CONCORD RESORT HOTEL**

Section, Block, Lot *	Acreage	Street Location	Current Owner
9-1-12 3	0.68	Gibber Road / Barnes Boulevard	James Parker
9-1-13	1	Barnes Boulevard	Robert Parker
9-1-18 1	20.83	Highway 42	Estate of Raymond Parker
9-1-26	1.3	County Highway 109	Frepar Laboratories, Inc.
9-1-27	28.8	County Highway 109	Kiamesha Concord, Inc.
9-1-28	0.26	County Highway 109	Kiamesha Concord, Inc.
9-1-29	1.8	County Highway 109	Kiamesha Concord, Inc.
9-1-31	0.21	County Highway 109	Kiamesha Concord, Inc.
9-1-34 1	93.66	Concord Road	Kiamesha Concord, Inc.
9-1-34 2	3.12	Concord Road	Estate of Raymond Parker
9-1-35	11.3	Concord Road	Estate of Raymond Parker
9-1-36	2.5	Back Kiamesha Road	Sullivan County
9-1-37	7.2	Back Kiamesha Road	Sullivan County
9-1-76	0.2	Concord Road	Nalou Realty Corp.
9-1-77	0.86	Route 42 / Concord Road	Sullivan County
10-15-9	2	County Highway 109	Kiamesha Concord, Inc.
10-15-10	0.34	County Highway 109	Concord Development Corp.
10-15-11	2.8	County Highway 109 / Pine Drive	Kiamesha Concord, Inc.
10-16-5	2.5	County Highway 109	Kiamesha Concord, Inc.
13-3-10.1	64.37	Old Highway 42	Sullivan County
13-3-12	0.98	Back Kiamesha Road	Sullivan County
13-3-17	0.46	Back Kiamesha Road	Kiamesha Concord, Inc.
13-3-18	23.9	Rock Ridge Drive	Estate of Raymond Parker
13-3-19 1	33.43	Concord Road	Sullivan County
13-3-19 3	0.95	Concord Road	Estate of Raymond Parker
13-3-20	66	Back Kiamesha Road	Concord Development Corp.
13-3-22	22	Rock Ridge Drive	Sullivan County
13-3-25	65.87	Back Kiamesha Road	Sullivan County
13-3-26	7.8	Thompsonville Road	Sullivan County

**TABLE 1-1
PHASE I / PHASE II EVALUATED PROPERTIES
CONCORD RESORT HOTEL**

(CONTINUED)

Section, Block, Lot *	Acreage	Street Location	Current Owner
15-1-1.1	2.39	County Highway 109	Frepar Laboratories, Inc.
15-1-2	0.34	County Highway 109	Frepar Laboratories, Inc.
15-1-3	0.57	County Highway 109	Frepar Laboratories, Inc.
15-1-10	0.24	County Highway 109	Sullivan County
15-1-11	108.45	County Highway 109	Sullivan County
15-1-13	116.48	Back Kiamesha Road	Nalou Realty Corp.
15-1-14	197.37	Chalet Road	Kiamesha Concord, Inc.
15-1-15	38.5	Thompsonville Road	Estate of Raymond Parker
15-1-16	38	Back Kiamesha Road	Nalou Realty Corp.
15-1-17	5.5	Thompsonville Road	Nalou Realty Corp.
15-1-18	4.5	Thompsonville Road	Sullivan County
15-1-19	15	Chalet Road	Nalou Realty Corp.
15-1-22	25.32	Thompsonville Road	Concord Development Corp.
15-1-24	1.5	Thompsonville Road	Frepar Laboratories, Inc.
15-1-25	49.9	Thompsonville Road	Frepar Laboratories, Inc.
15-1-35.7	132.84	Thompsonville Road	Concord Development Corp.
15-1-49	0.17	County Highway 109	Concord Development Corp.
15-1-50	17.72	Chalet Road	Estate of Raymond Parker
15-1-51	27.08	Town Road 45	Kiamesha Concord, Inc.
16-1-30	74	Thompsonville Road	Concord Development Corp.
23-1-11.3	12.2	Thompsonville Road	Sullivan County
23-1-48	46.6	Thompsonville Road	Nalou Realty Corp.
23-1-52	116.5	Thompsonville Road	Estate of Raymond Parker
23-1-53	8	Thompsonville Road	Sullivan County
23-1-54.1	31.73	Joyland Road	Frepar Laboratories, Inc.
23-1-54.2	57.5	Joyland Road	Kiamesha Concord, Inc.
23-1-54.3	7.6	Joyland Road	Kiamesha Concord, Inc.
23-1-55	40.5	Joyland Road	Concord Development Corp.

**TABLE 1-1
PHASE I / PHASE II EVALUATED PROPERTIES
CONCORD RESORT HOTEL**

(CONTINUED)

Section, Block, Lot *	Acreage	Street Location	Current Owner
23-1-61.2	10.05	Joyland Road	Concord Development Corp.
23-2-1	21	Joyland Road	Frepar Laboratories, Inc.
23-2-2	0.75	Joyland Road	Frepar Laboratories, Inc.
23-2-3	0.75	Joyland Road	Frepar Laboratories, Inc.
23-2-4	3.25	Joyland Road	Frepar Laboratories, Inc.
23-2-6	1	Joyland Road	Frepar Laboratories, Inc.
60-1-75 (Town of Fallsburg)	50	East End Kiamesha Lake Road	Sullivan County
60-1-76 (Town of Fallsburg)	0.34	County Highway 109	Nalou Realty Corp.
60-1-77 (Town of Fallsburg)	0.34	County Highway 109	Nalou Realty Corp.
108-4-3 (Village of Monticello)	0.25	Monticello By-Pass	Sullivan County
118-12-6 (Village of Monticello)	0.5	Lloyd Lane / Patricia Place	James Parker

***Note: All parcels located within the Town of Thompson unless otherwise noted.
Shading depicts parcels evaluated under Phase II investigation work effort.**

conducted visual inspections, as well as property and spill/release record searches for most of the properties listed for the Phase I assessment. This assessment process eventually concluded that environmental risks and liabilities existed at areas within the boundary limits of 18 parcels targeted for Phase II assessment (Table 1-1). These conclusions were determined throughout 1997 before the project was temporarily suspended during April 1997. All remaining additional parcels were evaluated between September and December 1997.

Phase I assessment activities were performed in accordance with ASTM standards for Environmental Assessments for Commercial Properties (E-1527-94/E-1527-97). In general, the scope of services performed by ECSI, on behalf of Kiamesha, included the following:

- ◆ Interviews with applicable agency and property owners/operators as well as the completion of an Environmental Questionnaire to facilitate evaluation of past and present site conditions
- ◆ Performance of site walkover surveys to visually evaluate the physical conditions of the subject parcels.
- ◆ Review of agency records on any spills/releases at or in the vicinity of the site.
- ◆ Review of Tax Assessor records to verify property ownership and any other available property record information.
- ◆ Evaluation of the level of regulatory compliance the site may be subject to.
- ◆ Review of available environmental reports completed for the site and related correspondence.

In addition to ongoing property inspections, ECSI staff responded to an observed surface release of diesel fuel (approximately 100 gallons) at the Golf Maintenance Shop, during January 1998. Diesel oil was discharged adjacent to the Golf Maintenance Shop while a Hotel staff person was fueling a compressor unit located approximately 35 feet, upslope of the Kiamesha Creek. Cleanup activities were coordinated with the New York State Department of Environmental Conservation (NYSDEC). These activities coincided with discussions about an additional release of #4 fuel oil reported by the Town of Thompson Water and Sewer Department; during December 1997, fuel oil was observed at its wastewater treatment plant and traced to the boiler room of the Concord Hotel. Based on visual inspection and conversations with Hotel maintenance staff, it appeared that during December, the release was caused by a boiler feed fuel pump valve malfunction which in turn caused oil to accumulate upon the concrete floor within the main boiler room of the Hotel. Once on the floor, the oil made its way to the wastewater treatment plant via a floor drain leading to the wastewater pipe collection system situated below Concord Road. Subsequently, the spill was cleaned up by on-site personnel to NYSDEC satisfaction. The Town's treatment plant was not impacted by the release.

During March 1997, Kiamesha requested that a preliminary (draft) Phase I Environmental Assessment report be completed, to provide to a prospective buyer of the hotel. ECSI provided a draft preliminary (letter) report to George Parker on March 12, 1997, which identified waste dump sites, and compliance issues related to existing active and inactive above and underground petroleum storage tanks systems. Recommendations for cleanup were noted in a Work Plan which was developed by ECSI for the Parkers in consideration of Kiamesha's plans to address compliance needs determined under the assessment process completed through December 1996.

In January 1998, the preliminary report completed for George Parker was addressed to Joseph Murphy, President of Value Resort & Spa, Inc. (Value), a prospective buyer who contacted Kiamesha some time during 1997. During December 1997 through January 1998, Kiamesha requested ECSI to continue Phase I assessment activities with plans to complete a Phase I Environmental Site Assessment report some time during February/March 1998. Prior to February, representatives of Value retained ECSI to conduct an expedited Phase II assessment to characterize and quantify environmental contamination determined at parcels visually evaluated to date. Phase II activities were completed during the week of February 2, 1998, on February 20 and 21, and again on September 16, 1998.

Subsequent to February 1998 Phase II field activities, work efforts were diverted from completing a Phase I report in anticipation of quickly completing Phase II field investigations and reporting findings, an arrangement mutually reached between Kiamesha and Value Investors, Inc. Appendix A contains copies of the preliminary assessment reports completed by ECSI, on behalf of Kiamesha, and addressed to George Parker and Mr. Murphy, Value Resort & Spa, Inc.

Prior to completing Phase II field investigations, the original listing of properties provided by Kiamesha was expanded by Value to include additional parcels. ECSI completed the bulk of Phase II investigations during February 1998, in conjunction with conducting visual inspections of properties contained on the expanded listing. As a result, some of the additional properties were included under a supplemental investigation work effort completed on February 20 and 21, 1998. Work efforts included conducting a GeoProbe boring program at three residential properties, sampling and analysis of a water supply well located in close proximity to confirmed underground tank system releases at the Golf Maintenance Shop and additional test pit investigations at a property site suspected of past disposal practices, the Thompsonville Road site.

1.1 Phase II Investigation Summary

Phase II Investigation activities primarily encompassed the evaluation of numerous dump sites by way of a test pit investigation program, and a boring (GeoProbe) program at suspect areas surrounding underground storage tanks. ECSI also sampled and analyzed an on-site drinking water supply well, the Concord Well, located in close proximity to confirmed UST releases at the Golf Maintenance Shop and to golf course grounds where chemicals are applied to control pests and undesirable forms of vegetation. The water supply well is leased by the Kiamesha Artesian Spring Water Co., Inc. which primarily supplements its potable water supplies to the Concord Resort Hotel. The well is also believed to feed a main supply tank (a 1.2 million gallon supply source) located near the intersection of Route 109 and Concord Road. This source

supplies other portions of the Concord Hotel facilities as well as nearby residents and businesses which connect to the Kiamesha Artesian Spring Water Company system.

Site inspections conducted under Phase I activities also revealed that pesticide and some herbicide chemicals are stored in a small shed at the Golf Maintenance Shop facility. The chemicals are utilized by Golf Maintenance staff to maintain the Concord Resort Hotel grounds and golf courses under the supervision of a NYS Certified pesticide applicator. On September 29, 1997, an inspection conducted by a NYSDEC representative resulted in the issuance of a Quarantine Order to require that the use of pesticides noted on the order be halted. In addition, the Order calls for the proper removal and disposal, in the presence of a NYSDEC representative, of all stored chemicals. It is important to note that the listed chemicals have accumulated over a five to seven year period and that the bulk of chemical supplies used at the site have been completely utilized as part of lawn care applications over time. ECSI contacted two reputable disposal firms to obtain a quotation to remove, manifest and dispose of the materials. Information on the cost for handling and disposal of the chemicals is contained in Section 10.0, Remediation Cost Estimates. Further details on the types of chemicals stored are contained in Section 3.7, Pesticide Storage.

A total of nine dump sites were evaluated under Phase II investigation activities, including the Concord Service Station parking area dump, the Concord Main Parking lot dump, the Golf Maintenance Shop dump, the existing Golf Course (NYSDEC) dump, the Chalet dump, the Casino dump, the Horse Farm dump (all during the week of February 2, 1998), the Thompsonville Road site (February 20, 1998), and the Cemetery dump (September 16, 1998). Dump sites were investigated under a test pit program, to determine the extent and character of wastes disposed in each suspect location. Table 1-2 presents a listing of the dumps, a summary of wastes encountered by parcel designations, as well as proposed actions to be considered for site cleanup/closure and monitoring. These actions were used for generating the remediation costs presented in Section 10.0, Remediation Costs Estimates.

Prior to conducting the GeoProbe boring programs, tank integrity testing was conducted to determine whether USTs had released petroleum into the subsurface. These activities were conducted during February 1998 and September 1998, under the direct supervision of ECSI personnel. The boring program consisted of placing GeoProbe borings (to refusal) in close proximity to underground storage tanks confirmed to be un-tight by integrity testing activities performed during February 1998, or tanks which required investigation to confirm suspected releases. Numerous borings were placed at the Concord surrounding a former Concord Service Station building which fronts along Concord Road and at an adjoining area, believed to previously contain underground storage tanks. In addition, parcels which contained USTs which could not be integrity tested (i.e., due to inaccessibility) or were identified after tank integrity testing activities, were included under the boring program. Table 1-3 presents a listing of the USTs investigated under the boring program and encountered conditions.

**TABLE 1-2
DUMP SITE CHARACTERISTICS
CONCORD RESORT HOTEL**

WASTE DISPOSAL SITE	WASTE AGE	APPROXIMATE VOLUME OF WASTE	GENERAL CHARACTERISTICS	APPROXIMATE SIZE OF AFFECTED AREA	TEST PIT ANALYTICAL RESULTS	PROPOSED ACTIONS
NYSDEC Golf Course Dump Site	1970's to Early 1980's	9,865 cu. yds.	Assorted wood, scrap metal, ash, piping, bricks and electrical conduit.	1.02	Non-hazardous	Total removal of waste and backfill with clean soils, including placement of top soil and vegetation. Perform confirmatory sampling and analysis as part of cleanup activities. Conduct quarterly water quality analysis.
Main Parking Lot Dump Site	1980's to Early 1990's	3,000 cu. yds.	White goods, drapes, unrecognizable cloth, glass bottles, carpeting, assorted wood, bricks, scrap metal and tires.	0.53	Non-hazardous	Cover with barrier soil and gravel; maintain and monitor cover; conduct quarterly water quality analysis.
Golf Maintenance Dump Site and Vehicle Storage Area	Late 1960's to Early 1990's	8,570 cu. yds.	Assorted wood, scrap metal, ash, tree sections, dishes, pans, bricks, concrete block, glass bottles and piping.	2.07	Non-hazardous	Cover portion of site with barrier soil and gravel and remove waste from other portion of site; maintain/monitor cover; conduct water quality analysis.
Chalet Dump Site	Early to Mid 1990's	1,710 cu. yds.	Assorted wood, cardboard boxes, carpeting, yard waste, white goods, tires, piping and electrical conduit.	0.15	Non-hazardous	Total removal of waste and backfill with clean soils, including placement of top soil and vegetation. Perform confirmatory sampling and analysis as part of cleanup activities.
Casino Dump Site	Late 1970's to Late 1980's	1,220 cu. yds.	Assorted wood and plastics, white goods, piping, electrical conduit, mattresses, carpeting and umbrellas.	0.27	Non-hazardous	Removal of waste within the pool and along edges of parking area waste site. Cover remaining waste with barrier soil, topsoil and vegetation; maintain and monitor cover.
Horse Farm Dump Site	1970's to Early 1980's	1,400 cu. yds.	Plastic bottles, dishes, white goods (at surface), yard waste and tires.	0.38	Non-hazardous	Total removal of waste and backfill with clean soils, including placement of top soil. Perform confirmatory sampling and analysis as part of cleanup activities.
Concord Service Station Dump Site	1970's to Early 1980's	800 cu. yds.	Assorted wood, metal piping, bed springs, tires, electrical conduit, bricks, scrap metal and concrete slab sections.	0.17	Non-hazardous	Total removal of waste and backfill with clean soils, including placement of top soil. Perform confirmatory sampling and analysis as part of cleanup activities.
Cemetery Dump Site	1960's to Mid 1970's	122 cu. yds.	Assorted wood debris, white goods, porcelain fixtures, carpeting, bed springs, shingles, metal piping, electrical conduit, vehicle bumper and lawn care equipment parts.	0.08	Non-hazardous	Total removal of surface wastes, grading, and revegetation. Perform confirmatory sampling and analysis as part of cleanup activities.
Breezy Corners Bungalows	Undetermined Period of Dumping	148 cu. yds. 15,000 gal. water	Scattered waste comprised of appliance parts and C&D waste materials consisting primarily of wood and shingles.	0.08	Presumably Non-hazardous	Total removal of surface wastes, grading, and revegetation. Removal and disposal of water and garbage from within pool. Backfill pool with clean soils, grade, and revegetate. Perform confirmatory sampling and analysis as part of cleanup activities.

**TABLE 1-3
ON-SITE UST SYSTEMS
CONCORD RESORT HOTEL**

PROPERTY	OWNER	DESCRIPTION OF PETROLEUM PRODUCT TANKS
Concord Main Hotel Complex (9-1-34.1)	Kiamesha Concord, Inc.	2 - Active 15,000 gallon #4 fuel oil underground storage tanks 1 - Inactive 1,500 gallon fuel oil/kitchen grease underground storage tank 1 - Active 12,000 gallon #4 fuel oil underground storage tank
Raymond's Restaurant / Clubhouse (15-1-13)	Nalou Realty Corp.	
Concord Service Station (9-1-35)	Estate of Raymond Parker	1 - Inactive 550 gallon #2 fuel oil underground storage tank 2 - Inactive 10,000 gallon gasoline underground storage tank
Golf Maintenance (15-1-50)	Estate of Raymond Parker	1 - Inactive 2,500 gallon gasoline underground storage tank 1 - Inactive 2,000 gallon diesel underground storage tank 1 - Inactive 1,000 gallon #2 fuel oil underground storage tank 1 - Inactive 550 gallon waste oil underground storage tank
Carlton Hotel (9-1-34.1)	Kiamesha Concord, Inc.	1 - Inactive underground storage tank of unknown capacity, presumed to have stored heating oil.
Pussycat Lounge (15-1-1.1)	Frepar Laboratories	1 - Inactive underground storage tank of unknown capacity, presumed to have stored heating oil.
Robert Parker Residence (9-1-34.2)	Estate of Raymond Parker	1 - Active 1,000 gallon #2 fuel oil underground storage tank
Naomi Freidman Residence (9-1-34.2)	Estate of Raymond Parker	1 - Active 1,000 gallon #2 fuel oil underground storage tank
James Parker Residence (15-1-18)	Sullivan County	1 - Active 500 gallon #2 fuel oil underground storage tank
Lori Parker Residence (16-1-30)	Concord Development Corp.	1 - Active 1,000 gallon #2 fuel oil underground storage tank
Mountain View Residence (15-1-22)	Concord Development Corp.	1 - Active 500 gallon #2 fuel oil underground storage tank

1.2 Limiting Conditions and Methodology Used

ECSI personnel have conducted research (i.e., record searches) in accordance with ASTM Standard Practice E-1527-9 & E-1527-97 as well as recognized professional business practices. Information was not always reasonably available, however, exhaustive attempts were made to obtain information related to recorded potential environmental risks and liabilities from state and local agencies, including the NYSDEC, the Town of Thompson Building and Zoning office, New York State Electric and Gas and the US Environmental Protection Agency (USEPA). The time frame for completing the Phase I work effort was a function of interest for purchasing the Hotel and surrounding properties, as indicated by the existing owners of these properties

Further, facility personnel interviewed by ECSI (as designated by George and Robert Parker) were found to provide the best information under the Phase I work effort as very little was maintained on file with agencies contacted by ECSI. In addition, no property survey drawings or complete utility system information for Hotel facilities (i.e., sanitary treatment systems or UST systems) was available to aid in depicting the location of potential contamination on Phase II properties. As such, only hand drawn field sketches and computer generated drawings (not to scale) are included within this report to assist the reader in understanding the approximate aerial extent of identified contamination and property conditions noted under the Phase II investigation.

2.0 GENERAL SITE DESCRIPTION

The Concord Resort Hotel is located in the Catskill Mountains, in a rural setting in close proximity to Kiamesha Lake. The Lake abuts the Challenger Golf Course, owned and operated by Kiamesha Concord. The overall project area is comprised of approximately 1,729 acres, most of which is located in the Town of Thompson, Sullivan County, New York (Figure 1-1). The area consists of rolling topography and forested lands, similar to other areas of Sullivan County.

The main Hotel facility is accessed directly from Concord Road and has a 1,200 room lodging capacity with numerous recreational facilities, including swimming pools, tennis and basketball courts and golf courses. Three golf courses, included in the 1,729 acre land area, are the Challenger, the International and the Monster. Golf club facilities are located in proximity to each course to satisfy the demands of golfing interests. Photographs 1 through 8 depict the main hotel and other support facilities noted in this report (Appendix E).

As noted, the area is rural in character. The largest nearby municipality is the Village of Monticello, approximately 5 miles from the main Concord Resort Hotel location. A small shopping mall as well as Town of Thompson Offices and retail and food establishments are located in close proximity to the Hotel, near the intersection of NYS Route 42 and Concord Road, approximately one mile from the main Concord Resort Hotel entrance. The Village of South Fallsburg is located approximately 5 miles northwest of the area and the Village of Woodridge approximately 9 miles from the project area.

In addition, the Leisure Time water company, a drinking water supply bottler, is located southeast of the Concord Resort Hotel, on the southwestern banks of Kiamesha Lake. The Kiamesha Artesian Spring Water Co., Inc. is located at the northeast portion of the Lake and provides potable water supplies to nearby Village and Town residents and businesses, including Concord Hotel facilities. Other businesses, retail establishments, schools, recreational areas (including bungalow colonies, summer camps, and other hotels), and residential parcels are located in the vicinity of the Kiamesha Concord land holdings.

Some agricultural lands exist at and in the vicinity of the site. According to information available from the NYSDEC Region 3 Office, New Paltz, New York, no critical environmental areas or endangered/threatened species or habitats were recorded for the 1,729 acre area. New York State Designated Wetlands, MO-56, MO-57, and MO-58, lie within the boundaries of the land holdings, and streams flow through the property boundaries. These are the Kiamesha Creek and its tributaries. The entire site properties (67 parcels) lie over the New Jersey Coastal Plain Sole Source Aquifer. Further, NYSDEC Region 3 information indicates that no visually significant resources are located within the entire site or surrounding land areas.

According to a summary map maintained by the NYSDEC Region 3 Offices, there is a potential for archaeological significance at undisturbed areas within the limits of overall holdings. ECSI requested that the New York State Office of Parks Recreation and Historic Preservation (NYSOPRHP) provide information as to whether or not potentials for archaeological significance exist throughout the subject property holdings. A response received (dated October 1, 1996) indicated that the NYSOPRHP would require additional information for each specific area to make a determination, and suggested that unless substantial ground disturbance can be documented, a Stage I Archaeological Survey should be completed prior to conducting disturbance activities (i.e., new construction).

2.1 Area Soils

The assessed property holdings (1,729 acres) contain three general soil complexes designated by the Soil Survey of Sullivan County, New York, as prepared by the USDA Soil Conservation Service (issued July 1989). One is the Wellsboro-Oquaga-Lackawanna which is described as a nearly level to very steep, very deep and moderately deep, moderately well drained to excessively drained, medium textured soil typically found on uplands. Another is the Wellsboro-Wurtsboro-Morris which is also nearly level to strongly sloping, very deep, moderately well drained or somewhat poorly drained, medium textured, soils which vary from nonstony to extremely stony soils typically found on uplands. The last is the Cheshire-Tunkhannock which is described as nearly to steep, very deep, well drained and somewhat excessively drained, medium textured soils often found in valleys and on valley sides. Soils information specific to each investigated property area is summarized below.

2.2 Water Resources

The project area is located within the Delaware River Drainage Basin, which means that all surface waters eventually flow into the Delaware River. As noted previously, the subject

properties also lie over the NJ Coastal Plain Sole Source Aquifer. The main source of water in Sullivan County is groundwater. Groundwater is drawn from three kinds of aquifers: bedrock, glacial till, and glacial outwash formations. Glacial outwash bedrock formation yield the greatest amount of water and provides several public water supplies. Glacial till is generally not a reliable source of water, because its yields are low. Surface water from lakes or reservoir supplies is also a source for several of the larger communities in the County.

The Concord Resort Hotel is located in close proximity to Kiamesha Lake. Kiamesha Lake is utilized as a surface drinking water source for nearby Townships, including portions of the Town of Thompson and the Village of Monticello. In addition, the water is used as a potable water supply for the Concord Resort Hotel. Kiamesha Lake is classified by the New York State Department of Environmental Conservation (NYSDEC) as Class A waters (A). According to NYS Conservation Law:

The best usages of Class A waters are: a source of water supply for drinking, culinary or food processing purposes; primary and secondary contact recreation, and fishing. The waters shall be suitable for fish propagation and survival. This classification may be given to those waters that, if subjected to approved treatment equal to coagulation, sedimentation, filtration and disinfection, with additional treatment if necessary to reduce naturally present impurities, meet or will meet New York State Department of Health drinking water standards and are or will be considered safe and satisfactory for drinking water purposes.

An unnamed tributary flows south to the north side of the Kiamesha Lake, a stream designated by the NYSDEC as a Class A waterway. Another unnamed tributary connects with the south end of Kiamesha Lake and is classified as a Class C waterway. This tributary connects with the Kiamesha Creek, a Class C stream, which essentially bisects large portions of the 1,729 acre property holdings evaluated under the Phase I and II work efforts. The Kiamesha Creek eventually flows north through Kiamesha Concord Inc. lands and then south/southeast to the Sheldrake Stream (Class B) which in turn is tributary to the Neversink River, situated approximately 2.5 miles southeast of the eastern most property boundary of the subject properties (i.e., east of Route 161). The Neversink River is a Class B(t) stream which flows to the Delaware River. NYSDEC Class B, B(t), and C designated waters are briefly described as follows:

The best uses for Class B waters are primary and secondary contact recreational activities including fishing. These waters must be suitable for fish propagation and survival.

The best uses for Class B(t) waters are the same for Class B above with the additional regulatory ingredient to allow sustaining populations of trout fisheries.

The best usages of Class C waters is fishing. These waters shall be suitable for fish propagation and survival. The water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes.

3.0 PHASE I FINDINGS

The information presented below has been obtained from available information sources including agency contacts and State and County published documents. In addition, facility personnel involved with on-site operations and maintenance activities and off-site maintenance contractors, were interviewed by ECSI personnel.

3.1 Water Supply and Sanitary Wastewater Treatment

As noted, the Hotel receives potable water supplies from the Kiamesha Artesian Spring Water Co., Inc. via a water distribution network located within the limits of the subject hotel property holdings. The water company receives water from two groundwater wells and the nearby Kiamesha Lake. The bulk of the Company's supplies are obtained from Kiamesha Lake located west of the main Hotel facility.

Based on historical consumptive use figures maintained by the Company, the two groundwater supply wells provide water to satisfy overall system demands. One of the supply wells, the Concord well, is accessed from Chalet Road and is located adjacent to the Golf Maintenance Shop, along the Kiamesha Creek. The well is a bedrock well, 300 feet in depth, and is capable of yielding 70 gallons per minute (gpm). A well house (6 feet wide by 6 feet in length by 10 feet high) surrounds the well and a separate chlorination building is situated adjacent to the well house which contains an in line hypochlorinator unit powered by an electrical motor. The well was installed during the early 1980's under a mutual agreement between the Kiamesha Artesian Spring Water Supply Co., Inc. and the Concord Resort Hotel. The well essentially supplies facilities situated along Chalet Road, south of Concord Road.

An additional well is located adjacent to the Kiamesha Artesian Spring Water Co., Inc. facility. This well is used as a supplemental source to that of Kiamesha Lake. Information of the physical aspects of the well could not be obtained from the Company.

Water supplies distributed to connected consumers are comprised of a combination of each water source. The combined water source is monitored by the Company every three years for volatile and semi-volatile organics and for fecal coliform each month. Based on conversations with representatives of the New York State Health Department (Monticello District) and the Kiamesha Artesian Spring Water Co., Inc., water quality monitoring performed for the combined water source has not resulted in any water quality problems.

The Kiamesha Lake is also the water supply source for the Village of Monticello. The Village has issued restrictions to protect its water supply in a document entitled "Rules and Regulations for the Protection from Contamination of the Public Water Supply of the Village of Monticello, Sullivan County." A copy of the regulations are contained in Appendix B. The regulations prohibit the disposal of wastes (solid and toxic) within close proximity to the Kiamesha Lake or its tributaries. Further, the regulations imply that planned development/construction activities are to include safeguards to protect the water source and that any project would be reviewed by the Village Water Department as part of receiving required

approvals within the Village. The main hotel, immediately surrounding grounds and the Challenger golf course (west of Concord Road and to the shore of Kiamesha Lake) are within the Village watershed limits and thus, are subject to the regulations. In addition to Village jurisdiction, the Delaware Basin Water Authority has jurisdiction over construction activities.

The main Hotel and immediately surrounding facilities are serviced by the Town of Thompson Water and Sewer Department wastewater treatment plant. Areas not serviced by the Town treatment plant include the International Club House, the Chalet, Raymond's Restaurant/Club House and the Golf Maintenance Shop. These facilities are serviced by individual septic systems. The Chalet and Raymond's Restaurant/Club House are serviced by a sand filtration treatment system situated down gradient from the restaurant and west of the Golf Maintenance Shop. The system is permitted by the NYSDEC under a State Pollution System Elimination Systems permit (SPDES, Permit No. NY-0104264) issued during November 1977. An outfall pipe leading from the sand filtration system serves to direct effluent to the Kiamesha Creek (Outfall No. 001). As noted, the Kiamesha Creek flows to the Neversink River which in turn flows to the Delaware River, each provide municipal water supplies which are regulated by the Delaware Basin Water Authority.

Based on discussions with a representative of the NYSDEC (Personal Communications, J. Sansalone, February 1998), the permit has been automatically renewed by the State over time and is still active. Conditions under the permit require monitoring, recordkeeping and reporting to the NYSDEC. Based on conversations with the NYSDEC, Region 3 office, no record of report submissions exist to verify whether or not monitoring was conducted during past years of operations. Given the fact that no records exist to explain compliance levels, this situation represents an exposure which must be addressed through conversations with the NYSDEC, in conjunction with prompt compliance with applicable permit conditions.

The Golf Maintenance Shop has a septic/leach tank system which receives sanitary wastewaters from the facility. The tank is located at the northwest corner of the Shop building and in close proximity to the Concord Well and Kiamesha Creek. Given its location, arrangements should be made to decommission and relocate a new system if use of this Shop will continue. In addition to sanitary wastewaters, shop floor washings were discharged to internal floor drains which connect with an underground sump tank west of the shop building. This tank is presently filled with sandy sediment. Subsequently, Phase II investigations performed at this facility included characterizing these sediments, as well as field screening (using a Photoionization Detector unit) soils extracted from borings placed on two sides, immediately adjacent to the tank. The results of the investigations proved that the sediments are nonhazardous and that soils adjacent to the tank did not reveal signs of Volatile Organic Compound (VOC) indications. The analytical results are contained in Appendix H of this report.

Based on conversations with Hotel personnel, no documentation exists to reflect whether the International Club House is serviced by an individual sanitary septic system or if the structure connects with the Town's sewer system. Conversations with a representative of the Town of Thompson Water and Sewer Department noted that the International was serviced by an above ground sand filtration system located south of the NYSDEC listed landfill, adjacent to the

Kiamesha Creek. Past dumping practices at the main hotel parking lot have rendered the sanitary waste pipeline inoperable. It is possible that over time, a separate arrangement was established with an existing pump station located north of the International and behind the Maintenance Barn (located in the main parking lot), however, no information was provided to ECSI to confirm these statements. As such, engineering efforts should be directed at verifying this facility for adequate treatment.

Only one other facility owned and operated by the Concord Resort Hotel is serviced by a sand filtration system permitted by the NYSDEC, under the SPDES program. This system serves the Breezy Corners Casino and bungalow development southwest of the intersection of Thompsonville Road and Bailey Road. The system does not have an outfall since it consists of an onground/subsurface system (i.e., discharge to groundwaters of the State). All other structures existing on parcels inspected by ECSI are believed to be serviced by individual septic systems. As noted, no records of utility information exist, based on conversations with Hotel maintenance personnel.

In addition to the above, the parcel designation Section 13, Block 3 and Lot 26 (7.8 acres in size, along Thompsonville Road) includes a residence currently occupied by George Parker. Based on tax records, this parcel is owned by the County. Land areas surrounding the residence are vacant. An inspection of the property by ECSI personnel during the Spring of 1998 revealed that a septic release exists adjacent to the unnamed stream Classified by the NYSDEC as Class C waters, south of Kiamesha Lake. A strong odor was also observed. Based on these observations, it appears that this system is functioning improperly and is not up to Health Department standards for treatment and requirements for locating systems specific distances upgradient of the adjacent tributary, referred to as "waters of the State."

3.2 Electric and Gas

As part of conducting the Phase I Environmental Audit for the site, ECSI obtained information from representatives of New York State Electric and Gas (NYSEG) with respect to electric and gas service at the subject Concord properties. In addition, ECSI representatives investigated the existing electrical transformers in use at the main Hotel facility. An electrical contractor for the Concord Resort Hotel (Boris Shalman, Inc.), was contacted to obtain pertinent information. In addition, a site inspection was conducted by an ECSI representative with facility personnel during the Fall of 1997, to visually inspect the on-site vaulted electrical transformers.

According to a NYSEG representative John Lounsbury, (Personal Communications, September, 1997), electricity is provided to the site via local distribution lines. The lines located within the limits of the subject parcel areas are owned by the Concord Hotel. Some of the lines located along Concord Road may also be owned by the Concord Hotel and are simply located on NYSEG poles. NYSEG service technicians maintain the lines and repair them as necessary. The cost for providing these repairs on Concord owned lines are billed directly to the Concord Resort Hotel. No other information was provided by NYSEG on matters related to power distribution lines.

The following summarizes information obtained from the site inspection, correspondence from Boris Shalman, Inc. and information obtained from NYSEG. Copies of the correspondence relating to the electrical transformers is contained within Appendix A of this report. A list of vaulted transformers, compiled by Boris Shalman, Inc., was received from Mr. Lounsbury. The list is thought to have been completed in the 1980s or earlier, although the information is not dated, however, the list is the most current information for the Concord Resort Hotel. According to NYSEG, there is no information maintained on file with NYSEG regarding PCB content of the Concord Resort Hotel's transformers. Further, all the transformers and much of the electrical distribution lines and pole transformers are owned by the Concord Resort Hotel. Maintenance and/or repairs are paid by the Concord Resort Hotel.

The area known as the 200 Basement Vault contains 4 electrical transformers. No staining was observed in this area at the time of the inspection conducted by ECSI staff. The transformer vault next to the boiler room office contains 3 Pennsylvania type transformers. A stain on the floor was noted within this area at the time of the visual inspection. According to Mr. John Hendrix and Mr. Nile Inghrim (facility maintenance personnel), the stain has always been there and its origin is not known.

At the rear of the main Hotel night club, just outside the loading dock, there exists 3 pole transformers. One was replaced approximately 10 years ago by NYSEG, however, no information exists on files at the Hotel to confirm the replacement. A nearby vault has a 3 phase transformer within its confines. There is a stain near the valve but the stain did not appear to have traveled outside the vault. No other information regarding this stain was available.

The area known as the old vault next to the main Hotel pantry has two banks of transformers. Both the first and second bank contain three transformers each. There was no staining near these transformers. However, stains were observed on the sides of the transformers. Approximately 20 or more years ago, during a very hot and humid summer, the usage of these transformers was so high that they required additional cooling. Fire hoses were set up and turned on the transformers to decrease internal temperatures and enable continued usage. No signs of significant spills existed at the time of the inspection.

A transformer vault is also located at the main Hotel ice rink. This vault contains 3 Penn Pole Star type transformers. No staining was visible at the time of the inspection. The newest vaulted transformer at the Concord Resort Hotel, according to Mr. Hendrix, is the Towers, pad mounted Vantron transformer. This transformer was installed new around December 1977.

In addition to the inspected vault transformers, there are numerous pole transformers on Kiamesha Concord property holdings. A list of pole transformers, as provided by Mr. Paul Lounsbury, NYSEG, is also contained within Appendix A of this report.

Two NYSEG substations exist in close proximity of Concord Resort Hotel properties. One substation, known as the Concord Substation, is located just north of County Highway Route 109. The Concord Substation was built in approximately 1960 and has a transmission voltage of 34,500 and a distribution voltage of 4,800. NYSEG has no record of any spills at this substation.

The substation was retrofilled in approximately 1993, prior to this date the PCB content was approximately 180 parts per million. The Kiamesha Substation is located just west of NYS Route 42. This substation was built in approximately 1955 and carries a transmission voltage of 34,500 and a distribution voltage of 12,740. NYSEG has no record of spills for this substation. The Kiamesha Substation was retrofilled in approximately 1995 and the prior PCB content was approximately 100 ppm. Both of these substations are now considered to be non-PCB containing.

3.3 Facility Emissions

According to records maintained by the Hotel and the NYSDEC Division of Air Resources, two main chimneys (stationary combustion emission points 0001 and 0002) which connect to five (5) boilers at the main Hotel are permitted by the Division. The NYSDEC issued permits for boiler emissions during 1974. Representatives of the Division have conducted periodic compliance inspections, the most recent of which occurred on June 23, 1996. The inspection revealed that opacity (smoke) levels were greater than applicable levels noted under regulation. Conversations with NYSDEC representatives (Personal Communications, Messrs. Stanton and Dunn, February 1998) indicated that observed levels averaged between 75 to 80 percent while regulatory thresholds call for less than 40 percent. In an effort to reduce opacity levels, Hotel representatives should contact the manufacturer of the boiler systems to ascertain the types of modifications which can be implemented to reduce levels. Other than high opacity levels, no other records of noncompliance exist for these emission sources.

3.4 Underground and Aboveground Storage Tanks

According to information provided by both facility employees, New York State Department of Environmental Conservation (NYSDEC) representatives, and others noted as being familiar with facility operations, the Concord Resort Hotel owns and operates several underground and aboveground storage tanks. Available information indicates that 18 underground storage tanks (USTs) are located within the subject property boundaries.

In addition to underground storage tanks, several aboveground storage tanks (ASTs) are located at the Concord Resort Hotel and surrounding parcels. Tanks observed during site inspection activities were visually inspected to verify integrity, most of which were used to store heating oil (#2 fuel oil) for space heating purposes. ASTs were located in close proximity to Raymond's Restaurant, Golf Maintenance Shop (kerosene storage), the Chalet, structures in and around the main Hotel complex (i.e., at the rear of the main Hotel pool), Breezy Corners bungalows, Mountain View bungalows (one 1,000 gallon tank used to fuel cloths dryer units) and near golf cart storage/pick-up areas. Some of these ASTs are described in conjunction with the following UST descriptions. No evidence of spills/releases from the ASTs were noted during site inspection activities. However, it should be noted that several of the ASTs were inspected at the initial undertaking of Phase I Investigation activities (Fall of 1996) and have not been inspected since this time.

Main Hotel

At the main hotel, near the intersection of Concord Road and Kiamesha Lake Road (County Route 109), there are two 15,000 gallon USTs which contain #4 fuel oil. These tanks are utilized for space heating purposes for the main Hotel boiler system. The fill ports for each of these tanks are located near the southeast corner of the intersection of Concord Road and Kiamesha Lake Road (County Route 109) and are not adequately protected from traffic. According to information provided by the NYSDEC and Concord employees the two 15,000 gallon tanks are registered with the NYSDEC Petroleum Bulk Storage (PBS) program and are designated as BL and BU (Appendix C).

The NYSDEC PBS number assigned to the Concord is 3-410225. The registration information notes that both tanks are steel/carbon steel tanks with connecting galvanized steel piping. Further, the PBS registration information indicates that neither tank has secondary containment or leak detection. The last test date for the tank designated BL was September 1989 and the tank designated BU October 1987. Luzon Environmental Services, Inc. of Woodridge, New York (formerly of Hurleyville, New York) completed the testing for both tanks. The results of the BU tank revealed a rate of leak of -0.063 gallons per minute. Tank system BL was tested and determined to have a leak rate of +0.047 gallons per hour. Based on NYSDEC regulations at the time of the tests, each of the two leak rates noted were considered to indicate a tight system. According to Robert Halprin, Luzon, the upper tank was replaced and the lower tank was lined with fiberglass approximately 10 to 15 years ago, although no documentation was available.

As noted, the fill ports for these tanks are located in close proximity to the rear wall (northeast corner) of the main Hotel. It appears that sloppy transfer activities have resulted in fuel oil stains around each fill port.

A 2,000 gallon UST exists at the rear of the former bakery location, approximately 50 feet from the upper 15,000 UST. This tank was found to recently contain spent cooking oil and fuel oil. The fuel oil once served to fire furnaces at the bakery, while the cooking oil was disposed by personnel during recent times. The boring (GeoProbe) program activities which continued on February 21, 1998 included placing two borings around this tank to verify whether or not a release occurred. No indications of a release was determined by subsurface activities and soil screening using a PID unit. Subsequently, the waste oil (cooking and #2 fuel oil) was pumped out by Luzon Environmental Services (on behalf of Kiamesha Concord Inc.) and disposed in accordance with Federal and State requirements.

Raymond's Restaurant/Club House

A large UST is in operation at the Raymond's Restaurant/Club House building located adjacent to the Monster Golf Course. According to Nile Inghrim, maintenance personnel, this tank has a 12,000 gallon capacity. However, the NYSDEC PBS registration indicates that this tank is only 10,000 gallons. The tank provides storage of #4 fuel oil. According to the PBS registration the tank is designated as CH1, it is a steel/carbon steel tank with galvanized steel piping and was last tested in September 1989 and was due for testing in September 1994.

Further, the PBS information indicates that the tank has no secondary containment or leak detection devices. The information also indicates that the fuel oil is dispensed via gravity. This tank is utilized for fire steam generating furnaces used for space heating purposes at both the Club House and the nearby Ski Chalet. An underground steam pipeline travels from Raymond's below its front lawn, then under Chalet Road and up to the Chalet building. At one time, the Chalet had a fuel fired furnace for heating purposes, however, this was decommissioned and removed in favor of using steam heat.

Two (2) ASTs are located at the side entrance of the Club House and contain #2 fuel oil. A short distance from the Club House near a golf cart storage area lies a 275 gallon gasoline AST with a manual dispenser atop the tank. This tank is used to fuel golf carts and is maintained by Golf Maintenance Shop personnel.

Ski Chalet Structures

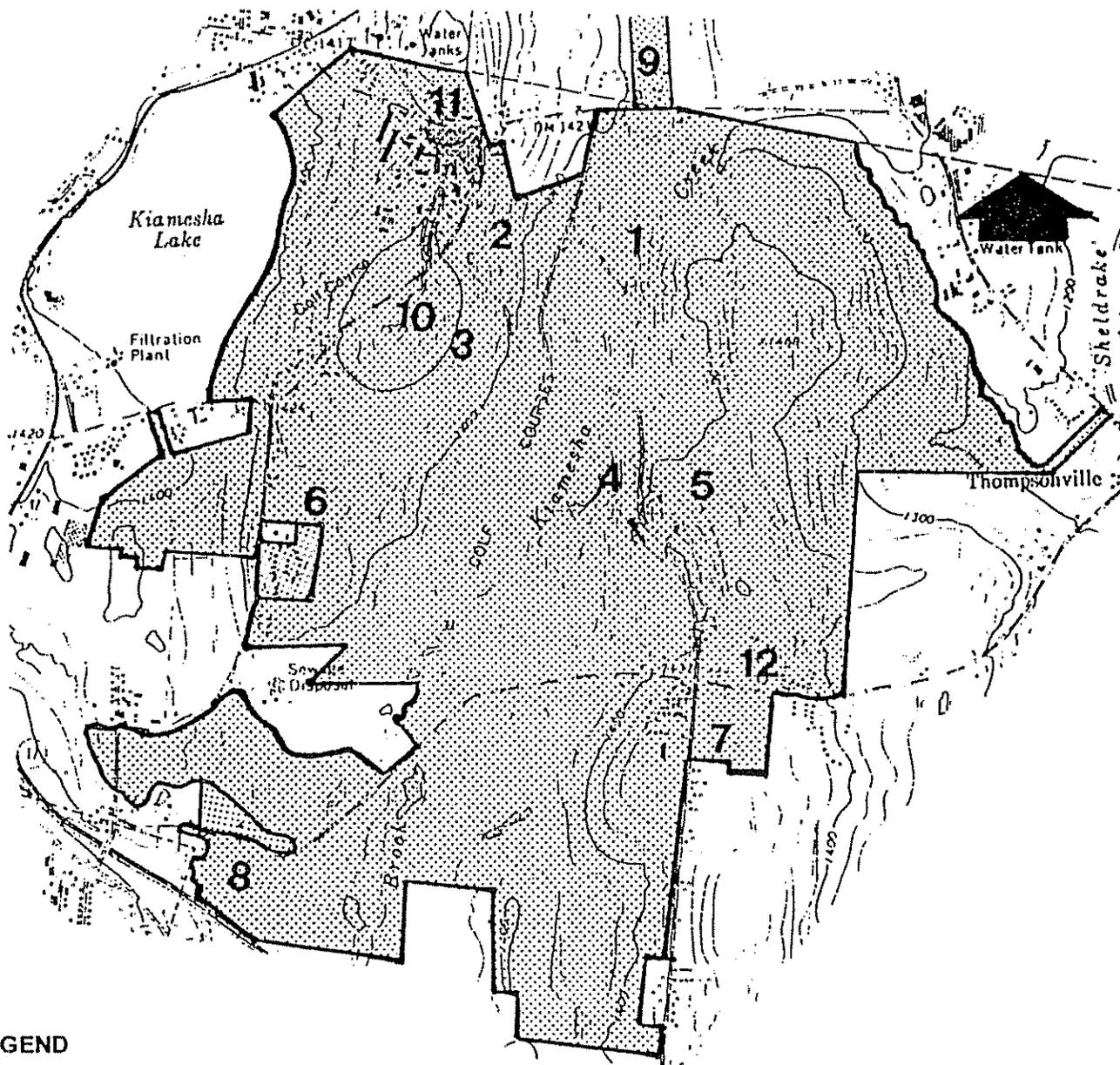
The Chalet facility includes an adjacent, single story apartment, once used by facility personnel. This structure contains a furnace and a 275 gallon AST, containing #2 fuel oil within the basement of the structure. Each was observed to be idle during property inspection performed during February and March, 1998.

As noted, the Chalet structure was once heated with fuel oil. During inspection activities conducted in February and March 1998, a 1,000 gallon, on-ground (AST) was located (traced from old feed lines) within a wooden structure in close proximity to the front of the Chalet. The tank is only noticeable by an inconspicuous fill port at the top of the wood structure. Subsequent to locating the tank, Luzon Environmental Services was retained by Kiamesha Concord Inc. to pump out this tank and relocate the fuel oil to the Golf Maintenance Shop facility for space heating use.

Concord Service Station

The Concord Service Station located just southeast of the main Hotel entrance was at one time a vehicle service/gasoline dispensing station. According to George Parker, tanks removed from the station were owned by Robert Blank Fuels, located in Monticello, New York, along Route 42. ECSI representatives contacted Mr. Blank and requested that he complete a UST Questionnaire regarding the former Exxon Service Station located on the Concord Hotel Property. Mr. Blank's representative, Stephen Kalka, Frames of Mind, completed the questionnaire and provided ECSI (via facsimile) with information regarding the former tanks and past removal activities. Mr. Kalka also provided ECSI with a copy of the NYSDEC PBS Certificate, PBS No. 179159, for the site, which was referred to as the Kiamesha Concord Service Station; the owner was noted as Premium Gas Service Inc. of Station Hill Road, Ferndale, New York and the General Manager as Stephen Kalka. The Service Station information provided by Mr. Kalka is contained within Appendix D.

The PBS Certificate provided indicates that four (4) tanks were located at the site; three 6,000 gallon fiberglass reinforced USTs which contained unleaded gasoline and one 2,000 gallon



LEGEND

- 1 - NYSDEC / GOLF COURSE DUMP SITE
- 2 - MAIN PARKING LOT DUMP SITE
- 3 - CONCORD SERVICE STATION DUMP SITE
- 4 - GOLF MAINTENANCE SHOP DUMP SITE
- 5 - CHALET DUMP SITE
- 6 - CASINO DUMP SITE
- 7 - BREEZY CORNERS BUNGALOWS
- 8 - CEMETERY DUMP SITE
- 9 - HORSE FARM DUMP SITE
- 10 - CONCORD SERVICE STATION
- 11 - CARLTON HOTEL
- 12 - MOUNTAIN VIEW RESIDENCE

SCALE 1" = 2,000'

FIGURE 1-1

SITE LOCATION MAP

KIAMESHA CONCORD INC.
KIAMESHA LAKE, NEW YORK

SOURCE:
USGS MONTICELLO, N.Y. (1966 PHOTO REV. 1982)
7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES

bare steel UST which stored diesel fuel. The three fiberglass tanks were noted as being installed in December 1981 and the bare steel tank in December 1983. Mr. Kalka noted that the three fiberglass USTs were formerly owned by Exxon Corp. of Norwalk, Connecticut, and were sold to Premium Gas Service, Inc. on July 7, 1983. The PBS information also noted that associated piping for all tanks was galvanized steel located underground. Further, none of the tanks had secondary containment, leak protection or spill/overflow protection devices. It appears, according to information provided, that Mr. Kalka, owners representative, submitted a PBS Modification to the NYSDEC in October 1991, which indicated that all four tanks were removed in September 1991.

The information provided on ECSI's completed questionnaire also indicates that the three fiberglass USTs were removed and disposed of, however, no disposal receipts or documentation exists. According to Mr. Kalka, the steel UST was retained by Premium Gas Service, Inc. and utilized as a loaner/temporary tank for contractors. The information also indicates that no soil disposal was necessary based on one soil test. No confirmatory soil samples were obtained for any of the tank excavations to verify subsurface environmental conditions. According to disposal receipts, 12,300 gallons of fuel oil, waste and water was removed by Luzon Environmental Services on September 23, 1991, for disposal (recycling) at the Luzon facility.

ECSI's site inspection of the service station revealed two other USTs located along the internal driveway at the rear of the service station. According to George Parker, these tanks were utilized in the 1970's during the gasoline shortage. The Concord offered it's guests a free fill up for each weekend stay to encourage hotel patronage. No information was provided by Mr. Kalka regarding these tanks. In addition, ECSI requested that the Service Station Manager, Chris Hummel, dipstick the tanks to determine if any liquids remain and obtain an estimate of the storage capacity of each tank. Mr. Hummel, who completed the task, indicated that one tank was full with a water and petroleum mixture and the other had some product remaining. The two USTs are believed to be fiberglass tanks and estimated to each have a storage capacity of 10,000 gallons. However, no additional information was available regarding these tanks. Subsequently, representatives of the NYSDEC were informed of the existence of the tanks and arrangements were made to pump out each tank. The tanks were pumped out during May/June 1998 by Luzon Environmental Services, on behalf of Kiamesha Concord Inc.

The existing vehicle service station utilized a 550 gallon #2 fuel oil UST to provide fuel for space heating purposes. This tank is not registered with the NYSDEC and was never tested to Mr. Hummel's knowledge. Mr. Hummel has been employed by the facility for the past 13 years. Further, he is not aware of any significant loss of product, although product inventory documentation is not maintained for this tank. ECSI representatives noted spillage at the fill port of the fuel oil UST, which is most likely due to sloppy transfer practices. Floor drains within the building connect to the Town's sewer system. Further, underground hydraulic tanks which surround three lifts are not believed to have ever displayed signs of release (i.e., constant filling), as indicated by Mr. Hummel.

Golf Maintenance Shop

The Golf Maintenance Shop is located along the western side of Chalet Road approximately 1 mile south of the intersection of Chalet Road and County Highway 109. The area contains four (4) USTs. According to information provided by Arthur Chandler, Golf Maintenance Manager, the four USTs include a 2,000 gallon gasoline UST, a 1,000 gallon diesel UST, a 1,000 gallon #2 fuel oil UST, and a 500 gallon waste oil UST. These tanks were not registered under the NYSDEC PBS program. Further, no information as to the date of installation of any of the four tanks is available. Mr. Chandler is not aware of the tanks ever being tested. Product inventory is not completed for any of the USTs or ASTs (2 kerosene tanks) located at the Maintenance facility. Fuel dispensers are located at the front section of the Shop which marks the approximate location of the gasoline and diesel tanks. A large funnel is connected to the waste oil tank, which is left in the tank to allow for the transfer of waste oil. According to Mr. Chandler, very little waste oil is generated at the Golf Maintenance facility and the tank is pumped out by an outside contractor (LORCO) once per year. Minor staining was observed in the vicinity of the fill port. Areas at and surrounding each of the fill ports for the three product tanks are petroleum stained and indicate very sloppy product transfers.

Other UST Locations

In addition to the USTs at the operating Hotel complex, other USTs are located on other land holdings of Kiamesha. The additional tanks include those utilized at five (5) residential structures for space heating purposes. Documentation confirming tank capacities was not available, but are presumed to be between 500 and 1,000 gallons based on the size of each structure and conversations with residents. The residential structures are located along Thompsonville Road, near the intersection of Thompsonville and Chalet Roads (Section 15, Block 1, Lots 18, and 22, and Section 16, Block 1, Lot 30). Two other residential structures (occupied by Robert Parker and Naomi Friedman) are located along Concord Road within the limits of parcel Section 9, Block 1, Lot 34.2.

Two USTs were also discovered at the former Carlton Hotel and the Pussycat Lounge. It appears that both of the tanks have been idle for some time, perhaps as long as 25 to 30 years. Over time, the Carlton and Pussycat were converted to steam heat, via piping routed from the main Hotel complex, under Route 109 and to each structure. No fill port was noted for the UST at the Carlton, however, a vent pipe and steel elbow, which probably attaches to the top of the tank, are visible. The tank at the Pussycat Lounge has a fill port visible, although no other lines were observed, with the exception of a feed and return line located within the basement of the wooden Lounge structure. An old, fuel oil fired furnace is also contained within the basement. No information was available for either tank regarding age or tank construction materials.

3.5 Asbestos and Radon

The scope of services conducted under the Phase I assessment did not include conducting asbestos or radon/lead paint surveys. A survey was completed by Warren Panzer and is available under separate cover from representatives of Resortco of New York.

A record search conducted in accordance with ASTM standards revealed that radon levels expected for areas of Sullivan County average 0.900 pCi/L (pico curries per liter) in living areas and 2.720 pCi/L in basement areas. Area radon information obtained for Sullivan County indicates that 95 percent of 24 tested sites were less than the regulatory threshold of 4 pCi/L for living areas and 62 percent were below the threshold for basement areas. Five percent were greater than the threshold for living areas and 38 percent were greater than the threshold for basement areas

3.6 Facility Waste Generation

In general, the Hotel facility generates municipal solid waste which includes garbage and construction and demolition debris resulting from minor renovations and cleanup activities. The main generation points situated within the limits of the Hotel grounds include the main hotel, the International Golf Club, Raymond's Restaurant/Golf Club, the Golf Maintenance Shop, the former Concord Service Station which fronts along Concord Road, the maintenance barn located within the main Hotel parking lot, and the ski slope Chalet along Chalet Road.

Waste generated by on-site facilities are collected by facility personnel using waste collection vehicles (garbage trucks) owned and operated by the Kiamesha Concord Inc. Collected waste is transported and disposed at the Sullivan County Sanitary Landfill located in the Village of Monticello. Some of the waste generated by Golf Maintenance Shop operations differs from other generation points since the waste types include waste oil, scrap metal and spent canisters of fertilizer, pesticides/herbicides, and fungicide product packaging. Solid waste items are disposed within dumpsters located adjacent to the Golf Maintenance building, waste oil is stored within a 550 gallon waste oil tank, also located adjacent to the shop building

3.7 Pesticide Storage

Site inspections conducted under Phase I activities revealed that pesticide and herbicide chemicals are stored in a small shed at the Golf Maintenance Shop facility. The chemicals are utilized by Golf Maintenance staff to maintain the Concord Resort Hotel grounds and golf courses under the supervision of a NYS Certified pesticide applicator.

On September 29, 1997, an inspection conducted by a NYSDEC representative resulted in the issuance of a Quarantine Order to require that the use of pesticides noted on the order be halted. In addition, the Order calls for the proper removal and disposal, in the presence of a NYSDEC representative, of all stored pesticides. A copy of the Quarantine Order is contained in Appendix A. The on-site pesticides and the quantity of each as noted on the Quarantine Order is as follows.

PRODUCT NAME	EPA NUMBER	AMOUNT
Embark Growth Regulator	7182-7-AA	(13) gallon containers
Agway Fruit Tree Spray	8590-563	(42) 1/2 gallon containers
Trex-San Bent	2217-529-AA372	(1) 2 1/2 & (1) 5 gallon containers
Crabgrass Killer	572-199	(11) gallon containers
Gas Cartridge	6704-4	(100) 3 ounce cartridges
Guthion-2S	Not Available	(3) 5 gallon containers (full)
Malathion	Not Available	(4) 5 gallon containers (3 full, 1 partial)
Agway Dormant Oil with Ethion	Not Available	(3) gallon containers

It is important to note that the listed chemicals have accumulated over a five to seven year period and that the bulk of chemical supplies used at the site have been completely utilized as part of lawn care applications over time. Every effort has and continues to be directed at ordering nearly the exact amount of chemical quantities needed seasonally, based on historical application rates. As part of ECSI's efforts to assist Kiamesha in the proper handling and disposal of the remaining above stored chemicals, two reputable disposal firms were contacted to obtain a quotation to remove, manifest and dispose of the materials. Information on the cost for handling and disposal of the chemicals is contained in Section 10.0, Remediation Cost Estimates.

4.0 GENERAL HISTORICAL INFORMATION

The main Hotel complex of the Concord Resort Hotel has been located at the northeastern portion of Kiamesha Lake since the 1920's and was built by the Parker family as a summer retreat which was used extensively by New York City residents. The Resort offered luxury accommodations, relatively close to home, in a pristine rural setting. The area was originally farm land and/or forested. The hotel has changed through the years, with the addition of rooms, dining areas, and appurtenant hotel areas (lobbies and offices), improvements and additions to utility services (electric and heating) to accommodate hotel upgrades, as well as the installation of golf courses, tennis courts, swimming pools, and ice skating rinks have all been added onto Hotel operations through the years.

In general, all of the parcels associated with the Concord Resort Hotel are part of the main Hotel complex, provide recreation for hotel patrons (i.e., golf courses and Chalet and ski slope) or support hotel operations (i.e., golf maintenance, service station, and staff quarters) and have since the construction of the facility. Some of the areas are no longer utilized, but contain remnants of prior operations, such as the Casino property located along Rock Ridge Drive (formerly Bailey Road). Some parcels also contain houses utilized by members of the Parker family (i.e., Robert Parker and Naomi Friedman). The remaining parcels were found to be vacant.

The original hotel consisted primarily of wood structures. Some of the structures still exist at the site, while others were removed to allow for new construction. The following is a

summary of information contained on six Survey Sheets completed for Kiamesha Concord, Inc., H.C. Boardman surveyed the area on July 22, 1960 (Index No. 23306.5, Serial Nos. 52960, 52961, 52962, 52963, 52964, and 52965). The first sheet (Serial No. 52960) indicates that both the Swiss Chalet and the Club House existed in 1960. The Swiss Chalet is noted as being used as a Ski Lodge and Lunch Bar. Appurtenant structures include a ski tow motor house, a toboggan tow motor house, and a ski equipment storage building with a 1,000 gallon aboveground fuel oil tank at the north end of the ski equipment storage building. This tank is believed to be the same AST encountered by ECSI staff.

Sheet 2 (Serial No. 52961) indicates that the Concord Service Station also existed in 1960. Four (4) underground storage tanks were located in front of the garage bays and are noted as two 5,000 gallon gasoline tanks and two 2,000 gallon gasoline tanks. The survey also indicates that just west of the service station there were a few cottages/employees rooms. The Golf Maintenance garage drawings indicate that both a 1,000 gallon gasoline underground storage tank and a 1,000 gallon fuel oil underground storage tank are located in front (east) of the main building.

The four remaining survey sheets depict the main hotel facility as it existed in 1960. The hotel then consisted of the Main Building (1920) which had an East Wing (1959), a South Wing (1957), and Night Club (1958). Several kitchens and dining rooms are depicted within the Main Building as well. In addition, there were several disconnected buildings used as part of hotel operations including the Continental House (prior to 1920), the Colonial House (prior to 1920), the Claridge House (prior to 1920), the Congress House (prior to 1920), the Columbia House (no construction date), the Capitol House (prior to 1920), the Chateau (prior to 1920), the New Staff House (1955) and Cottage Nos. 1 and 2 (no construction dates). The Old Staff House (1950) was located at the southwest corner of the intersection of Concord Road and County Highway 109. The Conference Building, located just south of the night club, was noted as under construction in July 1960. These buildings are depicted as wood structures with concrete and/or brick foundations. Recreational areas, such as pools, bath houses and locker rooms, an outdoor ice skating rink, a handball court, a baseball field, a volleyball court, and tennis courts are depicted around the Main Building. The plans also depict a sewerage pump house east of the outdoor skating rink and an ice making plant south of the outdoor skating rink, in close proximity to County Highway 109.

A Riding Academy is denoted east of the Main Hotel Complex and Concord Road in a parking area. A 500 gallon fuel oil underground storage tank is depicted north of the riding academy structure. A barn was noted south of the baseball field and outdoor skating rink and noted to have a 1,000 gallon storage tank near the east wall. At the rear (north) wall of the Main Building the survey depicts a 30,000 gallon fuel oil tank (sand covered) a 10,000 gallon fuel oil tank and a 2,000 gallon fuel oil tank. Conversations between ECSI and George Parker revealed that these tanks are presumed to have been removed to accommodate new construction needs.

Several buildings were also depicted north of County Highway 109, including the Kiamesha Motel (noted as being without sprinklers), the Carleton House (1948), the Jacobson

House and Jacobson Cottages, Gluck's House and Gluck's Lodge. The buildings shown on the north side of County Highway Route 109 were noted primarily as staff housing.

Although some of the original hotel structures remain at the site there are several others, such as the Continental House, Colonial House, Claridge House, and Congress House, that were removed. Some of the buildings were removed to allow for the construction of the new Towers which were erected in 1972. According to available information, the former buildings were demolished and buried on site, either at the Main Hotel Complex or other Concord owned parcels.

5.0 PHASE I ENVIRONMENTAL RECORD REVIEW AND EVALUATION

Agency records relevant to the past and present day site conditions were reviewed and evaluated to identify the potential of environmental risk. ECSI representatives reviewed available records maintained by the NYSDEC, the NYSDOH, Town of Thompson, and Town of Thompson. ECSI also retained Environmental Data Resources, Inc. (EDR) to conduct a Government Records review to further fulfill requirements set forth under ASTM E 1527-94 and 15-1527-97. This information was supplemented through interviews with on-site operators and ECSI's database of State and Federal agency records.

5.1 Government Records Search

An environmental records search was performed by EDR during January 1998 in accordance with ASTM E-1527-94 and E-1527-97. EDR determined that no Sanborn mapping was available for the Town of Thompson or surrounding areas. ECSI also verified with Town of Thompson and Sullivan County Planning Department representatives that no Sanborn Maps exist for the site and surrounding areas. EDR's records search revealed one spill at the Concord Resort Hotel (Spill No. 9009249). This spill and others are discussed in Section 5.2, Reports of Spills/Releases. EDR's provided a map depicting the location of water supply wells at or in the vicinity of the site, as provided by way of Federal, State and local data sources.

Additional sites of possible concern were also noted in the vicinity of the subject site. The EDR report indicates that the Concord Golf Maintenance Shop is on the Resource Conservation and Recovery Act (RCRA) database of sites that generate, (the site is noted as a small quantity generator), store, treat or dispose of hazardous waste, however, no additional information was provided with the report. Furthermore, ECSI's review of existing golf maintenance activities that the only wastes generated include waste oil, pesticide and/or herbicides, and typical garage maintenance wastes (i.e., used batteries and oil).

Nearby commercial/industrial sites (located within a 1/4 mile from Kiamesha's holdings) were noted as facilities with underground and/or aboveground storage tank operations. Some of the sites had conducted cleanup activities and others are still under investigation and/or monitoring for product releases that have occurred in recent years. Information maintained by the

NYSDEC Division of Spills, indicated that product spills occurred in the vicinity of the subject parcel. A summary of recorded area wide spills is provided below.

5.2 Reports of Spills/Releases

As part of investigating the possibility of environmental violations and/or records of spills or releases at the property site (including surrounding areas), ECSI obtained and reviewed records maintained by the NYSDEC under the programs of Solid Waste, Hazardous Waste Generators, SARA Title III, Spills, Petroleum Bulk Storage and Chemical Bulk Storage Programs. The NYSDEC Central Office, located in Albany, New York, compiles and periodically updates spill/release information from nine Regional Offices, which are made available to the public. ECSI obtains spill/release database updates quarterly in an effort to maintain current NYSDEC official information. The files are searched, using a database software program, to determine if any spills/releases have been reported to and/or investigated by NYSDEC representatives in close proximity to the facility. As necessary, NYSDEC personnel are contacted to obtain additional information for specific spill/release sites noted within the database.

Spill/Release records received from the USEPA under the Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) and the Emergency Response Notification System (ERNS) were also reviewed to further evaluate site and surrounding conditions and to supplement information received from EDR. These records also include cross references to NYSDEC records, and thus serve to verify consistency and accuracy. A review of these files indicate that the subject site was not noted on either the CERCLIS or ERNS listings.

Database searches were performed by both ECSI and EDR during January 1998, which revealed that spills were reported for the Concord Resort Hotel facility. Spill Nos. 9009249, 9106928, and 9705088 are on file with the NYSDEC. A discussion of the spills noted at the subject site is provided in the text that follows.

Spill No. 9009249 was designated for a spill reported on November 25, 1990. According to conversations with Ms. Dolores Wehrfritz, NYSDEC - Spill/Response, the spill number was assigned for a tank overflow caused by Hess (Personal Communications, February 1998). She indicated that the spill was cleaned up and the spill closed within a short period of time. The NYSDEC records indicated a spill closure date of November 28, 1990.

Spill No. 9106928 was designated for the tank removal activities completed in 1991 at the Concord Service Station. Ms. Wehrfritz indicated that the site was assigned the spill number as a result of tank removal activities. ECSI representatives discussed the potential for contaminated soils, due to the lack of confirmatory samples. She stated that she was called the day after tank removal activities and that contamination could be present. In addition, Ms. Wehrfritz stated that a "No Further Action" letter, a letter indicating that the site was cleaned up to NYSDEC standards, was never issued for the site. Additional information regarding this area is provided below in subsequent sections. This area was investigated under the Phase II work effort to confirm the presence of contamination.

Spill No. 9705088 was issued for a spill reported by a private citizen for a waterway on July 28, 1997, the file indicates that the spill was closed that same day. The file also provides the following comments from the citizen "a small lake on [the] concord golf course showed approximately 100 fish that are dead-floating up to surface-no further information avail at this time." No other information exists for this reported incident.

Another spill, reported to the NYSDEC, but not given an official spill number, was for a situation which occurred at the maintenance barn, located in the main parking lot across the road from the main Hotel complex. According to available information provided by Ms. Wehrfritz, on April 7, 1993, Agway had connected to fill a 275 gallon aboveground storage tank line which resulted in the release of petroleum product to surface soils. American Environmental Technologies, Inc. was retained by Agway to cleanup the spill that same night. On April 8, 1993, Ms. Wehrfritz spoke with the Agway representative at the site and informed him that the excavation could be covered to avoid caving in. Soil samples were taken to confirm cleanup levels.

During January 1998, a release of diesel fuel was identified at the Golf Maintenance Shop, between the north side of the Shop and the Kiamesha Creek. The release impacted an approximate 0.08 acre area near the northern corner of the building and north to the Kiamesha Creek. ECSI representatives discovered the release during Phase I assessment activities reinitiated during January 1998. According to Golf Maintenance personnel, the spill occurred while a compressor was being fueled to make snow for the Concord Ski Area. Diesel fuel was being pumped from the nearby on-site tank/dispenser system and into the compressor. Approximately 100 gallons of fuel were released to the ground surface.

The spill was not cleaned up or reported until ECSI representatives arrived and discovered the spill on January 8, 1998. ECSI subsequently coordinated and supervised the removal of surface soils and arranged for the placement of absorbent booms within the Kiamesha Creek to remove free product. The NYSDEC was notified and cleanup was conducted and finalized under the direct supervision of ECSI. A spill was assigned by the NYSDEC for the release (Spill No. 97-11336).

While NYSDEC personnel inspected spill cleanup measures at the Golf Maintenance Shop, a slight oil sheen was observed within an eddy area of the Creek, adjacent to the maintenance building. Field inspection by ECSI and NYSDEC personnel revealed that a pipeline used to route water to the Ski Chalet for snow making equipment contained an oil residue (compressor blow-by) produced by the on-site compressor. The pipeline is routed to the Creek for the purpose of supplying water for snow making. It was concluded that measures be implemented to prevent oil residue discharges to the Creek caused by the compressor unit.

5.3 Past Waste Disposal Practices

A review of aerial photographs and information obtained by way of on-site walkover surveys conducted by ECSI personnel, past hotel waste disposal practices included disposing of waste materials (later determined to be both garbage and construction and demolition, C&D,

wastes) upon portions of properties surrounding the main Hotel complex. The characteristics of disposed materials appear to be primarily solid, nonhazardous, C&D wastes generated by past Hotel renovations, as determined by way of the Phase II investigation (Table 1-2). The parcels identified as on-site waste disposal sites (dumps) and observations made by ECSI personnel as noted follows:

TOWN OF THOMPSON

NYSDEC Golf Course Dump Site - Section 15, Block 1, Lot 35.7

One dump site in particular is listed with the NYSDEC as a solid waste management facility subject to violation of 6 NYCRR Part 360 (1988) Solid Waste Management Facilities regulations. This landfill is located east of Chalet Road, adjacent to the Kiamesha Creek and is approximately 1.02 acres in size. A nearby inactive, aboveground wastewater treatment sand filtration system lies south of the dump. An access road leading to the system displays signs of C&D dumping which include several tires at the surface. Based on Tax records, a large portion of this dump site lies on County owned land.

An Order on Consent was drafted by the NYSDEC and forwarded to Carl Goldstein, Esq., attorney for Respondent, on behalf of Kiamesha Concord, Inc. (Case No. 3-1632/8902). The NYSDEC cited violations of Environmental Conservation Law (ECL) to include illegal dumping of municipal and C&D wastes without an appropriate Part 360 permit (Appendix A). Civil penalties were assessed in the amount of \$310,000; \$10,000 payable by respondent's (Kiamesha Concord, Inc.) execution and return of the Order, and \$300,000 to be suspended upon condition that the Respondent remain in compliance with each condition under the Order.

Agency correspondence noted that if the Order was not signed and returned by July 24, 1989, the Department will assume that the Respondent is not willing to consent to the Order, the offer is withdrawn, and formal legal proceedings would be triggered. Instead, a test pit investigation was performed by Glenn L. Smith, P.E., of Monticello, New York, on behalf of Kiamesha. The results of the investigation were forwarded to the NYSDEC, however, no final subsequent actions were ever completed, nor was an enforcement action pursued by the Department. Based on conversations with NYSDEC attorney Jonah Triebwasser (Personal Communications, February 1998), the Department is still willing to offer the same Civil Penalty arrangements specified in the 1989 Order, provided that conditions of the Order are met. The Order also notes that the Department reserves the right to seek surety or financial responsibility. These matters will likely be decided in conjunction with any planned remediation of the site.

Golf Maintenance Shop Dump Site and Vehicle Storage Area - Section 15, Block 1, Lot 50

A variety of waste disposal practices occurred over time at the Golf Maintenance Shop. Areas immediately surrounding the shop (a vehicle/equipment storage area) are littered with old, stripped vehicles, lawn maintenance equipment and assorted recognizable and non-recognizable scrap metal parts. An old dump site is located approximately 100 feet upgradient and west of this area and shows signs of both surface and subsurface disposal practices of assorted garbage

and C&D waste materials. The dump area lies within a portion of a flood plain situated adjacent to the Kiamesha Creek. Signs of leachate seepage were not observed during walkover inspection conducted by ECSI. Surface wastes including metal and plastic 55 gallon drums (mostly soap drums) as well as junked vehicles, carpeting, wood pallets, metal piping and mattresses, are scattered throughout the limits of the dump, which is approximately 2.07 acres in size. Photographs, Nos. 9 and 10 present an example of the types of waste materials encountered during Phase II test pit investigations (Appendix E).

Chalet Dump Site - Section 15, Block 1, Lot 13

The Chalet dump is located southeast of the ski slope, opposite a shale bank, both of which are accessed by a road which connects with an existing driveway leading to the Chalet facility. The driveway connects with Chalet Road in the vicinity of Raymond's Restaurant/Club House. Waste materials consist of C&D wastes, comprised mostly of wood, carpeting, electrical wiring, assorted plastic materials metal piping, and bricks. The approximate dump area is 0.15 acres in size. Photographs, Nos. 11 and 12 present an example of the types of waste materials encountered during Phase II test pit investigations (Appendix E)

Main Parking Lot Dump Site - Section 15, Block 1, Lot 14

The Main Parking Area Dump is located east of the main parking area and adjacent to an unnamed tributary of the Kiamesha Creek and a wetland regulated under Federal jurisdiction. The top elevation of the dump approximates the adjacent parking area, with an approximate relief of 25 feet from the top of the parking area, to the base of the waste pile. The total affected area is approximately 0.53 acres. Surface wastes are present, mostly comprised C&D and of yard wastes (corn stalks, grass clippings and leaves). Along the outside slope of the dump are large quantities (approximately 1,000 cubic yards) of exposed wood, white goods (hot water heaters and air conditioners), furniture, electrical fixtures, golf bags, plastic and metal piping, auto upholstery and carpeting. Most of the slope face is littered with these materials. In addition, groundwater seeps were observed at three locations at the base of the waste mass, all of which displayed signs of leachate staining. Photographs, Nos. 13 and 14 depict the types of wastes and a seep stain encountered during Phase II test pit investigations (Appendix E).

Casino Dump Site - Section 13, Block 3, Lot 20

The Bailey Road Casino site is littered with surface wastes that include white goods, furniture and assorted plastic materials. An abandoned swimming pool is filled with C&D and white goods. The pool had previously been emptied of water. In addition, a small parking area exists downgradient from a wood constructed Casino building and the swimming pool. An approximate 0.27 acre area is filled with C&D materials intermixed with municipal waste including bottles, cans and white goods. The bulk of the disposed materials appear to be situated along the outer limits of the parking area. Photographs, Nos. 15 and 16 present an example of the types of waste materials encountered during Phase II test pit investigations (Appendix E).

Breezy Corners Bungalows - Section 23, Block 2, Lot 4

Two bungalows located on this land parcel are surrounded with scattered waste comprised of appliance parts (water storage tanks and parts of white goods) and C&D waste materials consisting mostly of wood and shingles. A nearby abandoned swimming pool also contains waste materials, mostly consisting of C&D materials and white goods. The exact types of waste could not be ascertained since water is contained within the pool. The color of the water is brown, possibly resulted from leaf staining and from the unknown waste within the pool.

Thompsonville Road Site - Section 23, Block 1, Lot 48

This parcel once contained a storage building used to store equipment and outdoor furniture. Portions of the building, equipment and furniture still exist. An inspection of the property revealed that some signs of surface disposal occurred over time, primarily consisting of metal parts and wood materials in a small area of the site (less than 5 cubic yards of materials). The quality of this material is suitable for reuse elsewhere on the property and should not be disposed. Signs of top soil removal practices were evident across open areas of the property.

Concord Service Station Dump Site - Section 9, Block 1, Lot 35

This dump site is approximately 0.17 acres in size and displays evidence of C&D debris disposal as well as tires (approximately 50) disposed in areas surrounding the limits of the dump. Plumbing piping and wood are exposed at the surface along with an antique car (circa late 1960's/early 1970's). Plastic bags containing refuse were observed at the time of ECSI's walkover surveys during 1996 and 1997. Section 9, Block 1, Lot 35 is County owned. Photographs, Nos. 17 and 18 present an example of the types of waste materials encountered during Phase II test pit investigations (Appendix E).

Cemetery Dump Site - Section 23, Block 1, Lot 11.3

This area is approximately 0.08 acres in size and displays signs of white goods and assorted machinery parts (i.e., lawn care equipment and vehicle parts). These materials are exposed along a small topographic rise situated at the south boundary limits of a nearby cemetery, named Workmen's Circle Cemetery. Section 23, Block 1, Lot 11.3 is County owned. Photographs, Nos. 19 and 20 present an example of the types of waste materials encountered during ECSI's walkover inspections (Appendix E).

TOWN OF FALLSBURG

Horse Farm Dump Site - Section 60, Block 1, Lot 75

This parcel displays signs of surface waste material deposition, primarily consisting of white goods and C&D waste materials. A small area of the site (less than 0.10 acre) contains a pile of this material and very few signs of waste materials exist at the surface.

6.0 PHASE II METHODOLOGY

Phase II Investigative efforts included estimating volumes of waste masses by measuring the vertical and horizontal extent of disposed wastes materials. ECSI also characterized subsurface soils at each dump site. The same approach used to determine volume of wastes for each dump site was used to determine the horizontal and vertical extent of contamination for each investigated UST location.

As noted, the investigative method chosen to determine the extent and characteristics of past waste disposal practices was a test pit program. The method chosen to ascertain subsurface conditions in the vicinity of suspect UST was that of a boring program utilizing a mobile GeoProbe drill rig. Tank integrity testing of each accessible USTs, as determined by field inspection, was performed as a screening tool prior to placing GeoProbe borings in the field.

Krum and Sons, of Monticello, New York and New York Earth and Structure, Bloomingburg, New York, were retained to excavate test pits, Zebra Environment of Albany, New York was retained to provide boring (GeoProbe) services. Tank testing was performed by Precision Tank Testing of White Plains, New York. Services performed by these firms were supervised by ECSI personnel.

A PID (Photoionization Detector) unit and/or OVM (Organic Vapor Meter) was utilized in conjunction with the test pit and boring programs to screen soils and to guide activities by providing preliminary information with respect to VOCs, typically present within petroleum contaminated soils. In an effort to further characterize conditions, soil and water samples were obtained and analyzed under acceptable methods by Friends Laboratory, Inc., a New York State Certified laboratory.

6.1 Test Pit Investigation Program

As noted, the purpose of conducting test pit investigations was to ascertain the vertical and horizontal extent of waste deposition as well as identify the types of wastes disposed. Test pits were placed randomly across each suspected dump site location. In an effort to complete Phase II Investigation activities within a limited time frame, ECSI retained the services of two (2) excavation companies; Krum & Son, Inc. and New York Earth & Structure. Each of the companies provided an excavator with a reach of approximately 12 to 18 feet and a qualified operator. Typically, only one or more samples were necessary for characterization purposes.

Every effort was made to excavate each test pit to the bottom of the waste pile. Visual observations regarding the types of waste, as well as special conditions encountered, were recorded. Photographs were obtained during test pit investigations to document findings (Appendix E). Soil screening, using a PID unit or OVM, was performed to determine the presence of organic waste materials, as well as for health and safety monitoring purposes.

Composite samples of suspect groundwater, surface water and soils were obtained based on encountered field and waste material conditions. Samples of soil situated below suspect waste

masses were obtained to evaluate the extent of soil quality impacts and to characterize residue materials as hazardous or nonhazardous. Soil samples obtained from below and/or near the waste masses were analyzed for full TCLP and RCRA criteria (Ignitability, Reactivity and Corrosivity). Full TCLP parameters and RCRA criteria facilitated prompt characterization of suspect soils.

In addition, both groundwater and surface water was analyzed under 6 NYCRR Part 360, Solid Waste Management Facility baseline parameters. The Part 360 parameters are utilized for environmental monitoring of groundwater and surface waters at municipal solid waste landfills in the State as part of a gauging process (environmental monitoring) to ensure compliance with applicable solid waste regulations. The parameters encompass a wide array of potential pollutants which may be found within solid waste impacted materials. Part 360 parameter analyses were completed to facilitate a determination as to the extent and character of groundwater and surface water impacts which may be directly attributable to waste deposition. The parameter analyses also facilitated discussions with representatives of the NYSDEC Divisions of Solid and Hazardous Waste as part of plans outline cleanup criteria and site closure particulars with the NYSDEC.

6.2 Tank Integrity Testing Program

A total of nine (9) (USTs) were integrity tested using the EZ-Horner 3 test method. As noted, Precision Tank Testing, LLC conducted tank testing activities. Prior to testing, provisions were made to ensure that each tank was filled to an appropriate level, as required for the EZ-Horner test method. Both tank and piping (i.e., feed and return lines) were tested to determine system tightness.

UST site locations included two 15,000 gallon # 4 fuel tanks in operation at the main Hotel, one 1,500 gallon fuel oil (kitchen waste) underground storage tank at the main Hotel, one # 2 fuel oil tank in use at the former Concord Service Station along Concord Road, one 12,000 gallon # 4 fuel oil tank in use at Raymond's Restaurant/Club House and four tanks in use at the Golf Maintenance Shop; one 2,500 gallon gasoline tank, one 2,000 gallon diesel fuel tank, one 550 gallon waste oil tank and one 1,000 gallon # 2 fuel oil tank. Contingency measures were in place, via agreements with Luzon Environmental Services, prior to testing activities in the event one or more of the USTs failed integrity testing criteria.

In addition, all test failures were immediately reported to the NYSDEC and an assigned spill number was secured by ECSI and/or representatives of Precision Testing. One other tank was attempted for testing, a 500 gallon underground fuel oil tank at the John Parker residence located along Thompsonville Road, however, access to the tank could not be fully accomplished given that its location was beneath a wooden deck and a vent pipe did not exist. During September 1998, subsurface conditions around the tank were investigated GeoProbe boring rig.

6.3 Boring Program

The boring (GeoProbe) investigation program centered on evaluating the extent of contaminated subsurface soils and groundwater conditions using a PID unit and/or OVM designed to screen for VOC emissions. As necessary, soil and groundwater samples were

obtained to confirm the presence of contamination and/or the uncontaminated extent of a confirmed release. Borings were placed in the field utilizing an all-terrain mounted GeoProbe unit and associated supplies. A pattern of probe points were advanced to a minimum of 8 feet or to refusal, around each UST site location and within areas believed to previously contain USTs, such as the case at the former Concord Services Station property which fronts along Concord Road. As noted, the GeoProbe unit was operated by Zebra Environmental Corporation personnel under the supervision of ECSI.

To collect soil samples, a Macro Core (MC) sampler was used. The MC samplers are open tube design and measure approximately 2 inches in diameter by 44 inches long. The samplers are fitted with a removable cutting shoe and clear acetate liner. Samples can be collected from 0 to 4 feet, 4 to 8 feet, and 8 to 12 feet, etc., etc., below existing grade. Subsurface conditions dictate the pattered use of this sampler.

The placement of each probe point was conducted in a systematic manner, to facilitate soil screening and sampling activities (as necessary). The depth of each probe point varied, by location, but were typically between eight and twelve feet depending on encountered conditions. A record of boring depths, the presence of ground water, PID/OVM readings at 12 inch intervals along each boring core (reading vapors within a head space established within the extracted acetate), and approximate boring locations were documented by ECSI personnel. Prior to using a PID or OVM, background readings were obtained for site-specific work areas. Records of these readings were also documented by ECSI staff. After completing the described soil screening and sampling activities, each probe point bore hole was back filled with excavated materials.

6.4 UST Sampling and Analytical Protocols

Friend Laboratory Inc. (FLI) Laboratories, of Waverly, New York, was retained to perform analytical work required to confirm the quality of screened soils and groundwater conditions at each UST site. Groundwater samples were extracted from a probe point bore hole using either a peristaltic or vacuum pump attached to Teflon tubing at the surface. Every effort was made to ensure that the most representative sample was collected for each sampled location. The depth and physical condition of each sample was recorded by ECSI representatives.

In the event signs of contamination were encountered during probe point placement (either visually or by soil screening), soil samples were collected to characterize the vertical and horizontal extent of the suspect plume. The approximate depth and location of each sample was recorded and maintained separately under chain-of-custody procedures by ECSI personnel. Discrete and composite soil samples were obtained to characterize the vertical and horizontal extent of contaminated soil and groundwater conditions in the vicinity of the USTs and former UST locations. The soil and groundwater samples obtained at each site were analyzed for the parameters noted under the New York State of Environmental Conservation (NYSDEC) STARS Memorandum #1, Petroleum Contaminated Soil Guidance Policy, dated August 1992 (reprinted July 1993). Analytical parameters and test methods used for both soil and water composite and discrete sampling included:

<u>Parameter</u>	<u>Test Method</u>
Volatile Organics (VOCs)	SW846 (EPA Method 8021)
Semi-volatiles	SW846 (EPA Method 8270)

Once all analyses were complete, ECSI compared analytical results to applicable criteria noted under the STARS Memorandum to evaluate and report the extent of on-site contamination and calculate cost estimates contained in Section 10.0, Remediation Cost Estimates.

Sampling procedures adhered to appropriate Quality Assurance/Quality Control (QA/QC) measures referenced under State recognized procedures. Representatives of FLI Laboratory ensured that appropriate Standard Operating Procedures (SOPs) and Good Laboratory Procedures (GLPs) were performed for the project.

6.5 Concord Well Water

During February 21, 1998, a well water sample was obtained from the on-site water supply well, owned by the Concord Resort Hotel and leased to the Kiamesha Artesian Spring Water Co., Inc. This sample was analyzed for full Part V Safe Drinking Water Act constituents using EPA Method 502.2. According to available information obtained under the Phase I investigation, this well has never been individually sampled, only the combined water supply source at the initial distribution point located within the limits of the water Company's facility adjacent to the Kiamesha Lake, was sampled. However, concerns associated with the close proximity of golf maintenance operations and future use prompted the testing of this individual source. The results of full Part V testing are discussed below.

7.0 DUMP SITE PHASE II INVESTIGATION FINDINGS

A total of nine (9) dump sites were identified and investigated in the field under the Phase II Assessment process. These sites exist atop soils which are regarded as either silty, gravelly loamy textured soils, and/or those which contain a distinct fragipan layer with reported impermeable characteristics. Specific soil characteristics are presented below to imply the extent of migration potentials which may develop over time, if confirmed contamination is not addressed in a timely and environmentally sound manner.

The field information presented below has been used to generate remediation cost estimates which are further discussed in Section 10.0 of this report. Overall, the type of waste disposal characteristics appeared to be similar from site to site in that the bulk of waste materials encountered in the field consisted of limited quantities of garbage waste with the bulk of waste materials consisting of construction and demolition debris, probably originating from past facility building renovations and improvements. In addition, encountered waste materials were heavily laden with soils. As noted previously, Appendix E contains photographs of dump sites in addition to general site conditions. Sketches of each dump area are contained in Appendix F and provide an approximate location of each test pit and a brief summary of materials encountered.

The criteria for obtaining soil samples at the depths noted was based on visible signs of soil discoloration or unrecognizable decomposed waste materials encountered within the excavated waste mass. Analytical results for each sample obtained at the dump sites are contained within Appendix G.

7.1 Concord Service Station Dump Site - Section 13, Block 3, Lot 19.1

This dump site is located within approximately 1/4 mile east of the former service station which fronts along Concord Road. According to the Town of Thompson Tax Assessor's Office, records indicate that the dump site exists on a parcel designated as Section 13, Block 3, and Lot 19.1. Based on current tax records, this parcel is County owned. The parcel is 33.4 acres in area, the dump area is approximately 0.53 acres in size.

Visual inspection of the impacted areas of the parcel revealed that surface waste deposition, in the form of tires, a few empty steel 55 gallon (rusted) drums, small quantities of yard waste and lead piping (plumbing) which was placed atop an observed grade with an approximate four foot relief when compared to nearby surrounding grades.

Structures do not exist in the vicinity of the impacted area. Surrounding areas are vacant, forested lands which connect (edge) with portions of the International Golf Course located to the east. Risk pathways such as wetlands and/or surface water table seep conditions do not exist in the vicinity of the impacted area. The filled area lies adjacent to a large parking area which fronts along Concord Road.

Information contained within the Soil Survey of Sullivan County issued by the US Department of Agriculture, Soil Conservation Services (dated July 1989) indicates that the dump site lies atop soils classified as Wellsboro gravelly loams soils (at 3 to 8 % and 8 to 15% slopes). Specific information contained within the Survey is as follows:

Wellsboro gravelly loam (WeB & WeC) consists of a very deep, moderately well drained soil found on hilltops. Fragipan conditions are contained within the profile at approximately 60 inches. Soil permeability is moderate above the fragipan and slow within the pan. The seasonal high water table is perched above the fragipan in the late Fall and early Spring. The available water capacity in moderate. Depth to bedrock is generally more than 60 inches.

On February 4, 1998, a test pit investigation was performed at the dump area to ascertain subsurface conditions. A total of nineteen (19) test pit excavations were placed across the subject area to verify the extent of past dumping activities. A review of aerial photographs obtained for the property revealed that dumping occurred during the early to late 1980's. Excavations were placed from two to four feet below the suspect waste grade and to the original grades situated below deposited materials. Excavations placed within the waste mass revealed the existence of buried tires, construction and demolition debris (i.e., wood, plaster, wallboard, plumbing fixtures and electrical fixtures and conduit, brick and concrete forms) and a crushed metal drum containing an Exxon label. Composite samples of the decomposed waste and parent grade soils were

obtained for five test pit locations (Test Pit No. 1 and two composite samples of paired Test Pit Nos. 6 and 7, and 10 and 11). An additional sample was obtained of soils below and surrounding the uncovered Exxon drum. A sketch of the suspect area showing the approximate location of each test pit and brief notations of encountered waste materials is contained in Appendix F. As noted, photographs of forested areas surrounding the suspect dump site as well as an example of the waste materials encountered, are contained in Appendix E.

Test pit composite sample results revealed that the sampled soils were nonhazardous and in fact did not contain any trace parameters analyzed under RCRA criteria analyses (Ignitability, Corrosivity and Reactivity) or full TCLP test parameters (Appendix G). Soil screening activities using a PID unit did not reveal any incidence of VOC's resulting from a suspect spill/release.

Soils sampled from each of the above noted test pits were obtained from an approximate depth of 4 feet within the excavation. The composite soil samples for Test Pit Nos. 6 and 7 and Test Pit Nos. 10 and 11 indicated Barium as being detected. The analytical results indicated a Barium concentration of 0.167 ppm Test Pit Nos. 6 and 7 and 0.468 ppm for Test Pit Nos. 10 and 11. All other parameters tested for under the analytical method were noted as none detected and were not present or present in concentration below that of the method detection limit. Based on available literature obtained for the area, Barium is a natural occurring metal which has achieved reported concentrations of greater than 1.0 ppm in natural soils. As such, these concentrations are likely indicative of natural conditions.

An estimate of the approximate waste volume of 530 cubic yards was determined for this dump site. This estimate is based on the vertical and horizontal limits of materials observed by test pit activities.

7.2 Main Parking Lot Dump Site - Section 15, Block 1, Lot 14

The Main Parking Lot is located on the east side of Concord Road, east of the main Hotel and southeast of the intersection of Concord Road and County Highway 109. According to available information, the parking lot is a portion of Section 15, Block 1, Lot 14. The complete area of Lot 14 is approximately 197.37 acres, according to information maintained by the Town of Thompson Tax Assessor's Office. Phase II activities in this area centered on the investigation of the eastern limits of the main parking lot where past dumping activities are visible. The top elevation of the dump meets the elevation of the adjacent parking area. Surface wastes are present and are comprised mostly of yard wastes (corn stalks, grass clippings and leaves). Along the outside slope of the dump are large quantities (approximately 1,000 cubic yards) of exposed wood, white goods (hot water heaters and air conditioners), furniture, electrical fixtures, golf bags, plastic and metal piping, auto upholstery and carpeting. Most of the slope face is littered with these materials. Appendix E contains photographs of the general layout of the main parking lot, waste materials encountered within the main parking lot dump site, and a seep.

The main parking area is a large open parking lot with some areas of pavement, gravel, and dirt. The parking lot area is surrounded by cyclone fencing with gates to provide ingress/egress. The access roads connect with Concord Road as well as an internal access road

which connects with Concord Road and internal golf course areas. The parking lot is utilized by both Hotel guests and employees. A maintenance barn is located in the central/western area of the parking lot. In addition, a sewer pump station, owned and operated by the Town of Thompson is located in close proximity to the maintenance garage. Storm collection drains are located within the parking lot, and allow for storm water to flow to the east, toward the dump area. This may be a source of the observed seep sampled under the Phase II work effort.

The main parking dump site area is located at the eastern limits of the main parking lot and adjacent to an unnamed tributary of the Kiamesha Creek and a wetlands regulated under Federal jurisdiction. As noted previously, available information indicates that the site is covered by glacial till with a variable depth. Further, the lands that encompassed by the Concord Hotel are within the West Falls soils group, which is part of the upper Walton formation and comprised of shale, sandstone, and conglomerate.

Information contained within the Soil Survey of Sullivan County, New York issued by the US Department of Agriculture, Soil Conservation Service in July 1989, indicates that the main parking lot is located over two soil types, the Wellsboro gravelly loam and the Morris loam. Soil mapping revealed that the area contains Wellsboro gravelly loams at both 3 to 8% and 8 to 15% slopes. The Morris loam noted for the area has 3 to 8% slopes. Specific soil information excerpted from the Soil Survey is as follows:

Wellsboro gravelly loam is a very deep, moderately well drained soil on hillsides and hilltops. A fragipan is typical. Permeability of this Wellsboro soil is moderate above the fragipan and slow in the fragipan. The seasonal high table is perched above the fragipan in late fall and early spring. Surface runoff is medium. Depth to bedrock is generally more than 60 inches.

Morris loam is a very deep, somewhat poorly drained soil on the lower parts of concave hillsides on uplands. Permeability of this Morris soil is moderate in the upper part and slow or very slow in the dense, firm layer, or fragipan, in the subsoil. The seasonal high table is perched above the fragipan from late fall to early spring. Surface runoff is slow or medium. Depth to bedrock is generally more than 60 inches.

A test pit investigation was conducted at the Main Parking Area Dump on February 3, 1998, to determine the extent of waste deposition as well as characterize the wastes. Although two areas were determined to contain waste, only one area provided access for test pits. The test pit investigation in this area revealed an impacted area of approximately 0.44 acres over thickness' of 5 to 20 feet, as well as containing some surface waste and C&D debris. The second area of waste deposition was estimated at 0.09 acres. As such, the total approximated area of waste deposition in the Main Parking Area Dump is 0.53 acres. The approximate volume of waste in this area, based on physical data obtained during test pit investigations, is estimated at 3,000 cubic yards. Test pits excavated close to the edge of fill indicate that the refuse along the edge of the site is limited in extent and that the fill contains small volumes of waste. Based on a review of

aerial photos and the waste materials encountered in the field, it is estimated that waste was placed in this area from the early 1980s to the early 1990s.

A total of fifteen (15) test pits were placed within the main parking lot dump site. The depth of the test pits ranged from 4 to 16 feet. As noted, buried waste materials included yard wastes (corn stalks, grass clippings and leaves), wood, white goods (hot water heaters and air conditioners), furniture, electrical fixtures, golf bags, plastic and metal piping, auto upholstery and carpeting. Soil samples were obtained from the presumed base of waste from four (4) of the fifteen (15) test pits. Analyses conducted on the soil samples included full TCLP and RCRA criteria tests to facilitate a determination of hazardous or nonhazardous materials.

According to the analytical results for the areas sampled, nonhazardous wastes exist at the Main Parking Area Dump site (Appendix G). Soil samples were obtained and analyzed from test pit numbers 32, 33, 34, and 35. Test pits 32 and 33 were sampled at a depth of approximately 16 feet and test pits 34 and 35 were sampled at an approximate depth of 15 feet. Analytical results for each of the four (4) test pit locations indicated the presence of Barium; Test Pit No. 32 had a reported concentration of 0.294 ppm, Test Pit No. 33 had a reported concentration of 0.534 ppm, Test Pit No. 34 had a reported concentration of 0.430 ppm, and Test Pit No. 35 had a reported concentration of 0.454 ppm. In addition, Cadmium was detected in the soil samples for Test Pits Nos. 33 and 35 at a reported concentration of 0.055 ppm and 0.053 ppm, respectively. All other parameters tested for under the analytical method were noted as none detected and were not present or present in a concentration below that of the method detection limit. The reported concentrations of Barium are believed to be naturally occurring.

In addition to the above, a water sample was obtained in the vicinity of the main parking lot dump. During prior site inspections a seep was discovered on the hillside below the presumed base of waste placement. The seep is presumed to flow below or in close proximity to the waste mass. A sample of the seep water was obtained on February 5, 1998 to determine if the seep water was contaminated. The water sample was analyzed for solid waste baseline water quality parameters, regulatory parameters utilized by the NYSDEC to evaluate impacts related to releases of solid wastes. According to the laboratory results, the seep sample detected Aluminum at a concentration of 0.454 ppm, Barium at 0.076 ppm, Calcium at 54.7 ppm, Iron at 4.38 ppm, Lead at 0.006 ppm, Vanadium at 0.005 ppm, Magnesium at 3.74 ppm, Manganese at 1.44 ppm, Potassium at 6.94 ppm, and Sodium at 93.4 ppm. Analytical results reported for the seep sample indicate that potential impacts (leaching) are occurring as a result of past waste disposal practices. Table 7-1 notes the reported analytical results in exceedence of NYSDEC Part 360 thresholds as well as other samples obtained during Phase II investigations, which are discussed in subsequent report sections. The seep flows to an unnamed, intermittent stream (located adjacent to the dump) which eventually reaches the Kiamesha Creek, north of the NYSDEC designated dump site. The stream is classified by the NYSDEC as a Class C stream. The best usage for Class C waters, as defined by the NYSDEC, is fishing and waters suitable for fish propagation and survival. In addition, these waters must be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes.

TABLE 7-1
6 NYCRR PART 360 ANALYTICAL RESULTS SUMMARY
CONCORD RESORT HOTEL DUMP SITES

Parameter	NYSDEC Dump MW1	NYSDEC Dump MW2	NYSDEC Dump MW3	NYSDEC Dump Seep	Golf Maintenance MicroWell	Golf Maintenance In-Stream	Main Parking Area Dump Seep
Benzene	ND	ND	ND	ND	ND	0.9 ppb	ND
Toluene	ND	ND	ND	ND	ND	8 ppb	ND
TOC	5.9 ppm	8.8 ppm	8.4 ppm	ND	ND	3.0 ppm	ND
Potassium	6.68 ppm	18.7 ppm	14.8 ppm	2.19 ppm	10 ppm	1.18 ppm	6.94 ppm
Sodium	28.4 ppm	18.8 ppm	2.39 ppm	22.1 ppm	105 ppm	82.0 ppm	93.4 ppm
Barium	0.294 ppm	1.69 ppm	1.77 ppm	0.162 ppm	0.273 ppm	0.215 ppm	0.076 ppm
Calcium	16.0 ppm	31.0 ppm	44.6 ppm	24.8 ppm	50.9 ppm	17.3	54.7 ppm
Iron	50.8 ppm	21.8 ppm	216 ppm	76.7 ppm	ND	0.174 ppm	4.38 ppm
Magnesium	10.7 ppm	27.2 ppm	43.9 ppm	5.75 ppm	5.91 ppm	3.45 ppm	3.74 ppm
Manganese	1.06 ppm	1.5 ppm	16.3 ppm	1.95 ppm	3.15 ppm	0.052 ppm	1.44 ppm
Aluminum	26 ppm	102 ppm	119 ppm	0.18 ppm	5.16 ppm	ND	0.454 ppm
Arsenic	0.016 ppm	0.062 ppm	0.13 ppm	0.005 ppm	0.008 ppm	ND	ND
Beryllium	0.002 ppm	0.013 ppm	0.014 ppm	ND	ND	ND	ND
Chromium	0.037 ppm	0.154 ppm	0.165 ppm	ND	0.022 ppm	ND	ND
Cobalt	0.018 ppm	0.19 ppm	0.124 ppm	ND	ND	ND	ND
Copper	0.046 ppm	0.313 ppm	0.366 ppm	ND	0.017 ppm	ND	ND
Lead	0.062 ppm	0.51 ppm	0.44 ppm	0.020 ppm	0.20 ppm	ND	0.006 ppm
Vanadium	0.027 ppm	0.099 ppm	0.102 ppm	ND	0.006 ppm	ND	0.005 ppm
Nickel	0.049 ppm	0.267 ppm	0.298 ppm	ND	0.032 ppm	ND	ND
Zinc	0.141 ppm	0.555 ppm	0.619 ppm	0.067 ppm	1.30 ppm	ND	ND
Boron	ND	0.061 ppm	0.061 ppm	ND	ND	ND	ND
Cadmium	ND	0.022 ppm	0.022 ppm	0.013 ppm	0.005 ppm	ND	ND
Mercury	ND	0.0002 ppm	0.0002 ppm	ND	0.0022 ppm	ND	ND
Selenium	ND	ND	0.003 ppm	ND	ND	ND	ND

LEGEND

ppm = parts per million ppb = parts per billion ND = None Detected
Shaded areas indicate an exceedence of applicable New York State regulatory thresholds.

7.3 Golf Maintenance Dump Site and Vehicle Storage Area - Section 15, Block 1, Lot 50

The Golf Maintenance Dump site, and an identified waste/soil filled equipment/vehicle storage area adjacent to the Golf Maintenance Shop, is located west of Chalet Road, opposite the on-site Ski Chalet facility. The subject parcel is designated as Section 15, Block 1, Lot 50 and the complete area of the parcel is approximately 17.72 acres. The Kiamesha Creek flows north and lies adjacent to the dump and storage area. Recognizable waste materials exist at and throughout the dump area with abandoned vehicles scattered about the limits of an elevated waste mass (approximately 15 feet above surrounding grades). Appendix E provides photographs of the Golf Maintenance Shop area.

Based on a review of aerial photographs of the Golf Maintenance Shop area, disposal activities consisted of progressively filling each area (the first being the adjacent vehicle/equipment storage area) in a southwest direction until suitable grades were reached for storage purposes and to match grades surrounding the nearby dump site. Disposal activities are at the dump and storage area believed to have been initiated during the late 1970's and continued at the dump area until May 1998, based on observations of field conditions.

Information contained within the Soil Survey of Sullivan County, New York (SCS, dated July 1989) indicates that disposed materials lie over Otisville gravelly loamy coarse sand, Wellsboro and Wurtsboro soils, strongly sloping, extremely stony, and Wurtsboro loam. Specific soil information excerpted from the Soil Survey is as follows:

Otisville gravelly loamy coarse sand, 3 to 8 percent slopes is a gently sloping, very deep, excessively drained soil that formed in glacial outwash. The seasonal high water table in this Otisville soil is at a depth of more than 6 feet. Permeability is rapid or very rapid. The available water capacity is very low. Surface runoff is slow or medium. Gravel or cobbles are common in the surface layer and increase in abundance in the subsoil. Depth to bedrock is more than 60 inches.

Wellsboro and Wurtsboro soils, strongly sloping, extremely stony (WIC) map unit consists of very deep, moderately well drained soils that formed in glacial till on upland till plains and the lower parts of hillsides on uplands. Some areas are Wellsboro soils, some are the Wurtsboro soils, some consist of both. Texture of the surface, excluding stones, are gravelly silt loam and gravelly loam. Stones more than 10 inches in diameter and about 2.5 to 5 feet apart cover 3 to 15 percent of the surface. These soils have a dense, firm fragipan. Slopes range from 0 to 15 percent.

Permeability of the Wellsboro and Wurtsboro soils is moderate above and slow within a fragipan. The seasonal high water table in both soils is perched above the fragipan from late fall to early spring. The available water capacity for both soils is moderate. Surface runoff is medium or rapid. Depth to bedrock is more than 60 inches.

Wurtsboro loam, 3 to 8 percent slopes, stony (WuB) is a very deep, gently sloping, moderately well drained soil on hillsides and hilltops. Permeability of the Wurtsboro soil is moderate to a depth of 26 inches and slow below that depth. The seasonal high water table is perched above the firm and brittle part of the subsoil (fragipan) in late fall and early spring. Surface runoff is medium. Depth to bedrock is generally more than 60 inches.

A test pit investigation was performed at the Golf Maintenance Dump and storage area during the week of February 2, 1998. Phase II investigation efforts centered on the placement of test pits throughout the dump and storage area and the installation of three (3) MicroWell monitoring points, downgradient of the dump and storage area. Soil samples from each of the MicroWells were composited into one sample and analyzed for full TCLP and RCRA criteria. In addition, a grab sample of water within a stream located between the storage area and dump was analyzed for 6 NYCRR Part 360 parameters to determine if surface waters (via groundwater seepage) were impacted due to the stream's proximity to the dump and storage areas. The stream is tributary to the Kiamesha Creek and originates approximately 200 feet from the Creek, between the dump and storage areas. Appendix F provides a field sketch representation of the approximate test pit, MicroWells and stream locations noted in the field. Appendix G provides the analytical results obtained for each of the Golf Maintenance samples described below.

A total of thirteen (13) test pits were placed at the dump to approximate depths ranging from 6 to 16 feet below existing grade. Soil screening activities using a PID unit did not reveal any suspect conditions (i.e., VOC content within the soil). The type of waste materials encountered included old dishes, glass and plastic bottles, ash (presumed to be generated by past surface waste burning activities) buried with soil fill, wood, small quantities of carpeting and refuse (garbage). A total of five soil samples were obtained from varying depths within each test pit excavation. These included a sample from Test Pit No. 7 at 16 feet, Test Pit No. 8 at 4 feet, Test Pit No. 9 at 12 feet, Test Pit No. 12 at 15 feet and Test Pit No. 13 at 6 feet. Each test pit sample was analyzed for full TCLP parameters and RCRA criteria.

A total of ten (10) test pits were placed throughout the limits of the vehicle/equipment storage area, east of the dump, and in close proximity to the Golf Maintenance Shop. The test pits were excavated to depths ranging from approximately 1 to 6 feet below existing grade. A field sketch representation of the approximate test pit locations excavated within the vehicle storage area is contained in Appendix F.

Materials encountered by excavation included construction and demolition debris, electrical conduit, glass and plastic bottles, ash, and metal. Soil screening activities using a PID unit did not reveal any suspect conditions (i.e., VOC content within the soil). A total of three composite soil samples were obtained from varying depths within the three test pit excavations. These included Test Pit No. 42 at 2.5 feet, Test Pit No. 47 at 3 feet and Test Pit No. 48 at 6 feet. Each test pit sample was analyzed for full TCLP parameters and RCRA criteria.

Based on reported results, TCLP and RCRA parameter analyses indicate that the waste materials and soil samples obtained are nonhazardous. Analytical results for Test Pit No. 7

revealed concentrations of Barium at 0.593 ppm and Lead at 0.471 ppm. Test Pit No. 8's analytical results revealed concentrations of Barium at 0.477 ppm, Cadmium at 0.064 ppm, and Lead at a concentration of 0.474 ppm. Test Pit Nos. 9, 12, 13, 42, and 47 all contained Barium at concentrations of 0.265 ppm, 1.46 ppm, 0.221 ppm, 0.331 ppm, and 0.328 ppm, respectively. Analytical results for Test Pit No. 48 revealed Barium at a concentration of 0.070 ppm. All other parameters analyzed under the above noted analytical methods were noted as nondetects, not present or present in a concentration below the method detection limit. The reported concentrations of Barium are believed to be within background levels. The other metals reported appear to be indicative of the breakdown of waste associated with disposed materials.

In addition, concentrations of Toluene (8.0 ppm) and Benzene (0.9 ppm) were detected in the water sample obtained from the stream situated between the dump and storage area, which flows to the Kiamesha Creek. No other parameters listed under the methods analyzed under Part 360 requirements were indicative of surface water impacts related to past waste disposal activities.

As noted, a composite soil sample was obtained from each of the MicroWell installations while each well was installed. The sample was analyzed for full TCLP and RCRA parameters to determine if soils downgradient from the dump and storage areas were impacted from past disposal activities. Based on reported analytical results, downgradient soils were not impacted by past disposal activities for these locations. In addition to the soil sample, water samples obtained from MicroWell Nos. 2 and 3 (immediately downgradient of the dump) were analyzed using EPA Methods 8021 and 8270 to determine if shallow groundwater resources downgradient of the dump were impacted with petroleum product constituents resulting from past disposal activities. The results indicate that trace concentrations of Toluene (2.0 ppb) and p-Xylene/m-Xylene (1.0 ppb) were reported for MicroWell No. 2 and Toluene was detected at 0.7 ug/l for MicroWell No. 3. Evidence of petroleum product releases were not detected in the vicinity of the well points.

A water sample was obtained from MicroWell No. 1 and was analyzed for 6 NYCRR Part 360 Baseline parameters. Part 360 Baseline parameters were targeted to ascertain possible liquid waste migration to the nearby Kiamesha Creek originating from the dump and equipment/vehicle storage areas. The results indicate the presence of metals including Aluminum (5.16 ppm), Arsenic (0.008 ppm), Barium (0.273 ppm), Cadmium (0.005 ppm), Chromium (0.022 ppm), Copper (0.017 ppm), Iron (58.1 ppm), Lead (0.20 ppm), Vanadium (0.006 ppm), Magnesium (5.91 ppm), Manganese (3.15 ppm), Mercury (0.0022 ppm), Nickel (0.032 ppm), Potassium (10.0 ppm) and Zinc (0.032 ppm) all of which were contained within the shallow groundwater. The analytical results are presented within Table 7-1, with indication of those parameters in exceedence of NYSDEC Part 360 thresholds.

7.4 NYSDEC Golf Course Dump Site - Section 15, Block 1, Lots 11 and 13

Based on limited available information, dumping activities commenced at the site during the 1970's and continued into the early 1980's. Prior to dumping activities, the site was used by the Hotel as a gravel mine and was eventually rendered to a nearly level condition. The site lies west of and in close proximity to the Kiamesha Creek. The topography of the dump site is flat

and somewhat bowl shape as higher surrounding topographic elevations exist along the west, north and southern limits of the site. The surrounding topographic features are remnants of past mining activities and approximate the limits of the mine. A section of the International Golf Course exists approximately 50 to 100 feet west of the western most limits of the waste mass, as encountered by ECSI by way of test pit investigations. Soils are described within the Sullivan County Soil Survey as consisting of Scriba loam, stony and Wurtsboro loam. Both soil units are noted as having slopes ranging from 3 to 8 percent. Specific soil information excerpted from the Soil Survey is as follows:

Scriba loam, 3 to 8 percent slopes, stony (ScB) is a gently sloping, very deep, somewhat poorly drained soil on toe slopes and on parts of glaciated uplands and till plains. Stones, 10 to 200 feet apart, cover 0.01 to 0.1 percent of the surface. Permeability in this Scriba soil is moderate or slow above the fragipan and slow in the fragipan. Surface runoff is slow or medium. The seasonal high water table is at a depth of 0.5 foot to 1.5 feet and is perched above the fragipan in late winter and early spring. The available water capacity is low. Depth to bedrock is generally 60 inches or more.

Wurtsboro loam, 3 to 8 percent slopes, stony (WuB) is a very deep, gently sloping, moderately well drained soil on hillsides and hilltops. Permeability of the Wurtsboro soil is moderate to a depth of 26 inches and slow below that depth. The seasonal high water table is perched above the firm and brittle part of a subsoil fragipan in late fall and early spring. Surface runoff is medium. The available water capacity is moderate. Depth to bedrock is generally more than 60 inches.

This dump site was previously investigated during 1990 and 1991 by the engineering firm of Glenn L. Smith, P.E., on behalf of Kiamesha, and under the oversight of representatives of the New York State Department of Environmental Conservation (NYSDEC). Prior to conducting the investigation, the Department issued an Order on Consent to Kiamesha on July 10, 1989 which required site investigation and remediation actions, as necessary. The Order was never signed by Kiamesha, however, Glenn L. Smith, P.E. was retained to conduct a test pit investigation program, as well as install, sample, and analyze three groundwater monitoring wells. The wells were installed in accordance with applicable Part 360 requirements in effect at the time of the investigation.

Monitoring Well No. 1 was located upgradient of Monitoring Wells Nos. 2 and 3, which were situated downgradient of a waste mass encountered during test pit investigations. During this period, the size of the waste mass was determined to be 1.2 acres, most of which extended to an approximate depth of 3 to 4 feet across this area. Activities related to the installation of each well and the sampling and analyses of groundwater conditions were performed in accordance with regulations noted in 6 NYCRR Part 360, Solid Management Facilities (effective 1988).

Representatives of the NYSDEC also obtained samples and analyzed soil and surface waters conditions within the vicinity of the suspect waste mass, which included the Kiamesha Creek (upgradient and downgradient) and a seep located within the east, central portion of the

waste mass. The seep displayed visual signs of staining suspected as being caused by leachate discharges originating from the waste mass. The seep, which originates approximately 200 feet west of the Kiamesha Creek, has and continues to discharge to the Kiamesha Creek.

The characteristics of the waste encountered by Glenn L. Smith, P.E. was reported as typical construction and demolition debris and kitchen waste materials (i.e., glass and plastic bottles, paper/cardboard packaging, lead piping, wall board and wood of various dimension). These characteristics were similar to those observed during test pit investigation activities completed by ECSI during February 1998 placed south of the areas investigated by Glenn L. Smith, P.E.

Analysis of groundwater conditions coordinated by Glenn L. Smith, P.E., revealed that low concentrations of leachate indicator parameters (i.e., Alkalinity, Sulfate, Calcium, Lead, Iron and Manganese) were detected within the two downgradient groundwater monitoring wells (Monitoring Well Nos. 2 and 3). Efforts by NYSDEC to evaluate the quality of soils and surface waters in the vicinity of the site did not conclude any suspect indications for surface water quality, however, a soil sample obtained 400 to 500 feet west of the Kiamesha Creek, in the area of the waste mass, did indicate high concentrations of petroleum contamination. Based on these results, the NYSDEC concluded that industrial wastes exist at the site.

Subsequent to the NYSDEC findings, Glenn L. Smith, P.E. obtained an additional soil sample in the area sampled previously by the NYSDEC which confirmed levels of aliphatic hydrocarbons believed to have originated by the disposal of petroleum product. Subsequent to these investigations, the NYSDEC required an additional test pit investigation during 1992 within an area south of the dump limits confirmed by Glenn L. Smith, P.E. The results of additional test pit investigations revealed that additional areas of the property were impacted by past waste disposal practices.

Based on conversations between ECSI staff and the NYSDEC (Personal Communications, Andrew Lent, February 1998) the case is still open and no enforcement actions were brought against Kiamesha since investigations were concluded during 1992. During February 1998, ECSI performed a test pit investigation of areas south of the NYSDEC designated dump and obtained soil samples from three test pits to confirm whether or not hazardous constituent concentrations were contained within the soils at the site. TCLP and RCRA criteria analyses were performed for this purpose. In addition, groundwater samples were obtained from the three on-site wells, as well as from the seep and two stream locations to evaluate sediment conditions within the Kiamesha Creek, immediately upgradient and downgradient of the seep confluence point connecting with the Creek. A sketch, contained within Appendix F, depicts the location of test pits placed by ECSI. Sampling and analyses were conducted in accordance with 6 NYCRR Part 360, Solid Waste Management Facilities (effective 1993). Analytical results for each of the samples are contained within Appendix G.

Analytical results for Test Pit No. 82 revealed Barium at a concentration of 0.666 ppm and Lead at 7.38 ppm. The Test Pit No. 91 sample contained Barium at a concentration of 0.441 ppm and Cadmium at a concentration of 0.054 ppm. Analytical results for Test Pit No. 94

contained Barium at a concentration of 0.360 ppm, Cadmium at a concentration of 0.057, and Lead at a concentration of 0.597 ppm

Table 7-1 presents a summary of Part 360 parameters analyzed for the groundwater monitoring wells, and the seep. Based on the results obtained for the two downgradient monitoring wells, exceedences of groundwater quality parameter standards were documented. Parameters exceedences included Barium, Iron, Magnesium, Manganese, Aluminum, Arsenic, Zinc and Mercury. Comparisons with these concentrations to those observed in Monitoring Well No. 1 concluded that parameter concentrations were greater in the downgradient wells, however, parameter concentrations were also detected in the upgradient well at levels below NYSDEC groundwater quality thresholds.

It is important to note that both upgradient and downgradient monitoring wells reflect exceedences of NYSDEC groundwater quality parameters including Sodium, Iron, Manganese, Magnesium, Chromium, Cobalt, Lead, and Vanadium. These concentrations appear to be indicative of contaminant migration toward the upgradient monitoring well; this seems highly likely given the amount of time which has passed since dumping activities began, influences of precipitation and infiltration, the topographic features of the site and the fact that the waste mass lies in close proximity of Monitoring Well No.1 (approximately 100 feet).

Analytical results reported for the upgradient sediment sample revealed concentrations of metals at both low and high concentrations. Metals detected included Aluminum (4470 ppm), Barium (60.1 ppm), Cadmium (1.37 ppm), Chromium (5.3 ppm), Cobalt (2.29 ppm), Copper (9.55 ppm), Iron (5500 ppm), Lead (32.4 ppm), Vanadium (3.72 ppm), Magnesium (1280 ppm), Manganese (215 ppm), Mercury (0.12 ppm), Nickel (6.95 ppm), Potassium (479 ppm), Sodium (89.0 ppm), Zinc (58.4 ppm), and Hexachromium (0.038 ppm). No volatile or semi-volatile organic compounds were detected in this sample.

Analytical results for the downgradient sediment sample also reported metals in varying concentrations, including Aluminum (3710 ppm), Barium (111 ppm), Cadmium (1.18 ppm), Chromium (5.3 ppm), Cobalt (3.42 ppm), Copper (12.8 ppm), Iron (6300 ppm), Lead (200 ppm), Vanadium (5.49 ppm), Magnesium (1040 ppm), Manganese (474 ppm), Mercury (0.078 ppm), Nickel (8.57 ppm), Potassium (525 ppm), Sodium (51.3 ppm), Zinc (63.5 ppm), and Hexachromium (0.064 ppm). Acetone, a volatile organic compound, was detected in this sample at a concentration of 200 ppb.

Part 360 does not facilitate comparison of sediment samples to samples, however, based on the reported concentrations it appears that sediment quality is associated with leachate discharges originating from the nearby dump. The presence of acetone in the downgradient sample and not the upgradient, implies that the dump is the source.

Investigations conducted by both ECSI and Glenn L. Smith, P.E. provide analytical results which indicate that waste materials are indeed industrial and municipal solid waste intermixed with C&D materials. This site is subject to the cleanup/closure standards noted under Part 360 regulation (effective 1993).

7.5 Chalet Dump Site - Section 15, Block 1, Lot 13

The Chalet Dump Site is located on the northeast side of Chalet Road southeast of the Ski Chalet Area. According to available tax record information, the Chalet Dump this site lies on a portion of Section 15, Block 1, Lot 13. The complete area of Lot 13 is approximately 116.48 acres, according to information maintained by the Town of Thompson Tax Assessor's Office. Phase II activities in this area centered on the visual investigation of waste piles and analysis of subsurface conditions at the dump site.

The Chalet dump site is located opposite a shale bank situated at the end of a single lane, dirt access road. The area of waste deposition is on a hillside and appears to have been progressively filled, extending the hilltop in a northeasterly direction. Surface waste piles, which are comprised of pallets, carpets, windows, and draperies, are located above deposited wastes and soil fill material (Appendix E).

Based on field observations, no surface water or wetland areas exist within or in close proximity to the Chalet Dump. Lands areas below the Chalet Dump lie within the West Falls soils group, which is part of the upper Walton formation comprised of shale, sandstone, and conglomerate.

Information contained within the Soil Survey of Sullivan County, New York issued by the US Department of Agriculture, Soil Conservation Service, indicates that the Chalet Dump is located above Oquaga very channery silt loam with 3 to 8% slopes. Specific soils information excerpted from the Soil Survey is as follows:

Oquaga very channery silt loam is a moderately deep, gently sloping, well drained to excessively well drained soil on hilltops on bedrock-controlled uplands. The seasonal high water table in this Oquaga soil is commonly not above the bedrock. Permeability, or rate of water movement through the soil, is moderate. Surface runoff is medium and the available water capacity is low or moderate. Bedrock, commonly red shale, is at a depth of 20 to 40 inches.

A test pit investigation was conducted at the Chalet Dump on February 4, 1998, to determine the extent of waste deposition as well as characterize waste residues. The investigation revealed an area of approximately 0.15 acres over an average thickness of 8 feet. The approximate volume of waste in this area, based on physical data obtained during test pit investigations and the size of waste piles, is estimated at 1,710 cubic yards. Based on a review of aerial photos and the disposed waste encountered in the field, it is estimated that waste was placed in this area from the early to mid 1990s.

A total of twelve (12) test pits were placed at the Chalet Dump site. The depth of the test pits ranged from 5 to 12 feet. A sketch of the suspect area showing the approximate location of each test pit and brief notations of encountered waste materials is contained in Appendix F. Buried refuse was comprised of wood debris, white goods (hot water heaters and air conditioners), furniture, electrical fixtures, carpeting, beds and mattresses, shingles, metal piping,

electrical conduit, and umbrellas. One soil sample was obtained, a composite from Test Pit Nos. 5 and 7. Analyses conducted on the soil sample (including Ignitability, Reactivity, Corrosivity, and full TCLP) revealed that the materials are nonhazardous.

Analytical results, Appendix G, for the composite soil sample detected the presence of Barium at a concentration of 0.245 ppm. All other parameters tested for under the analytical method were noted as none detected and were not present or present in a concentration below that of the method detection limit. The reported concentrations of Barium are believed to be within background levels.

7.6 Casino Dump Site - Section 13, Block 3, Lot 20

The Casino Dump is located on the northeast side of Rock Ridge Drive (formerly Bailey Road), approximately 1/4 mile southeast of the intersection of Concord Road and Rock Ridge Drive. According to available information, the Casino Dump lies within the limits of parcel designated as Section 13, Block 3, Lot 20. The complete area of Lot 20 is approximately 66.0 acres, according to information maintained by the Town of Thompson Tax Assessor's Office. Phase II activities in this area centered on the investigation of waste piles and subsurface conditions in the vicinity of the Casino building, including waste piles found north of the building as well as within an existing concrete, in-ground swimming pool. No water was observed within the pool, only soil laden waste materials.

The Casino building was once utilized to house hotel events but was abandoned. The Casino building is surrounded by grassy areas with a circular dirt/gravel access road which provides ingress/egress to Rock Ridge Drive. Available information indicates that no surface water or wetland areas exists within or in close proximity to the Casino dump site. As noted previously, soils below the Casino Dump and swimming pool lie within the West Falls soils group, which is part of the upper Walton formation and comprised of shale, sandstone, and conglomerate.

Information contained within the Soil Survey of Sullivan County, New York issued by the US Department of Agriculture, Soil Conservation Service indicates that the Casino site is located above Wellsboro gravelly loams at both 3 to 8% and 8 to 15% slopes. Specific soil information excerpted from the Soil Survey is as follows:

Wellsboro gravelly loam is a very deep, moderately well drained soil on hillsides and hilltops. Permeability of this Wellsboro soil is moderate above the fragipan and slow in the fragipan. The seasonal high table is perched above the fragipan in late Fall and early Spring. Surface runoff is medium. The available water capacity is moderate. Depth to bedrock is generally more than 60 inches.

A test pit investigation was conducted at the Casino Dump on February 4, 1998, to determine the extent of waste deposition as well as to characterize the residue wastes. The investigation revealed an area of approximately 0.27 acres over an average thickness of 4 feet. The approximate volume of waste in this area, based on physical data obtained during test pit

investigations, including the size and depth of the nearby swimming pool, is estimated at 1,220 cubic yards. Test pits excavated within the waste mass revealed that C&D materials and recognizable refuse exists along the edge of the dump. Based on a review of aerial photos and the nature of the disposed waste encountered, it is estimated that waste was placed in this area between the early 1970s through the late 1980s.

A total of eight (8) test pits were placed at the Casino Dump. A sketch depicting the location of each test pit and brief notations of encountered waste materials is contained in Appendix F. Two of the eight test pits were placed within the limits of the swimming pool to allow for visual inspection of the wastes deposited within. Test Pit No. 1 was placed at the center of the pool and Test Pit No. 2 at the deep (north) end of the pool. Both of the areas revealed white goods (air conditioners, hot water heaters, and dryers), electrical conduit, rubber hoses, pallets, metal piping, and bed springs. Test pit activities did not compromise (dismantle) the swimming pool base or walls.

The depth of the remaining test pits ranged from 4 to 7 feet. Buried waste was comprised of C&D debris, white goods (hot water heaters and air conditioners), furniture, electrical fixtures, empty paint pails, toys and bicycles, carpeting, bedsprings, linoleum, metal piping, electrical conduit, and bicycles (Appendix E). One soil sample was obtained for the Casino Dump; a composite from Test Pit Nos. 5 and 7. Analyses conducted on the soil sample included Ignitability, Reactivity, Corrosivity, and full TCLP revealed that the materials are nonhazardous (Appendix G).

Analytical results for the composite soil sample detected the presence of Barium at a concentration of 0.425 ppm and Cadmium at a concentration of 0.068 ppm. All other parameters tested under the analytical method were noted as none detected and were not present or present in a concentration below that of the method detection limit. Groundwater was not encountered during the test pit investigation at this location.

7.7 Thompsonville Road Site - Section 23, Block 1, Lot 48

The Thompsonville Road site is located on the south side of Thompsonville Road, approximately 3/8 of a mile east from the intersection of Thompsonville Road and Chalet Road. According to available tax record information, the Thompsonville Road site is designated as Section 23, Block 1, Lot 48. The complete area of Lot 48 is approximately 46.6 acres, according to information maintained by the Town of Thompson Tax Assessor's Office. A forested area that abuts a pond and wetlands at the east/southeast portions of the site. A dirt access road provides access to the lot via Thompsonville Road. The lot contains a portion of the Tannery Brook, a tributary of the Kiamesha Creek. In addition, a large pond and adjacent Federal jurisdictional wetland areas are contained within the eastern limits of the lot.

Phase II activities in this area centered on the investigation of the site in areas of suspected waste deposition. Information obtained as part of interviews with Hotel personnel revealed that waste disposal activities may have occurred at this parcel. Test pit investigations placed throughout an area of four sections revealed that very small quantities of surface wastes,

consisting of remnants of old lawn equipment and angle iron. Test pit investigations were conducted on February 6 and 11, 1998, to determine the extent, if any, of waste deposition. Test pits were placed randomly in suspect areas to depths ranging from 2 to 8 feet. During the February 6, 1998, test pit investigation revealed some surface debris, particularly around and in the vicinity of the former chicken coop structure. The test pit investigation concluded that no buried waste exist in the areas investigated at the site. Sketches depicting approximate location of each test pit excavated as part the investigations, and brief notations of encountered subsurface conditions, are contained in Appendix F.

7.8 Horse Farm Dump Site - Section 60, Block 1, Lot 75

The Horse Farm Dump is located on the north side of County Route 109, approximately 1/4 mile west of the intersection of County Route 109 and Chalet Road within the Town of Fallsburg. According to available information, the Horse Farm Dump area is located on a portion of Section 60, Block 1, Lot 75. Tax records indicate that this parcel is owned by the County.

The complete area of Lot 48 is approximately 50 acres, according to information maintained by the Town of Fallsburg Tax Assessor's Office. Phase II activities in this area centered on the investigation of the site in areas of suspected waste deposition. Some surface wastes are present within the limits of the site, along internal access roads.

The Horse Farm site is basically vacant land comprised predominantly of fields, which are separated by tree borders and small forested areas. A dirt access road allows access from County Route 109. The dirt access road splits into an internal access road which lead to an open area with surface waste deposition. This area contains white good, lumber and assorted furniture including mattresses and bed springs. The western/central portion of the site reveals conditions of previous, limited topsoil mining activities.

Information obtained as part of site inspection activities (visual confirmation of surface debris and recent grading activities), as well as interviews with Hotel personnel revealed that disposal activities had occurred on this site. Based on field information, no streams or wetlands exist within the Horse Farm boundaries. A complete site inspection was not conducted due to time constraints, aerial photographs were instead utilized to determine possible exposures.

Land areas within the limits of the Horse Dump site lot within the West Falls soil group, which is part of the upper Walton formation and comprised of shale, sandstone, and conglomerate. Information contained within the Soil Survey of Sullivan County, New York, indicates that the Horse Farm site is located over four soil types, the Neversink and Alden soils, very stony (NF), Oquaga very channery silt loam (OeB), Wellsboro and Wurtsboro soils, strongly sloping, extremely stony (WIC), and Wurtsboro loam (WuB). Specific soil information for the two soil types is as follows:

Neversink and Alden soils, very stony (Nf) is a map unit described as containing very deep, poorly drained and very poorly drained soils that formed in glacial till in level or depressional areas of till plains. Some are Neversink soils, some are Alden

soils, and some consist of both. The total acreage of this map unit is about 45 percent Neversink soils, 40 percent Alden soils, and 15 percent other soils. Slopes range from 0 to 3 percent. Slopes are commonly slightly hummocky. Stones or boulders 50 to 30 feet apart cover 3 to 15 percent of the surface. The seasonal high water table in Neversink and Alden soils is at or near the surface from late Fall to mid-Spring and during other, excessively wet periods. Runoff is very slow or intermittently ponded.

Oquaga very channery silt loam, 3 to 8 percent slope (OeB) is a moderately deep, gently sloping, well drained to excessively well drained soil on hilltops on bedrock-controlled uplands. The seasonal high water table in this Oquaga soil is commonly not above the bedrock. Permeability, or rate of water movement through the soil, is moderate. Surface runoff is medium. Bedrock, commonly red shale, is at a depth of 20 to 40 inches.

Wellsboro and Wurtsboro soils, strongly sloping, extremely stony (WIC) map unit consists of very deep, moderately well drained soils that formed in glacial till on upland till plains and the lower parts of hillsides on uplands. Some areas are Wellsboro soils, some are the Wurtsboro soils, some consist of both. The total acreage of the map unit is about 40 percent Wellsboro soils, 40 percent Wurtsboro soils, and 20 percent other soils. Texture of the surface, excluding stones, are gravelly silt loam and gravelly loam. These soils have a dense, firm fragipan. Slopes range from 0 to 15 percent.

Permeability of the Wellsboro and Wurtsboro soils is moderate above and slow within the fragipan. The seasonal high water table in both soils is perched above the fragipan from late fall to early spring. The available water capacity for both soils is moderate. Surface runoff is medium or rapid. Depth to bedrock is more than 60 inches.

Wurtsboro loam, 3 to 8 percent slopes, stony (WuB) is a very deep, gently sloping, moderately well drained soil on hillsides and hilltops. Permeability of the Wurtsboro soil is moderate to a depth of 26 inches and slow below that depth. The seasonal high water table is perched above the firm and brittle part of the subsoil (fragipan) in late fall and early spring. Surface runoff is medium. Depth to bedrock is generally more than 60 inches.

An extensive test pit investigation was conducted at the Horse Farm site on February 11, 1998, to determine the extent, if any, of waste deposition as well as to characterize the wastes. Test pit activities were conducted across three open, accessible areas of the site, primarily within field areas. Fifteen (15) test pits were placed in areas close to surface waste debris as well as within open elevated and depressional areas. Each pit was placed randomly and excavated to depths ranging from 1 to 6 feet. The investigation revealed some surface debris, particularly around and in the vicinity of the former topsoil mine area. Only limited buried waste materials were found within the 15 test pits. It should be noted that most of the test pits were shallow due

to significant quantities of rock. Sketches depicting the approximate location of test pits excavated under the investigations, and brief notations of encountered subsurface conditions, are contained in Appendix F.

Visual inspections of the surface debris at the Horse Farm site indicate that the waste was deposited from the early 1970s to the late 1980s. It was estimated that an approximate 0.38 acre area contained of surface debris (1,400 cubic yards). The surface debris consists of plastic bottles, dishes, white goods, yard waste and tires.

7.9 Cemetery Dump Site - Section 23, Block 1, Lot 11.3

The Cemetery Dump is located immediately south of the Workmen's Circle Cemetery which is directly accessed from Thompsonville Road. The dump lies perpendicular to the cemetery and New York State Route 17, situated approximately 1,500 feet to the south. An access roadway connecting with Thompsonville Road travels to the dump as well as a roadway leading from an open field situated between the dump site and Route 17.

The limits of the dump approximate a 3,600 square foot area (144 in length by 25 feet in width), representing roughly 0.08 acres. According to available information maintained at the Town of Thompsonville, Tax Assessor's Office, the dump lies within the limits of parcel Section 23, Block 1, Lot 11.3. Based on recent tax records, this parcel is owned by the County through foreclosure.

Phase II excavation within and adjacent to areas which contained partially buried surface waste materials, indicated past subsurface disposal. Surface waste consists of limited C&D materials, parts of white goods and plastic/metal toys. Based on available information and field observations, no surface waterways or wetland areas exist within or in close proximity to the Cemetery Dump. Lands that encompassed the limits of the Cemetery Dump lie within the West Falls soil group, which is part of the upper Walton formation and comprised of shale, sandstone, and conglomerate.

Information contained within the Soil Survey of Sullivan County, New York, indicates that the Cemetery Dump is located above Neversink loam, nearly level soils. Specific soil information excerpted from the Soil Survey is as follows:

Neversink loam (Ne) is a map unit is described as containing very deep, nearly level, poorly drained or very poorly drained soil in flat or slightly depressed areas of glacial till plains or along small drainageways. Slopes range from 0 to 3 %. Permeability of these soils is regarded as moderate in the surface and slow in the subsurface. Seasonal high water table is at or near the surface from late Spring to late Fall. Surface runoff is slow or very slow at or near the surface.

A test pit investigation was conducted at the Cemetery Dump on September 16, 1998, to determine the extent of waste deposition and to characterize the wastes. The investigation revealed an approximate waste disposal area of 1,650 square feet (0.03 acres) over an average

thickness of 2 feet, in addition to minimal amounts of surface waste with an approximate volume of 12.7 cubic yards. The total approximate volume of waste in this area, based on physical data obtained during test pit investigations, and the area of exposed surface waste, is estimated to be 122.7 cubic yards. Based on a review of aerial photos and observations of the nature of the waste encountered, it is estimated that waste was placed in this area sometime between the late 1960's and mid 1970's.

A total of fourteen (14) test pits were placed at the Dump area. The depth of the test pits ranged from 2 to 6 feet. A sketch depicting the approximate location of each test pit excavated under the investigations, and brief notations of encountered waste materials, is contained in Appendix F. Buried refuse was comprised of wood debris, white goods (hot water heaters and refrigerator doors), porcelain fixtures, carpeting, bed springs, shingles, metal piping, electrical conduit, vehicle bumper and lawn care equipment parts. Each test pit mostly consisted of clean soils and no forms of waste residue were observed (Appendix E). One confirmatory soil sample was obtained for this dump site; a composite from test pit number TP-4B. Analyses conducted on the soil sample included full TCLP and RCRA criteria analyses (Ignitability, Reactivity, Corrosivity) to characterize impacted soils. PID readings obtained during test pit activities did not reflect elevated levels of VOCs within excavated soils.

According to the analytical results for the areas sampled, nonhazardous wastes exist at the Cemetery dump site. Analytical results for the composite soil sample revealed that all parameters tested under the analytical method were not present or present in concentrations below that of the method detection limit. Appendix G contains the analytical results for the Cemetery dump sample.

8.0 UST PHASE II INVESTIGATION FINDINGS

Subsurface, GeoProbe borings described below have been conducted in accordance with NYSDEC STARS Memorandum # 1 criteria to facilitate discussions with Department representatives for outlining cleanup options. Table 8-1 provides the NYSDEC STARS Memorandum #1 Thresholds utilized for evaluating subsurface conditions in the vicinity of the USTs.

Information obtained for parcel locations found to be contaminated with petroleum product were sketched to explain, in simplest terms, the extent of contamination encountered in the field. Parcels which were determined not to be contaminated were not sketched and thus, are not contained within this report. In addition, tabulations of analytical results were only generated for contaminated areas. Analytical reports obtained under the boring program are contained in Appendix H.

Soil conditions encountered at each UST site investigated consisted of silty, sandy loam textures which were very often observed with an impermeable fragipan barrier within the profile. Given infield PID determinations and analytical results obtained for each site, soil conditions

TABLE 8-1
NYSDEC STARS MEMO # 1 THRESHOLDS
TCLP Alternative Guidance Values

METHOD 8021

Parameter	NYSDEC Threshold (ug/kg)
Benzene	14
Toluene	100
Ethylbenzene	100
p-Xylene/m-Xylene	100
o-Xylene	100
Isopropylbenzene	100
n-Propylbenzene	100
1,3,5-Trimethylbenzene	100
tert-Butylbenzene	100
1,2,4-Trimethylbenzene	100
sec-Butylbenzene	100
4-Isopropyltoluene	100
n-Butylbenzene	100
Naphthalene	200
Methyl-tert-butyl-ether (MTBE)	1,000

METHOD 8270

Parameter	NYSDEC Threshold (ug/kg)
Naphthalene	200
Acenaphthylene	400
Acenaphthene	400
Fluorene	1,000
Phenanthrene	1,000
Anthracene	1,000
Fluoranthene	1,000
Pyrene	1,000
Benzo-(a)-anthracene	0.04
Chrysene	0.04
Benzo-(b)-Fluoranthene	0.04
Benzo-(k)-fluoranthene	0.04
Benzo-(a)-pyrene	0.04
Indeno-(1,2,3-cd)-pyrene	0.04
Dibenzo-(a,h)-anthracene	1,000
Benzo-(g,h,i)-perylene	0.04

appear to aid in confining contaminants, thus displaying characteristics of low contaminant migration potential

8.1 Concord Main Hotel - Section 9, Block 1, Lot 34.1

The main Hotel complex utilizes two (2) 15,000 gallon #4 fuel oil USTs to provide heating for the facility. The two (2) active USTs are located in close proximity to the intersection of County Route 109 and Concord Road. In addition, an inactive 1,500 gallon UST is located near a rear kitchen entrance (fronting County Route 109). Differing accounts as to the use of this tank were obtained by ECSI during Phase I activities; some indicated that the tank contained #2 fuel oil to provide fuel to the kitchen and others noted that the tank contained kitchen waste (i.e., grease). As such, ECSI arranged to have each of the tanks tested in accordance with acceptable NYSDEC criteria, as described previously.

The two 15,000 gallon tanks passed integrity testing criteria on February 3, 1998. Based on the results of the test, no subsurface investigations were conducted for these tanks. The integrity testing was completed by Precision Tank Testing, LLC. Each tank was tested utilizing the EZ-Horner 3 Method, a vacuum method test. The inactive 1,500 gallon fuel oil/kitchen grease UST failed integrity testing. Subsurface borings were conducted around the tank and screened with the use of a PID unit. The results of soil screening activities from the locations probed did not reveal signs of a release. ECSI arranged to have the tank pumped out and the fill port marked and sealed to avoid additional filling until which time the tank was removed and/or closed in place.

8.2 Raymond's Restaurant/Club House - Section 15, Block 1, Lot 50

A 12,000 gallon #4 fuel oil UST provides fuel to heat Raymond's Restaurant/Club House, located along Chalet Road. The tank was tested, in accordance with NYSDEC criteria, on February 3, 1998, with the EZ-Horner 3 Method by Precision Tank Testing, LLC. According to integrity testing, the UST passed NYSDEC testing criteria and was considered to be "tight." As such, no subsurface investigation was conducted at this site.

8.3 Concord Service Station USTs - Section 9, Block 1, Lot 35

The former Concord Service Station, located just southeast of the main Hotel entrance and on the southeastern side of Concord Road, currently provides vehicle maintenance for Concord Resort Hotel vehicles. However, the site also included active gasoline dispensing services. Available information obtained by ECSI indicated that the gasoline dispensing activities were conducted from the late 1940s or early 1950s until the early 1990s. Further, Phase I Investigations revealed that two former UST, existed at the northeast side of the building. In addition, one active 550 gallon #2 heating oil tank was located on the southwest side of the building and two inactive 10,000 gallon gasoline USTs were found further northeast of the service station building.

A subsurface boring program was designed to investigate subsurface conditions at the service station property in an effort to confirm the presence and/or extent of petroleum contaminated soils. Figure 8-1 depicts the general service station layout as well as GeoProbe and test pit locations.

The 550 gallon heating oil tank was tested on February 2, 1998, by Precision Tank Testing, LLC with the EZ-Horner 3 Method. The tank system failed NYSDEC testing criteria and ECSI placed three 8 foot deep borings around the tank. Each boring sample extracted soils in 4 foot increments. ECSI representatives conducted field screening activities with a PID unit. Based on field soil screening, the soils surrounding the tank are not contaminated. Two new aboveground tanks were installed within the service building to allow uninterrupted heating of the building while the 550 gallon UST pumped out and the fill pipe covered to prevent additional filling. The heating oil UST remains in place at the site until closure activities are approved at the facility.

In addition to the existing tank locations, the areas determined to be the location of prior tanks and/or product transfer lines were also investigated with subsurface soil borings. The tank area formerly located northeast of the service station building, within a chain link fenced area, was determined to contain both contaminated groundwater and soils. Soil screening activities conducted by ECSI representatives indicated high levels of VOCs. A total of fifteen (15) borings were placed in this area, each boring ranged from a depth of 4 to 16 feet, but were typically from 8 to 12 feet in depth. Each boring core was screened with the use of the PID unit at a 12 inch interval within the acetate core. Based on these readings, samples were obtained to confirm the presence and extent of subsurface contamination. Six (6) soil samples and two (2) groundwater samples were obtained and analyzed. Analytical results for both soil and groundwater samples revealed high concentrations of gasoline constituents including Benzene, Toluene, Ethylbenzene, and Xylene (BTEX). A tabulation of all analytical results for both STARS 8021 and 8270 for the Concord Service Station are contained on Table 8-2. Table 8-1 provides NYSDEC STARS 8021 and 8270 thresholds for comparison evaluation of the results obtained.

A former UST area located in front of the building was also investigated. Tank islands and additional gasoline USTs were once located in front (west) of the service station building. ECSI representatives conducted a limited subsurface (soil boring) investigation, in light of time constraints, which indicated that additional contamination exists at the front portion the of the site. Soil screening results also indicated high levels of VOCs observed within extracted soils. The use of a magnetometer did not reveal the presence of underground tanks in this location, however, based on observations during soil boring activities the prior use and removal of other tank systems in this area cannot be ruled out. A test pit was excavated directly in front of the service station office which did not reveal any tanks, but petroleum contaminated soils were uncovered. This area was highly odorous and soil screening reflected high volatile organic levels.

A total of seven (7) GeoProbe borings and one (1) test pit were placed in the front section of the building. Soil samples were obtained from five (5) of the boring locations, as well as one (1) from the test pit. One of the borings was sampled in two intervals, an upper and a lower sample, resulting in a total of six (6) soil samples in this area. Groundwater was not encountered

STARS ANALYTICAL RESULTS
Concord Service Station Subsurface Investigation

METHOD 8021

Parameter	Sample Identification Number														Test Pit
	SSB 1	SSB 1 (W)	SSB 3	SSB 4	SSB 4 (W)	SSB 6	SSB 9	SSB 10	SSB 16	SSB 18/19	SSB A	SSB B	SSB C upper	SSB C lower	
Depth of Sample (feet)	6-12	12	8-12	8-12	12	10-14	4-12	8-12	1-4	1-3	1-3	3-8	1-4	4-8	4
Analytical Results (ug/kg)															
Benzene	35	24	2,600	230	1,000	15	ND<27	ND<6	ND<7	3,600	ND<5	2,000	37	ND<160	3,100
Toluene	24	18	7,200	210	380	38	180	15	ND<7	16,000	ND<5	7,500	110	1,070	4,900
Ethylbenzene	140	63	22,000	1,500	1,200	150	880	ND<6	ND<7	19,000	ND<5	9,200	130	960	24,000
p-Xylene/m-Xylene	940	400	96,000	11,000	7,000	650	5,300	13	14	60,000	10	51,000	830	8,200	95,000
o-Xylene	280	66	27,000	840	580	90	1,100	ND<6	ND<7	12,000	ND<5	16,000	260	2,500	34,000
Isopropylbenzene	35	5	3,200	420	ND<50	40	310	ND<6	ND<7	4,200	ND<5	1,500	ND<26	ND<160	5,900
n-Propylbenzene	72	8	8,500	640	63	87	670	ND<6	ND<7	7,600	ND<5	4,300	68	540	1,000
1,3,5-Trimethylbenzene	380	63	22,000	4,500	570	540	1,900	ND<6	ND<7	20,000	ND<5	16,000	330	2,400	35,000
tert-Butylbenzene	ND<7	ND<2	ND<1400	ND<150	ND<50	ND<12	ND<27	ND<6	ND<7	ND<14	ND<5	ND<280	ND<26	ND<160	ND<1400
1,2,4-Trimethylbenzene	1,100	190	76,000	1,400	1,800	1,400	5,800	14	ND<7	60,000	ND<5	44,000	1,000	6,800	100,000
sec-Butylbenzene	ND<7	ND<2	ND<1400	ND<150	ND<50	ND<12	98	ND<6	ND<7	ND<1400	ND<5	ND<280	ND<26	360	ND<1400
4-Isopropyltoluene	ND<7	ND<2	ND<1400	ND<150	ND<50	33	110	ND<6	ND<7	2,400	ND<5	ND<280	ND<26	ND<160	3,200
n-Butylbenzene	650	51	28,000	6,900	280	1,100	3,200	8	ND<7	25,000	ND<5	17,000	460	2,600	6,600
Naphthalene	230	13	16,000	3,000	200	250	1,000	50	ND<7	9,900	ND<5	8,300	330	1,100	87,000
Methyl-tert-butyl-ether (MTBE)	ND<1	ND<25	ND<14000	ND<1500	ND<500	ND<120	ND<270	ND<57	ND<71	ND<14000	ND<54	ND<2800	ND<260	ND<1600	ND<14000

LEGEND:

- SSB = Borings taken at the Concord Service Station, at former gasoline tank and piping locations.
- W = Water samples, all other samples noted are soil samples.
- ND = Non detect, less than detection limit noted.

STARS ANALYTICAL RESULTS
Concord Service Station Subsurface Investigation
(Continued)

METHOD 8270

Parameter	Sample Identification Number													Test Pit	
	SSB 1	SSB 1(W)	SSB 3	SSB 4	SSB 4 (W)	SSB 6	SSB 9	SSB 10	SSB 16	SSB 18/19	SSB A	SSB B	SSB C upper		SSB C lower
Depth of Sample (feet)	6 - 12	12	8 - 12	8 - 12	12	10 - 14	4 - 12	8 - 12	1 - 4	1 - 4	1 - 3	3 - 8	1 - 4	4 - 8	4
Analytical Results (ug/kg)															
Naphthalene	1	12	1.9	0.15J	390	0.16J	0.15J	ND<0.28	ND<0.25	8.5	ND<0.28	0.83	ND<0.27	0.67	0.22J
Acenaphthylene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Acenaphthene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	0.06J	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Fluorene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	0.12J	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Phenanthrene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	0.21J	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Anthracene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Fluoranthene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	0.12J	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Pyrene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	0.11J	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Benzo-(a)-anthracene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Chrysene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Benzo-(b)-Fluoranthene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Benzo-(k)-fluoranthene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Benzo-(a)-pyrene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Indeno-(1,2,3-cd)-pyrene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Dibenzo-(a,h)-anthracene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27
Benzo-(g,h,i)-perylene	ND<0.25	ND<5	ND<0.27	ND<0.28	ND<50	ND<0.26	ND<0.26	ND<0.28	ND<0.25	ND<0.29	ND<0.28	ND<0.26	ND<0.27	ND<0.27	ND<0.27

LEGEND:

- SSB = Borings taken at the Concord Service Station, at former gasoline tank and piping locations.
- W = Water samples, all other samples noted are soil samples.
- ND = Non detect, less than detection limit noted. J = Estimated Value, under the laboratory detection limit.

in this area. This area also revealed high concentrations of typical gasoline constituents ranging from non-detect to 100,000 ppb of 1, 2, 4-Trimethylbenzene

According to available information, the two (2) inactive 10,000 gallon gasoline USTs located northeast of the service station building are 20 to 30 years old and of steel construction. The tanks had not been used since the 1970s or 1980s. These tanks were not tested due to the fact that the tanks were inactive and site representatives indicated that arrangements would soon be made to remove each tank. At the time of investigation, the upgradient tank was estimated to contain approximately 90% water and 10% gasoline. ECSI representatives conducted a subsurface investigation around the tanks to determine release potentials. Nine (9) borings were placed in close proximity to the inactive tanks. Based on soil screening results, one soil sample was obtained to document subsurface conditions. Analytical results for the sample revealed that the sample was in compliance with thresholds set forth under the NYSDEC STARS Memorandum #1. Based on soil screening using a PID unit, it is believed that the upgradient tank may have released gasoline in close proximity to the tank as two boring locations indicated elevated VOC levels.

In addition to concerns for UST contamination, service station personnel were questioned about discharges from the system of drains located within the existing service station building. Employees on-site at the time of the subsurface investigations noted that the system connects with the Town's sewer treatment plant via underground piping. Floor washings and residue resulting from minor spills are directed to the drains. Localized spills are first handled with a dry absorbent material. In addition to drains, three lifts are located within the building. Conversations with Chris Hummel, on-site personnel, indicated that the underground hydraulic oil holding tank surrounding each lift does not leak, based on his knowledge of the frequency of oil replenishment. While this knowledge is important, a release can not be ruled out.

8.4 Golf Maintenance USTs - Section 15, Block 1, Lot 50

Four (4) USTs are located at the Golf Maintenance Building. Each of the four tanks were tested on February 4, 1998 by Precision Tank Testing, LLC with the EZ-Horner 3 Method. Prior to tank testing the tank capacities were indicated to be one 1,000 gallon diesel tank, one 2,000 gallon gasoline tank, one 1,000 gallon # 2 heating oil, and one 500 gallon waste oil. However, tank testing activities revealed that the capacity of the gasoline tank was actually 2,500 gallons and the diesel tank 2,000 gallons. All four tank systems failed NYSDEC integrity testing criteria.

A subsurface boring program was designed specific to the Golf Maintenance tank areas. ECSI placed several subsurface soil borings near the areas of the underground storage tanks as well as next to a sump connecting with drains within the Golf Maintenance Shop building. Figure 8-2 provides a general layout of Golf Maintenance, including the location of the USTs, the sump and the Concord well. Three of the four tanks are located at the front (north) of the golf maintenance building. Soil borings in this area revealed both heating oil/diesel odors and/or gasoline odors. In some instances, free product was observed in the soil. Table 8-3 provides a summary of analytical results and sample depths by location. Table 8-1 provides NYSDEC STARS 8021 and 8270 thresholds for comparison evaluation of the results obtained.

FAL 8-3
STARS ANALYTICAL RESULTS
Golf Maintenance Shop Subsurface Investigation

METHOD 8021

Parameter	Sample Identification Number																	
	GMT 1	GMT 3	GMT 4	GMT 5	GMT 6	GMT 7	GMT 14	GMT 16	GMT 17	GMT 18	GMWO 3 Upper	GMWO 3 Lower	GMWO 6	GMWO 7				
Depth of Sample (feet)	1 - 4	1 - 3	4 - 8	6 - 8	4 - 6	6 - 9	4 - 8	4 - 8	4 - 7.5	3 - 6.5	1 - 4	6 - 10	6 - 10	6 - 10				
Analytical Results (ug/kg)																		
Benzene	ND<14	ND<7	ND<7	120	1,200	25	ND<6	ND<7	ND<6	ND<6	900	68	94	ND<8				
Toluene	180	ND<7	200	2,200	20,000	95	ND<6	ND<7	ND<6	ND<6	16,000	560	1,500	ND<8				
Ethylbenzene	160	ND<7	58	885	6,500	30	ND<6	ND<7	ND<6	ND<6	5,300	95	380	ND<8				
p-Xylene/m-Xylene	610	ND<7	222	3,800	25,000	98	ND<6	ND<7	ND<6	ND<6	21,000	380	1,600	11				
o-Xylene	130	ND<7	96	1,400	9,800	43	ND<6	ND<7	ND<6	ND<6	8,100	140	610	9				
Isopropylbenzene	160	ND<7	ND<7	170	880	12	ND<6	ND<7	ND<6	ND<6	800	14	47	ND<8				
n-Propylbenzene	142	ND<7	17	510	2,000	63	ND<6	ND<7	ND<6	ND<6	2,400	41	130	ND<8				
1,3,5-Trimethylbenzene	420	ND<7	38	1,000	4,300	33	ND<6	ND<7	ND<6	ND<6	5,200	94	260	8				
tert-Butylbenzene	190	ND<7	33	ND<45	ND<140	ND<6	ND<6	ND<7	ND<6	ND<6	ND<140	ND<7	ND<9	ND<8				
1,2,4-Trimethylbenzene	400	ND<7	110	3,600	16,000	77	ND<6	ND<7	ND<6	ND<6	18,000	290	900	29				
sec-Butylbenzene	400	ND<7	ND<7	ND<45	ND<140	ND<6	ND<6	ND<7	ND<6	ND<6	ND<140	ND<5	27	ND<8				
4-Isopropyltoluene	290	ND<7	ND<7	ND<45	320	ND<6	ND<6	ND<7	ND<6	ND<6	3,200	30	54	ND<8				
n-Butylbenzene	1,600	ND<7	58	1,700	4,500	46	ND<6	ND<7	ND<6	ND<6	7,500	180	250	13				
Naphthalene	1,300	ND<7	ND<7	750	2,800	48	ND<6	ND<7	ND<6	ND<6	7,200	120	170	15				
Methyl-tert-butyl-ether (MTBE)	ND<14	ND<70	340	910	ND<1400	ND<62	ND<64	ND<71	ND<64	ND<64	ND<1400	390	390	ND<79				

LEGEND:

- GMT = Borings taken at the Golf Maintenance Tanks, at front of golf maintenance shop near gasoline, heating oil, and diesel tanks.
- GMWO = Borings taken at the Golf Maintenance Waste Oil tank, located at the eastern side of the golf maintenance shop building.
- ND = Non detect, less than detection limit noted.
- J = Estimated Value, under the laboratory detection limit.

TA 8-3
STARS ANALYTICAL RESULTS
Golf Maintenance Shop Subsurface Investigation
(Continued)

METHOD 8270

Parameter	Sample Identification Number												
	GMT 1	GMT 4	GMT 5	GMT 6	GMT 7	GMT 14	GMT 16	GMT 17	GMT 18	GMWO 3 Upper	GMWO 3 Lower	GMWO 6	GMWO 7
Depth of Sample (feet)	1 - 4	4 - 8	6 - 8	4 - 6	6 - 9	4 - 8	4 - 8	4 - 8	3 - 6.5	1 - 4	6 - 10	6 - 10	6 - 10
Analytical Results (ug/kg)													
Naphthalene	ND<0.28	ND<0.28	0.77	5.5	0.11J	ND<0.27	ND<0.27	ND<0.26	ND<0.26	0.94	ND<6	0.08J	3.7
Acenaphthylene	ND<0.28	ND<0.28	ND<0.25	ND<0.28	ND<0.28	ND<0.27	ND<0.27	ND<0.26	ND<0.26	ND<0.28	ND<6	ND<0.29	ND<0.29
Acenaphthene	ND<0.28	ND<0.28	ND<0.25	ND<0.28	ND<0.28	ND<0.27	ND<0.27	ND<0.26	ND<0.26	ND<0.26	ND<6	ND<0.29	0.77
Fluorene	2.4	ND<0.28	ND<0.25	0.06J	ND<0.28	ND<0.27	ND<0.27	ND<0.26	ND<0.26	0.10J	ND<6	ND<0.29	1.4
Phenanthrene	3.4	ND<0.28	ND<0.25	0.08J	0.07J	ND<0.27	ND<0.27	ND<0.26	ND<0.26	0.37	ND<6	ND<0.29	3.0
Anthracene	0.71	ND<0.28	ND<0.25	ND<0.28	ND<0.28	ND<0.27	ND<0.27	ND<0.26	ND<0.26	ND<0.28	ND<6	ND<0.29	0.14
Fluoranthene	0.71J	ND<0.28	ND<0.25	ND<0.28	ND<0.28	ND<0.27	ND<0.27	ND<0.26	ND<0.26	0.07J	ND<6	ND<0.29	0.09J
Pyrene	ND<0.28	ND<0.28	ND<0.25	ND<0.28	ND<0.28	ND<0.27	ND<0.27	ND<0.26	ND<0.26	0.18J	ND<6	ND<0.29	0.08J
Benzo-(a)-anthracene	ND<0.28	ND<0.28	ND<0.25	ND<0.28	ND<0.28	ND<0.27	ND<0.27	ND<0.26	ND<0.26	ND<0.28	ND<6	ND<0.29	ND<0.29
Chrysene	0.07J	ND<0.28	ND<0.25	ND<0.28	0.06J	ND<0.27	ND<0.27	ND<0.26	ND<0.26	0.06J	ND<6	ND<0.29	0.06J
Benzo-(b)-Fluoranthene	ND<0.28	ND<0.28	ND<0.25	ND<0.28	ND<0.28	ND<0.27	ND<0.27	ND<0.26	ND<0.26	0.06J	ND<6	ND<0.29	ND<0.29

TAB. J 8-3
STARS ANALYTICAL RESULTS
Golf Maintenance Shop Subsurface Investigation
(Continued)

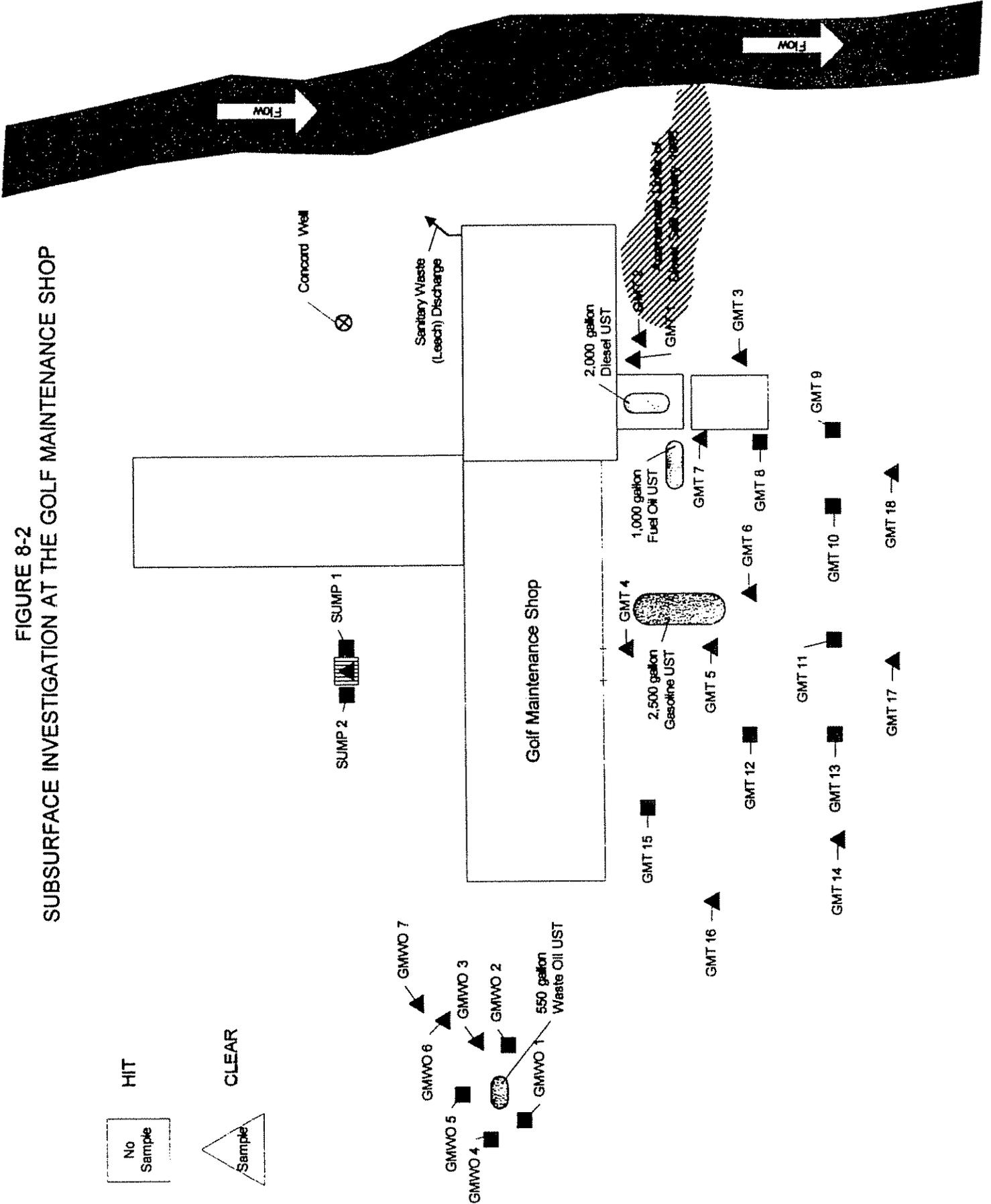
METHOD 8270
(continued)

Benzo-(k)-fluoranthene	ND< 0.28	ND< 0.26	ND< 0.28	ND< 0.25	ND< 0.28	ND< 0.28	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	ND< 0.26	ND< 0.28	ND< 6	ND< 0.29
Benzo-(a)-pyrene	ND< 0.28	ND< 0.26	ND< 0.28	ND< 0.25	ND< 0.28	ND< 0.28	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	ND< 0.26	ND< 0.28	ND< 6	ND< 0.29
Indeno-(1,2,3-cd)-pyrene	ND< 0.28	ND< 0.26	ND< 0.28	ND< 0.25	ND< 0.28	ND< 0.28	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	ND< 0.26	ND< 0.28	ND< 6	ND< 0.29
Dibenzo-(a,h)-anthracene	ND< 0.28	ND< 0.26	ND< 0.28	ND< 0.25	ND< 0.28	ND< 0.28	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	ND< 0.26	ND< 0.28	ND< 6	ND< 0.29
Benzo-(g,h,i)-perylene	ND< 0.28	ND< 0.26	ND< 0.28	ND< 0.25	ND< 0.28	ND< 0.28	ND< 0.27	ND< 0.27	ND< 0.26	ND< 0.26	ND< 0.26	ND< 0.28	ND< 6	ND< 0.29

LEGEND:

- GMT = Borings taken at the Golf Maintenance Tanks, at front of golf maintenance shop near gasoline, heating oil, and diesel tanks.
- GMWO = Borings taken at the Golf Maintenance Waste Oil tank, located at the eastern side of the golf maintenance shop building.
- ND = Non detect, less than detection limit noted.
- J = Estimated Value, under the laboratory detection limit.

FIGURE 8-2
 SUBSURFACE INVESTIGATION AT THE GOLF MAINTENANCE SHOP



A total of eighteen (18) GeoProbe borings were placed in the vicinity of the gasoline, fuel oil and diesel USTs at the front of the Golf Maintenance Building. Boring placement was guided with the use of a PID unit to screen soil borings. The elevated VOC levels obtained as part of soil screening activities indicated that the front (northeast) portion of the Golf Maintenance Shop area is severely contaminated and remediation activities must be conducted promptly, given proximity to the Kiamesha Creek. Further, the close proximity of the Kiamesha Creek may have bearing on remediation options and NYSDEC approvals, such as the need to obtain a stream bank/bed disturbance permit. Analytical results for the eleven (11) samples obtained in this area indicate high concentrations of gasoline constituents.

Seven (7) borings were obtained in the vicinity of the 550 gallon waste oil tank. Field observations, including preliminary soil screening information, indicates that this area contains petroleum contaminated soils. Based on soil sampling activities, four (4) soil samples were obtained from three (3) borings in this area. Two (2) of the samples were obtained from one boring to obtain an indication of the concentration of petroleum contamination at varying depths. The analytical results reveal high concentrations of gasoline parameters and confirm suspected petroleum product contamination.

As noted, a sump exists at the rear (southwest) side of the maintenance building. The sump, according to available information, is connected to Golf Maintenance building drains located within the golf maintenance shop. In conjunction with the cleanup of the observed diesel oil release at the side of the building, the NYSDEC required that the drains be sealed to prevent future discharges. ECSI placed two (2) borings immediately adjacent to the sump. The soils were screened with a PID, based on the results, no petroleum contamination in the boring locations was detected. In addition to placing two (2) borings, a composite sample of the soil/sediment contained within the limits of the sump was obtained. ECSI had the sump sample analyzed under a full TCLP and RCRA criteria. The analytical results indicated that the sample was nonhazardous; the only detected parameters were Barium (at 0.395 ppm) and Cadmium (at 0.067 ppm).

Subsequent to confirming subsurface contamination at the USTs, ECSI contacted the NYSDEC to provide notice of same and arranged to pumpout each tank and install temporary holding tanks for gasoline, diesel and #2 fuel oil. Waste oil was to be placed in 55 gallon drums within the maintenance building (in a vented area) for eventual removal by a qualified and NYSDEC permitted waste oil recycler.

8.5 Residential Parcels

Additional USTs are located within the boundaries of the land holdings of Kiamesha. The USTs are associated with space heating on residential parcels. Specific information related to UST evaluations follow.

Section 15, Block 1, Lot 18

This lot is a private residence, the owner of record noted on the Town of Thompsen Tax Assessor's records is Sullivan County and the site is approximately 4.5 acres. Phase I Investigation activities revealed that an underground #2 fuel oil storage tank is located at the site and is utilized for space heating. Conversations with George Parker indicated that the UST at this location has a capacity of approximately 500 gallons, based on fuel filling bills (Personal Communications, September 1997). The age and construction of the tank was not available. The UST is located beneath an open deck located on the western side of the house. The fill port is visible and fuel lines appear to enter the basement via an opening in the concrete.

Due to the fact that no information was available to document the integrity of this UST, ECSI arranged to have Precision Tank Testing, LLC test the tank on February 4, 1998. However, Precision Tank Testing, LLC was unable to conduct an integrity tank test because there was no vent pipe for the tank and access was difficult. It should be noted that the lack of a vent pipe on a fuel oil tank is a violation of fire and safety codes. Based on these findings, ECSI arranged to place GeoProbe borings in close proximity to the tank to verify if petroleum contaminated soils were present.

On September 16, 1998, Zebra Environmental placed two (2) GeoProbe borings in close proximity to the UST. Each boring allowed for the removal and evaluation of subsurface soils to a depth of approximately 10 feet. An OVM was utilized to screen soils to determine if organic vapors were present. The results of soil screening activities did not indicate a petroleum release, as no organic vapors were detected by the meter at each boring location.

Section 16, Block 1, Lot 30

This lot contains a private residence, the owner of record noted on the Town of Thompsen Tax Assessor's records is Harold Friedman, and the site is approximately 74.0 acres. Phase I Investigation activities revealed that an underground #2 fuel oil storage tank is located at the site and is utilized for space heating. Conversations with George Parker indicated that the UST at this location has a capacity of approximately 1,000 gallons, based on fueling bills (Personal Communications, September 1997). The age and construction of the tank was not available. The UST is located on the southwest side yard, adjacent to the house. A fill port is located near the house.

ECSI arranged to conduct GeoProbe borings in close proximity to the tank to verify if petroleum contaminated soils were present because no information was available to document the integrity of this UST. On February 21, 1998, Zebra Environmental placed three (3) GeoProbe borings in close proximity to the UST at the site. Each boring allowed for the removal and evaluation of subsurface soils to a maximum depth of approximately 10 feet. A PID unit was utilized to screen soils to determine if organic vapors were present. The results of soil screening activities did not indicate a petroleum release, as no organic vapors were detected by the meter from either of the three boring locations.

Section 9, Block 1, Lot 34.2

This parcel contains two residences, the owner of record noted on the Town of Thompson Tax Assessor's records is under the Estate of Raymond Parker, and includes an adjacent residence occupied by Robert Parker and Naomi Friedman. The site is approximately 3.12 acres. Phase I Investigation activities revealed that one underground #2 fuel oil storage tank is located adjacent to each residence. Conversations with George Parker indicated that each UST has a capacity of approximately 1,000 gallons, based on fueling bills (Personal Communications, September 1997). Neither the age nor the construction of either tank was available.

Due to the fact no information was available to document the integrity of these USTs, ECSI arranged to have Precision Tank Testing, LLC test each tank on February 4, 1998. According to tank testing results neither tank system passed NYSDEC requirements for "tightness." Therefore, ECSI arranged to conduct GeoProbe borings in close proximity to each tank to verify if a petroleum release was evident.

On February 21, 1998, Zebra Environmental placed three (3) GeoProbe borings in close proximity to the Robert Parker UST and four (4) borings in close proximity to the Naomi Friedman UST. Each boring allowed for the removal and evaluation of subsurface soils to a maximum depth of approximately 10 feet. A PID unit was utilized to screen soils to determine if organic vapors were present. The results of soil screening activities did not indicate a petroleum release, as no organic vapors were detected by the meter from any of the boring locations.

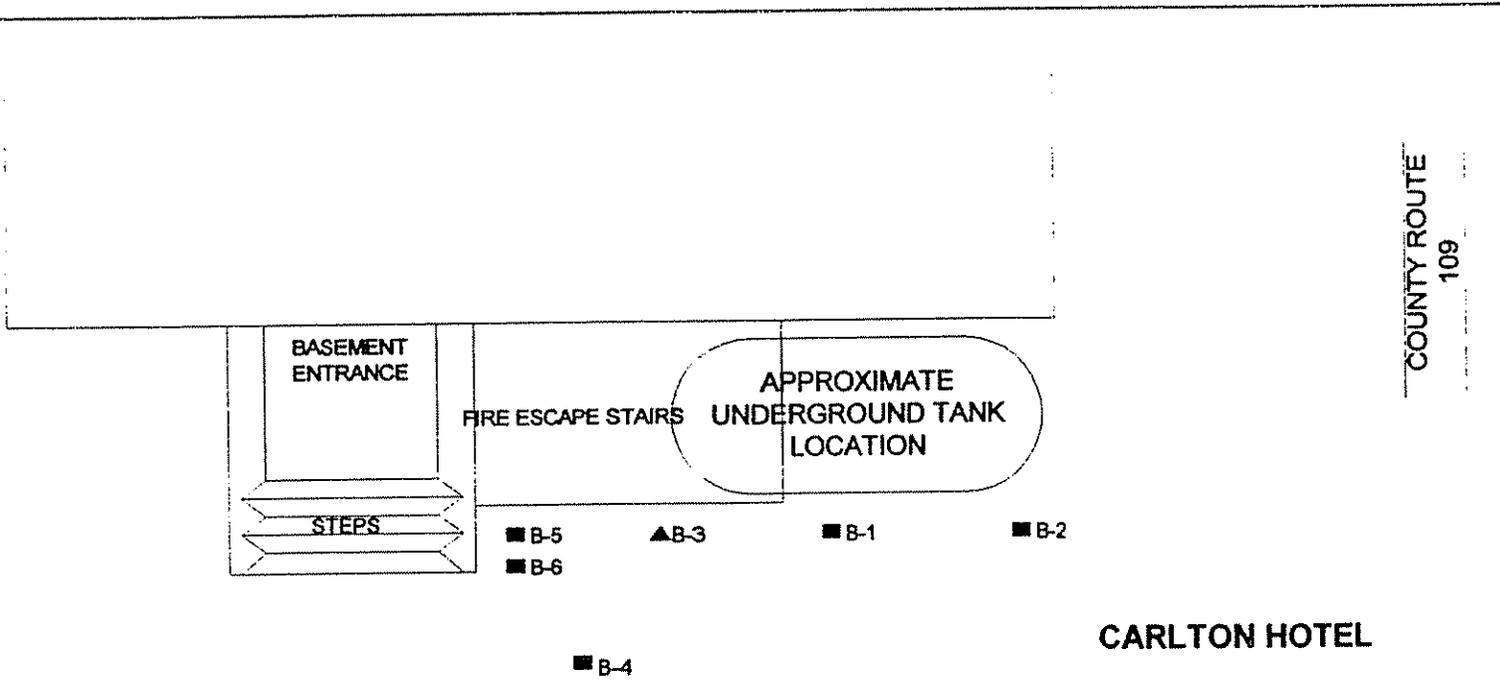
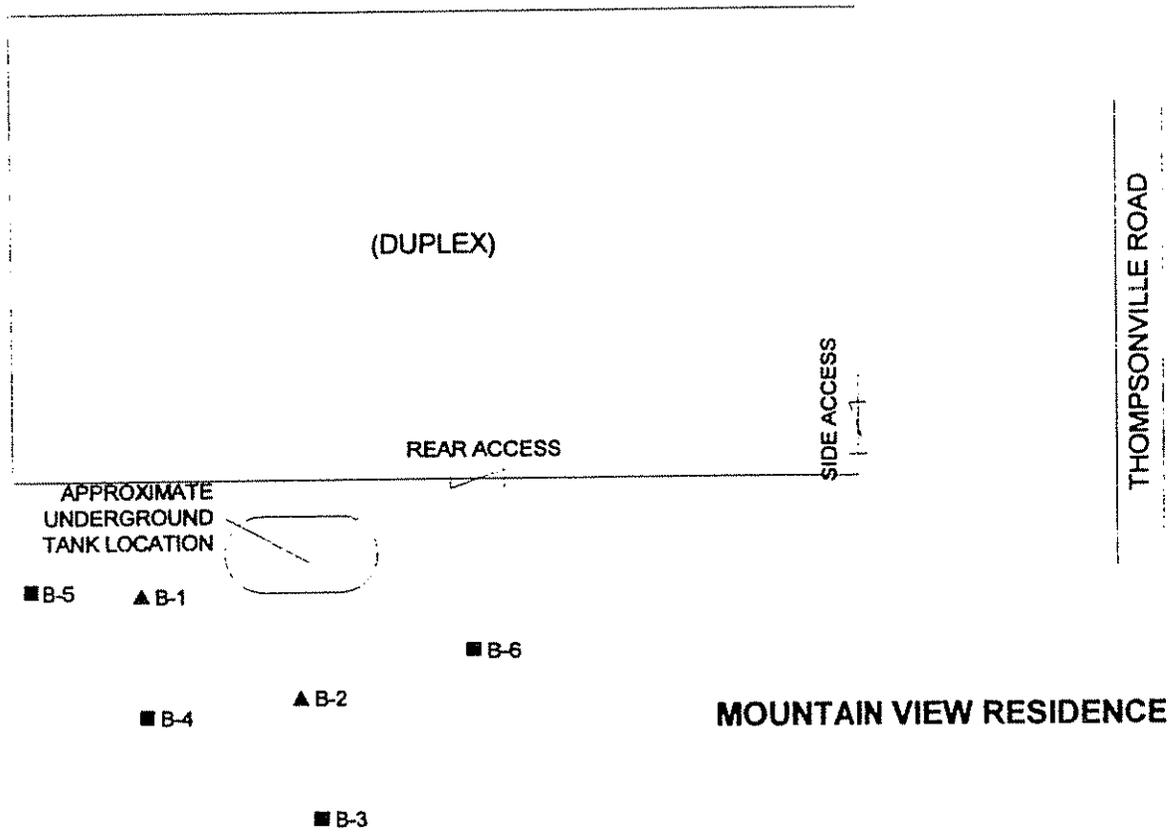
Section 15, Block 1, Lot 22

This lot is residential, containing a duplex and several bungalows. According to Town of Thompson Tax Assessor records, the site is owned by Concord Development Corp. and approximately 25.32 acres in size. Phase I Investigation activities revealed that an underground #2 fuel oil storage tank is located at on-site duplex and utilized for space heating. Based on the size of the building and information provided by one of the tenant's, the tank is presumed to have a capacity of approximately 500 gallons. The age and construction of the tank was not available. The UST is located in a section of the rear yard on the west side of the house. The fill port is visible and fuel lines appear to enter the basement from underground.

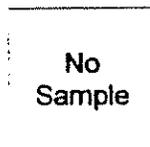
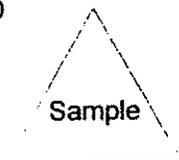
Due to the fact no information was available to document the integrity of this UST, ECSI arranged to conduct GeoProbe borings in the vicinity of the tank to determine its integrity and to determine if a petroleum product release was evident.

On September 16, 1998, Zebra Environmental placed six (6) GeoProbe borings in close proximity to the UST at the site. Figure 8-3 depicts the approximate location of each boring placed at this site. Each boring allowed for the removal and evaluation of subsurface soils to a maximum depth of approximately 10 feet. An OVM was utilized to screen soils to determine if organic vapors were present. Based on the results obtained at the site, it appears that a release of heating oil has occurred from the UST. Table 8-4 presents the analytical results for the samples obtained. Table 8-1 provides NYSDEC STARS 8021 and 8270 threshold standards for

**FIGURE 8-3
SUBSURFACE INVESTIGATIONS AT THE CARLTON HOTEL
AND THE MOUNTAIN VIEW RESIDENCE**



LEGEND



HIT
CLEAR

Approximate Scale
1" = 10'

TABLE 8-4
STARS ANALYTICAL RESULTS
Carlton Hotel and Mountain View Residence

METHOD 8021

Depth of Sample (feet)	Sample Identification Number		
	CH 3	MV 1	MV 2
4 - 7	5 - 10	2 - 7	
Parameter	Analytical Results (ug/kg)		
Benzene	ND<5	ND<6	ND<46
Toluene	ND<5	ND<6	ND<46
Ethylbenzene	ND<5	ND<6	84
p-Xylene/m-Xylene	ND<5	12	170
o-Xylene	ND<5	ND<6	48
Isopropylbenzene	ND<5	ND<6	190
n-Propylbenzene	ND<5	ND<6	280
1,3,5-Trimethylbenzene	ND<5	ND<6	350
tert-Butylbenzene	ND<5	ND<6	890
1,2,4-Trimethylbenzene	14	31	1,500
sec-Butylbenzene	ND<5	ND<6	1,100
4-Isopropyltoluene	ND<5	ND<6	350
n-Butylbenzene	ND<5	31	2,300
Naphthalene	20	6	2,200
Methyl-tert-butyl-ether (MTBE)	74	ND<56	ND<460

METHOD 8270

Depth of Sample (feet)	Sample Identification Number		
	CH 3	MV 1	MV 2
4 - 7	5 - 10	2 - 7	
Parameter	Analytical Results (ug/kg)		
Naphthalene	ND<0.26	ND<0.26	1.3
Acenaphthylene	ND<0.26	ND<0.26	ND<0.26
Acenaphthene	ND<0.26	ND<0.26	0.37
Fluorene	ND<0.26	ND<0.26	0.45
Phenanthrene	ND<0.26	ND<0.26	1.1
Anthracene	ND<0.26	ND<0.26	0.11 J
Fluoranthene	ND<0.26	ND<0.26	ND<0.26
Pyrene	ND<0.26	ND<0.26	0.19 J
Benzo-(a)-anthracene	ND<0.26	ND<0.26	ND<0.26
Chrysene	ND<0.26	ND<0.26	ND<0.26
Benzo-(b)-Fluoranthene	ND<0.26	ND<0.26	ND<0.26
Benzo-(k)-fluoranthene	ND<0.26	ND<0.26	ND<0.26
Benzo-(a)-pyrene	ND<0.26	ND<0.26	ND<0.26
Indeno-(1,2,3-cd)-pyrene	ND<0.26	ND<0.26	ND<0.26
Dibenzo-(a,h)-anthracene	ND<0.26	ND<0.26	ND<0.26
Benzo-(g,h,i)-perylene	ND<0.26	ND<0.26	ND<0.26

LEGEND:

- CH = Borings taken at the Carlton Hotel
- MV = Borings taken at the Mountain View Residence
- ND = Non detect, less than detection limit noted.

comparison evaluation of the results obtained. STARS 8021 analysis of soils from Boring No. 1 at approximately 5 to 10 feet below the surface detected four parameters, but at levels below applicable STARS guidance values. No parameters were detected under the STARS 8270 analysis performed for this sample. STARS 8021 analytical results for soils obtained from Boring No. 2, between 2 and 7 feet below the surface, revealed petroleum contamination at levels far greater than applicable STARS guidance values. STARS 8270 analysis for this boring detected 6 parameters, but at levels below the applicable STARS thresholds.

It should be noted the Ms. Dolores Wehrfritz, NYSDEC - Division of Spills Management, was contacted to describe the findings. Further, soil samples were obtained from Boring Nos. 1 and 2 to confirm the extent of petroleum contamination at this site.

In addition to the residential, fuel oil UST, a 1,000 gallon AST exists adjacent to a bungalow on this parcel. The tank contains fuel oil and was once used to service fuel oil fired cloths dryers located within an adjacent wooden bungalow. Fuel oil contained within this tanks should be removed.

8.6 Carlton Hotel and Pussycat Lounge - Section 9, Block 1, Lot 34.1 and Section 15, Block 1, Lot 1.1

USTs were discovered at the former Carlton and the Pussycat Lounge. It appears that both of the tanks have been idle for some time, perhaps as long as 25 to 30 years. No fill port was noted for the UST at the Carlton, however a vent pipe and steel elbow, which probably attaches to the top of the tank, are visible. The tank at the Pussycat Lounge has a fill port visible, although no other lines were observed, with the exception of a feed and return line within an adjacent basement area. There was no information for either tank regarding age or tank construction materials. Further, available information indicates that the Carlton was switched to steam heat over 30 years ago.

Due to the fact that no tank documentation was available and it was not possible to conduct integrity testing on either tank, ECSI arranged to conduct a subsurface boring investigation at each of the tank locations to determine subsurface conditions. A magnetometer was utilized to determine the limits of the each UST prior to placing borings in the field.

A total of five (5) GeoProbe borings were placed at the Carlton, in close proximity to the tank. Figure 8-3 depicts boring locations placed near this tank. Each boring was placed to a maximum depth of approximately 8 feet or refusal. The soils were screened with an OVM to determine if organic vapors were present. One soil sample was obtained from Boring No. 3 to determine the extent of suspect contamination, based on soil screening results. Screening of soils from the four (4) other borings at this location did not indicate the presence of petroleum product contamination. Soils obtained from Boring No. 3, between 4 and 7 feet, were analyzed under STARS 8021 and 8270. A summary of the analytical results are contained in Table 8-4. Table 8-1 provides NYSDEC STARS 8021 and 8270 thresholds for comparison evaluation of the results obtained. STARS 8021 analytical results detected 3 parameters, each under applicable STARS guidance values. All parameters analyzed under STARS 8270 were none detected.

Three (3) GeoProbe borings were placed near the UST at the Pussycat Lounge. Borings were placed to a maximum depth of 11 feet and were screened with an OVM to determine if petroleum contamination existed. No organic vapors were detected in any of the soils from the three (3) soil boring locations, indicating that the area is not contaminated.

9.0 CONCORD WATER SUPPLY WELL

As noted, the Concord water supply well provides potable water supplies to Hotel facility buildings located along Chalet Road and Concord Road. Water is supplied, under constant pressure, to the distribution piping network located below each road. The well is located in close proximity to recently confirmed petroleum product releases resulting from leaking underground storage tanks situated upgradient of the well, approximately 60 feet.

On February 23, 1998, a water sample was obtained and analyzed for full Part V Drinking Water regulatory standards listed under New York State Health Department regulations. The standards were developed from Safe Drinking Water regulations administered by the US Environmental Protection Agency. The analysis included bacteriological parameters, metals, volatile and semi-volatile organic compounds, pesticides, herbicides and PCBs. A full Part V analysis was chosen given that the well is located in close proximity to golf courses where chemicals are applied to control pests and undesirable forms of vegetation, and because the well was never previously tested for full Part V parameters. In addition, information obtained by way of the full Part V analyses essentially served to establish baseline water quality data to facilitate comparisons as part of future water quality testing.

Based on the reported results, parameter concentrations were in full compliance with the drinking water standards administered by New York State. A trace concentration of Barium was detected, however, this metal is believed to have originated naturally by the breakdown of native soils and geologic materials. In addition, Iron, Sodium, and Zinc were detected at low concentrations (0.52, 6.77 and 0.025 mg/l, respectively), however, these concentrations are well below applicable regulatory thresholds. Nitrate and Sulfate were also detected at low concentrations (1.32 and 12.0 mg/l, respectively), however, these concentrations are typical levels for drinking water and are well below applicable regulatory thresholds. Appendix H contains the analytical results obtained for the drinking water well.

10.0 REMEDIATION COST ESTIMATES

Presented below are cost estimates calculated to remediate encountered waste materials at each of the dump and UST sites investigated under Phase II field activities. In addition, cost estimates prepared to address immediate compliance issues are presented. Total costs for each of these categories are noted to facilitate priority considerations.

It is important to note that during February and April 1998, ECSI representatives scheduled and attended meetings with representatives of the NYSDEC to discuss remediation

options in conjunction with Phase II investigation findings. An initial meeting was held in February in the field with Andrew Lent, Division of Solid and Hazardous Waste Management, while Phase II activities were being performed. An additional meeting was held between representatives for Value and the NYSDEC during April 1998 at the NYSDEC offices in New Paltz, New York. Ms. Dolores Wehrfritz, Spill Response, Mr. Lent and Jonah Triebwasser, NYSDEC Senior Attorney, were present during the meeting to discuss Phase II findings and cleanup options. The costs presented below reflect cleanup options discussed with NYSDEC representatives developed in consideration of planned uses for each site.

Capital costs for dump site remediation included calculation of tasks required for permitting, engineering, construction supervision and oversight/contract administration. A percent breakdown of each capital cost provided below.

<u>Item</u>	<u>Percentage of Increase</u>
Contractor General Conditions	10%
Contingency (General)	20%
Engineering	5%
Permitting	2%
Oversight/Contract Administration	5%

In addition, capital costs for equipment mobilization/demobilization, erosion and sedimentation control, excavation, waste transport and disposal, site restoration, environmental monitoring and confirmatory sampling and analyses were determined by receipt of quotations from area wide contractors and laboratories during February 1998. Inflation and location factors for Monticello, New York were obtained from Means 1997 Building Construction Cost data and 1996 Environmental Cost Handling Options and Solutions (ECHOS).

10.1 Dumps and Leaking USTs

Costs for remediating dump sites and leaking USTs were based on field information obtained by completion of the test pit and GeoProbe boring investigations, as described in Sections 7.0 and 8.0. The following table provides the total remediation costs for remediating each dump site and leaking UST location, including operating and maintenance (O&M) costs, as necessary.

Area	Capital Cost*	O&M Present Value Cost	Total Present Value Cost
DUMP SITES			
DEC/Golf Course Dump (4 Areas)	\$677,000	\$10,000	\$688,000
Main Parking Dump	\$228,000	\$46,000	\$274,000
Golf Maintenance (Area and Dump)	\$723,000	\$61,000	\$784,000
Concord Service Station Dump	\$65,000	\$0	\$65,000
Chalet Dump	\$175,000	\$0	\$175,000
Casino Dump	\$131,000	\$16,000	\$147,000
Thompsonville Road	\$0	\$0	\$0
Horse Farm	\$90,000	\$0	\$90,000
Cemetery Dump	\$10,000	\$0	\$10,000
Breezy Dump	\$15,000	\$0	\$15,000
LEAKING USTs			
Golf Maintenance Leaking Tanks	\$145,000	\$0	\$145,000
Concord Service Station Leaking Tanks	\$185,000	\$0	\$185,000
Carlton Leaking Tank	\$20,300	\$0	\$20,300
Mountain View Residence Leaking Tank	\$20,300	\$0	\$20,300
TOTALS	\$2,485,000	\$133,000	\$2,618,000

The costs for closure of each dump site reflects placement of 24 inch cover materials (with a permeability of 10^{-5}) and 6 inches of topsoil. Costs for gravel placement, grading and revegetation were also calculated for each site.

The extent of confirmatory sampling and analysis is predicated on obtaining one sample per acre of affected area to verify dump site cleanup, following waste excavation and removal activities. Very small quantities of surface encountered sporadically upon a given site are not included in dump remediation cost estimates. The cost for waste removal and disposal is included in the estimated contingency cost values presented for remediation of each site. Further,

much of this material consists of salvageable items (i.e., scrap metal) which can be removed and recycled by an area recycler.

A first step in planning remediation activities is to discuss final closure options for each dump site with representatives of the NYSDEC. The above costs reflect worst case considerations, however, it is suggested that contractors for Resortco of New York pursue cost saving design considerations such as reducing final cover thickness from 24 to 18 inches. Subsequently, a detailed closure plan should be prepared to address full remediation of each dump site.

Leaking UST sites also included the cost for mobilizing/demobilizing of excavation equipment, the use of erosion/sedimentation controls (as necessary), the excavation of the tank and petroleum contaminated soils (PCSs), transport and disposal of PCSs, backfilling, and asphalt replacement, as necessary. Confirmatory analyses conducted in accordance with NYSDEC STARS Memorandum criteria are also included in calculated costs.

10.2 Replacement of Existing USTs

Federal and State regulations require the upgrading or replacement (if necessary) of existing USTs to include corrosion protection, leak detection and secondary containment, prior to December 22, 1998. UST systems which are likely to be evaluated for compliance may include USTs at the main Hotel, the Parker residences and Raymond's Restaurant/Club house. Recent regulatory updates published by the Bureau of National Affairs indicate that the USEPA is working on the idea of possibly extending the compliance date in light of economic concerns. Regardless, tank compliance planning will first have to be finalized with representatives of the NYSDEC, and in consideration of facility improvements, prior to finalizing compliance cost estimates. The level of consideration must be also directed at several ASTs existing upon subject parcels.

10.3 Pesticide Removal and Disposal

As noted, pesticide removal and disposal is required under the Quarantine Order (Appendix A) issued by the NYSDEC for chemicals stored at Golf Maintenance Shop. Representatives of ECSI obtained cost estimates for the removal and disposal of the pesticides/herbicides noted on the Order. Two proposals were obtained, however, in an effort to provide a conservative cost estimate, the highest quotation, \$4,075, was calculated in conjunction with contingency services. The total cost for handling and disposal is \$5,800. It should be noted that the cost reflects health and safety precautions.

10.4 Total Remediation and Compliance Costs

Based on the above, the estimated remediation and compliance costs are denoted on the following table by category below.

Area	Estimated Cost
Remediation of Dumps and Leaking USTs	2,618,000
Pesticide Removal and Disposal	5,800
TOTAL ESTIMATED COSTS	2,623,800

11.0 CONCLUSIONS AND RECOMMENDATIONS

During 1996, ECSI was retained by Kiamesha Concord Inc. to conduct Phase I Environmental Assessment activities of parcels owned by Kiamesha Concord, Inc., Frepar, Nalou Realty and Concord Development Corporation. The assessment continued through January 1998 when ECSI was retained by Resortco of New York, a Manhattan development firm interested in purchasing the subject property holdings, to conduct a Phase II Environmental Site Assessment upon 18 parcels suspected of potential contamination resulting from prior illegal dumping and UST releases. The properties investigated under the Phase I and II assessments are mostly located within the Town of Thompson, 3 are located within the Town of Fallsburg and 2 in the Village of Monticello. Of the 18 parcels investigated under the Phase II assessment, four are owned by Sullivan County. The County had taken ownership of 16 of the 67 subject parcels, four of which were confirmed to be contaminated as a result of past waste dumping activities.

ECSI staff also responded to an observed surface release of diesel fuel (approximately 100 gallons) at the Golf Maintenance Shop, during January 1998. Diesel oil was discharged adjacent to the Golf Maintenance Shop while a Hotel staff person was fueling a compressor unit located approximately 35 feet, upslope of the Kiamesha Creek. Cleanup activities were coordinated with the New York State Department of Environmental Conservation (NYSDEC). These activities coincided with discussions about an additional release of No. 4 fuel oil reported by the Town of Thompson Water and Sewer Department; during December 1997, fuel oil was observed at its wastewater treatment plant and traced to the boiler room of the Concord Hotel. Based on visual inspection and conversations with Hotel maintenance staff, it appeared that during December, the release was caused by a boiler feed fuel pump valve malfunction which in turn caused oil to accumulate upon the concrete floor within the main boiler room of the Hotel. Once on the floor, the oil made its way to the wastewater treatment plant via a floor drain leading to the wastewater pipe collection system situated below Concord Road. Subsequently, the spill was cleaned up by on-site personnel to NYSDEC satisfaction. The Town's treatment plant was not impacted by the release.

In addition, pesticides stored at the Golf Maintenance Shop were required by the NYSDEC to be properly handled and disposed. An Order issued by the NYSDEC required that appropriate measures to be taken to remove the materials from the site and dispose of them at an appropriate NYSDEC permitted disposal facility.

During December 1997 through January 1998, Kiamesha requested ECSI to continue Phase I assessment activities with plans to complete a Phase I Environmental Site Assessment report some time during February/March 1998. Prior to February, representatives of Value retained ECSI to conduct an expedited Phase II assessment to characterize and quantify environmental contamination determined at parcels visually evaluated to date. Phase II activities were completed during the week of February 2, 1998, on February 20 and 21, and again on September 16, 1998.

Subsequent to February 1998 Phase II field activities, work efforts were diverted from completing a Phase I report in anticipation of quickly completing Phase II field investigations and reporting findings, an arrangement mutually reached between Kiamesha and Value Investors, Inc.

Phase II Investigation activities primarily encompassed the evaluation of numerous dump sites by way of a test pit investigation program, and a boring (GeoProbe) program at suspect areas surrounding underground storage tanks. ECSI also sampled and analyzed an on-site drinking water supply well, the Concord Well, located in close proximity to confirmed UST releases at the Golf Maintenance Shop and to golf course grounds where chemicals are applied to control pests and undesirable forms of vegetation. The water supply well is leased by the Kiamesha Artesian Spring Water Co., Inc. which primarily supplements its potable water supplies to the Concord Resort Hotel. The well is also believed to feed a main supply tank (a 1.2 million gallon supply source) located near the intersection of Route 109 and Concord Road. This source supplies other portions of the Concord Hotel facilities as well as nearby residents and businesses which connect to the Kiamesha Artesian Spring Water Company system.

A total of nine (9) dump sites were evaluated under Phase II investigation activities; including the Concord Service Station parking area dump, the Concord Main Parking lot dump, the Golf Maintenance dump, the existing Golf Course (NYSDEC) dump, the Chalet dump, the Casino dump, the Horse Farm dump (all during the week of February 2, 1998), the Thompsonville Road site (February 20, 1998), and the Cemetery dump (September 16, 1998). Dump sites were investigated under the test pit program, to determine the extent and character of wastes disposed in each suspect location.

Prior to conducting the boring programs, tank integrity testing was conducted to determine whether USTs had released petroleum into the subsurface. These activities were conducted during February 1998 and September 1998, under the direct supervision of ECSI personnel. The boring program consisted of placing GeoProbe borings (to refusal) in close proximity to underground storage tanks confirmed to be un-tight by integrity testing activities performed during February 1998, or tanks which required investigation to confirm suspected releases. Numerous borings were placed at the Concord surrounding a former Concord Service Station building which fronts along Concord Road and at an adjoining area, believed to previously contain underground storage tanks. In addition, parcels which contained USTs which could not be integrity tested (i.e., due to inaccessibility) or were identified after tank integrity testing activities, were included under the boring program.

Phase II field activities determined that nine dump sites will require cleanup/closure in accordance with NYSDEC 6 NYCRR Part 360 regulations (effective 1993). As a first step in addressing site closings, contractors for Resortco of New York should first discuss final cleanup parameters with representatives of the NYSEC and prepare a Closure Plan to encompass each dump site. Closure activities should not commence until NYSDEC approves of the Plan. It is important to note that three of the dump sites investigated, and confirmed to be contaminated with waste materials, are owned by Sullivan County, via past foreclosure proceedings. In addition, Phase II field activities determined that evidence of petroleum product releases exist at the Golf Maintenance Shop, the former Concord Service Station (surrounding areas and adjoining 10,000 gallon tank systems), the Carlton Hotel and a residence located at the Mountain View properties along Thompsonville Road.

Subsequent to confirming the extent of contamination for the above sites, ECSI prepared a remediation cost estimate to address the cleanup of confirmed contaminated sites. Total remediation costs for the cleanup/closure of dump and UST release sites is \$2,618,000. This amount, combined with the cost of \$5,800 to remove, manifest and dispose of on-site pesticide chemicals, is \$2,623,800.

While total remediation costs are provided to address the cleanup/closure of dump sites, confirmed UST releases and the handling/diposal of pesticide chemicals, other compliance issues which were cited under the Phase I and II work efforts should be addressed in time. These issues are discussed below by each evaluated location.

Main Hotel

Future construction activities performed at the main Hotel grounds are likely to lie within the jurisdiction of the Delaware Drainage Basin Commission and as such, the exact applicability of the agency's jurisdiction should be confirmed prior to commencement of any planned construction activities.

An emissions inspection report prepared by the NYSDEC indicates that opacity levels during 1996 were not to State standards for the on-site boiler systems operated at the main Hotel. It is recommended that levels be evaluated and appropriate corrective actions be implemented, if necessary. If new heating and fuel supply systems are installed, the Divisions of Air Resources and Petroleum Bulk Storage should be contacted for emissions permitting and/or tank registration.

Given the particulars of the December 1997 #4 fuel oil release at the main Hotel boiler room, arrangements should be made to conduct an audit of facility operations with the intent of eliminating release potentials. In addition, facility personnel should be trained and informed on spill response and notification procedures applicable under Federal and State environmental regulations. These are recommended as immediate measures for implementation.

While the two 15,000 gallon USTs passed tank integrity testing conducted during February 1998 Phase II field activities, these tanks will require retrofitting or possible

replacement given the age and the cited exposures associated with each fill port location. Federal and State regulations require that all USTs be brought up to construction standards by December 22, 1998. Notice and registration of retrofitting or replacement must be issued to the NYSDEC prior to commencement of activities. If tank replacement activities are considered, a roadway work permit must be obtained from the Sullivan County Department of Transportation prior to commencing construction activities.

All electrical transformers (including pole transformers) which were not confirmed through testing to be free of PCBs, should be tested and appropriate measures should be made to ensure compliance with applicable Federal rulings under the Toxic Substances and Control Act (TSCA) regulations.

International Club House

It is recommended that efforts be made to verify whether or not the International Club House has a separate sanitary wastewater system or is connected to the Town of Thompson Sewage Treatment Plant system. If a separate system exists, facility representatives must ensure that a SPDES permit exists for the system (for discharges to waters of the State) or obtain a permit in accordance with applicable State regulations.

Raymond's Restaurant/Club House

As noted, sanitary wastewater generated by facility operations is discharged to an individual septic tank and sand filtration treatment system, north of the building. SPDES permit conditions require periodic monitoring and reporting of discharge flow conditions. Based on conversations with facility personnel and NYSDEC representatives, it appears that these compliance requirements have not been addressed. As such, the facility is not in compliance with SPDES regulations. It is recommended that arrangements be made to ensure that sanitary wastewater discharge monitoring and reporting is addressed in accordance with issued SPDES permit conditions.

While the 12,000 gallon USTs passed tank integrity testing conducted during February 1998 Phase II field activities, this tank will require retrofitting or possible replacement given the age of the tank system. Federal and State regulations require that all USTs be brought up to construction standards by December 22, 1998. Notice and registration of retrofitting or replacement must be issued to the NYSDEC prior to retrofitting or replacement.

Golf Maintenance Shop

The septic tank system in use at the Golf Maintenance Shop should be relocated away from the nearby Concord Well and the Kiamesha Creek. The system appears to be substandard, a new system must adhere to Health Department standards. Relocation will serve to off-set biological contamination potentials via sanitary wastewater discharges.

February 1998 Phase II field activities included full Part V water quality testing which in turn resulted in providing a good baseline data summary for the well. Given the well's proximity

to confirmed petroleum product releases and areas which receive seasonal application of pesticides and herbicides, it is recommended that the well be sampled and analyzed on a 6 month frequency for a partial listing of Part V parameters and a full parameter listing every year

The water supply piping system connecting with the compressor unit used for snow making must be altered to preclude any further oil residue discharge potentials to the Kiamesha Creek. Arrangements may possibly include altering the piping configuration to allow manual operation and filtration for residue oil potentials.

James Parker Residence

Phase II assessment activities revealed that a vent pipe, thought to be connected to a 500 gallon underground storage tank, could not be located in the vicinity of the tank. This situation resulted in the tank not being able to be tank tested during February 1998 Phase II field activities. This condition is a violation of fire safety rulings for New York State and as such, it is recommended that a vent pipe be installed, as necessary.

Other than the above noted compliance issues, no other actions are recommended.

APPENDICES

APPENDIX A

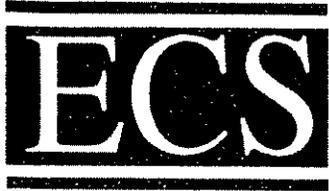
PRELIMINARY PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORTS

ELECTRICAL TRANSFORMER PACKAGE

PESTICIDE QUARANTINE ORDER

NYSDEC ORDER ON CONSENT

PRELIMINARY PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORTS



VIA FACSIMILE

March 12, 1997

Mr. George Parker
Concord Hotel
Kiamesha Lake, New York 12751

Re: Preliminary Phase I Environmental Site Assessment Report
Concord Hotel, Kiamesha Lake, Sullivan County, New York
(ECSI Project No. 4051.EA)

Dear Mr. Parker:

This is to provide you with a preliminary report on our services completed to date for conducting ongoing Environmental Site Assessment activities for properties owned by Kiamesha Concord Inc. (KCI) and the Concord Development Corporation (CDC). Our work efforts have been conducted in accordance with ASTM standards on Environmental Site Assessments for Commercial Real Estate (E-1527-94) as well as recognized practices suitable for typical lending institutions. A general description of the scope of our services is as follows:

- ◆ Interviews with applicable agency and property owners/operators as well as the completion of an Environmental Questionnaire to facilitate evaluation of past and present site conditions.
- ◆ Performance of site walkover surveys to visually evaluate the physical conditions of the subject parcels.
- ◆ Evaluation of the level of regulatory compliance the site may be subject to.
- ◆ Review of agency records on any spills/releases at or in the vicinity of the site.
- ◆ Review of available environmental reports completed for the site and related correspondence.
- ◆ Preparation of a Phase I Environmental Site Assessment Report.

Mr. George Parker
March 12, 1997
Page 2

As you know, we have commenced Phase II Environmental Site Assessment activities to further evaluate property conditions, based on the preliminary findings discussed below. Activities include preparation of a Work Plan for Waste Pile Removal and Disposal at the Concord Resort Hotel (dated October 1996) and performance of a preliminary test pit investigation currently performed by your staff in conjunction with our assistance. The purpose of the investigation is to acquire additional information on previous surface waste disposal practices conducted on properties either owned by KCI and CDC or which lie adjacent to these subject parcels. Information obtained under the investigation will be incorporated into a revised Work Plan scheduled for completion later this month. The Work Plan will include:

- ◆ Identification of property areas of concern and the types of further investigations to conduct
- ◆ Evaluation of waste removal and disposal options (with recycling possibilities)
- ◆ Confirmatory soil sampling and analyses
- ◆ Underground storage tank (UST) compliance issues and requirements
- ◆ Agency liaison and regulatory requirements for each area of concern
- ◆ Site restoration activities, as necessary
- ◆ Agency reporting requirements, as necessary

As part of our work effort, we investigated 19 parcels at and in the vicinity of the Concord Resort Hotel. The lands investigated are listed in the following table and have been entered by Section, Block and Lot as designated by the Town of Thompson Tax Assessor's Office. In addition, the acreage, as noted on tax property record cards and associated tax maps have been included for each site. The general location of each parcel, by street name as well as current ownership as noted on each property record card has been included as well. Please note, this information was obtained from the Town of Thompson Tax Assessor's Office in November 1996, and represents updated official information until that date. No indication of change in ownership of Concord lands has been offered, as such it is assumed for the purpose of this report, that the information presented is current.

Mr. George Parker

March 12, 1997

Page 3

Parcels Designated for Investigation			
Section, Block, Lot	Acreage	Street Location	Current Owner
9-1-27	28.8	County Highway 109	Kiamesha Concord, Inc.
9-1-28	0.26	County Highway 109	Kiamesha Concord, Inc.
9-1-29	1.8	County Highway 109	Kiamesha Concord, Inc.
9-1-31	0.21	County Highway 109	Kiamesha Concord, Inc.
9-1-34.1	93.66	Concord Road	Kiamesha Concord, Inc.
10-15-9	2	County Highway 109	Kiamesha Concord, Inc.
10-15-10	0.34	County Highway 109	Concord Development Corp.
10-15-11	2.8	County Highway 109 & Pine Drive	Kiamesha Concord, Inc.
10-16-5	2.5	County Highway 109	Kiamesha Concord, Inc.
13-3-17	0.46	Back Kiamesha Road	Kiamesha Concord, Inc.
13-3-20	66	Back Kiamesha Road	Concord Development Corp.
15-1-14	197.37	Ski Run Road	Kiamesha Concord, Inc.
15-1-22	25.32	Thompsonville Road	Concord Development Corp.
15-1-35.7	132.84	Thompsonville Road	Concord Development Corp.
15-1-49	0.17	County Highway 109	Concord Development Corp.
15-1-51	27.08	Town Road 45	Kiamesha Concord, Inc.
23-1-54.2	57.5	Joyland Road	Kiamesha Concord, Inc.
23-1-54.3	7.6	Joyland Road	Kiamesha Concord, Inc.
23-1-61.2	10.05	Joyland Road	Concord Development Corp.

As part of completing our investigations of these properties in accordance with ASTM Standard Practice E-1527-94, ECSI included an investigation of adjacent and surrounding parcels to determine if on-site or nearby conditions exist that may affect the environmental quality of the subject parcels. Presented below is a description of preliminary findings for the above noted properties. The attached Existing Conditions Figure presents the approximate locations of each finding situation described, the numbers presented correspond to the numbered locations on the attached figure.

Mr. George Parker
March 12, 1997
Page 4

1) EXISTING DUMP SITE (KCI PARCEL 15-1-14, 197.37 ACRES)

- Case File Still Open With the New York State Department of Environmental Conservation (NYSDEC), Verification of Remediation Is Necessary Via Contact With Staff Previously Requested To Review Groundwater and Surface Water Investigation Information Obtained During 1989 By KCI

2) GAS STATION SITE (ADJACENT TO KCI PARCEL 9-1-34.1, 93.66)

- Two USTs Need To Be Closed Or If Placed Back Into Service Then Tested In Accordance With NYSDEC Requirements
- Adjacent Parking Area Needs Waste Removed And Cleanup Levels Verified

3) MAINTENANCE SHOP (Adjacent to KCI Parcel 15-1-14, 197.37 Acres)

- Salt/sand Pile Must Be Managed In Accordance With NYSDEC Storm Water Regulations
- Overfill Prevention On Waste Oil Tank & Possible Retrofitting
- Perform Sump Clean Out and Sludge Disposal
- Conduct Test Pit Investigation To Determine Extent Of Waste Removal Along Storage Area Limits & Confirm Cleanup
- Remove Junked Materials And All Unused Cleaning Product Drums

4) HOTEL Underground and Above Ground Storage Tanks (KCI Parcel 9-1-34.1, 93.66 Acres)

- Ensure Protection Of Fillports And Implement Spill Prevention Measures
- Complete Registration Of All On-Site USTs and ASTs
- Complete Integrity Testing For USTs In Accordance With NYSDEC Requirements

Mr. George Parker
March 12, 1997 .
Page 5

5) HOTEL BOILERS (KCI Parcel 9-1-34.1, 93.66 Acres)

- Ensure Emissions Compliance with Pending Federal And State Clean Air Act Requirements for Boiler Emissions

6) MAIN HOTEL PARKING AREA FILL SITE (KCI Parcel 15-1-14, 197.37 Acres)

- Conduct Test Pit Investigation & Sample/Analyze Soil & Water Resources Adjacent to Main Parking Lot Area

7) CHALET SOUTHEAST DUMP SITE (KCI PARCEL 15-1-51, 27.08 ACRES)

- Conduct Test Pit Investigation To Determine Extent Of Waste Removal & Confirm Cleanup

8) BAILEY ROAD CASINO PROPERTY (CDC PARCEL 13-3-20, 66 ACRES)

- Cleanup Surface Dumping At Rear Of Casino Building And Confirm Cleanup Levels
- Remove/Dispose of Trash In Swimming Pool
- Conduct Test Pit Investigation At Adjacent Properties To Determine Extent Of Waste Disposed For Possible Removal

9) BREEZY CORNERS (Adjacent To KCI Parcel 23-1-54.2, 57.5 Acres)

- Breezy Corners SPDES Applicability & Health Department Code Verification On Treatment System And Removal of Trash Behind Casino Building

In addition to the above, surface water/watershed regulations established by the Kiamesha Water Company exist for Kiamesha Lake and surrounding areas which include properties owned by KCI and CDC. Regulations require safeguards for pesticide applications and sediment and erosion precautions to protect the water quality of Kiamesha Lake, a public water supply source.

Based on the above findings to date, we expect that areas which contain discarded trash will not pose a significant environmental threat, risk or liabilities to surrounding groundwater and surface water resources or public health and welfare. With respect to the old dump site (location number 1), a response from NYSDEC Division of Solid Waste Management staff must be obtained regarding their review of surface and groundwater information previously provided to them

Mr. George Parker
March 12, 1997
Page 6

during 1989 and 1990. The response will likely indicate appropriate actions to undertake to further investigate and verify environmental risks or liabilities by way of additional surface and groundwater sampling and analysis. The analysis will provide indication of the extent possible remediation activities will to need be addressed, as necessary. In addition, it is our understanding that KCI will continue efforts to address the other above noted matters including the removal and disposal of waste/trash piles, register petroleum bulk storage facilities and arrange for integrity testing of in-use USTs, and complete UST closure of the two USTs at the adjacent service station property.

In the interim, we will continue to assist your efforts to address all matters noted in this correspondence as well as arrange to contact representatives in the NYSDEC Division of Solid Waste Management regarding the old dump site. Please be aware that the NYSDEC has recently published requirements for boiler emissions, we will verify applicability for the hotel facility.

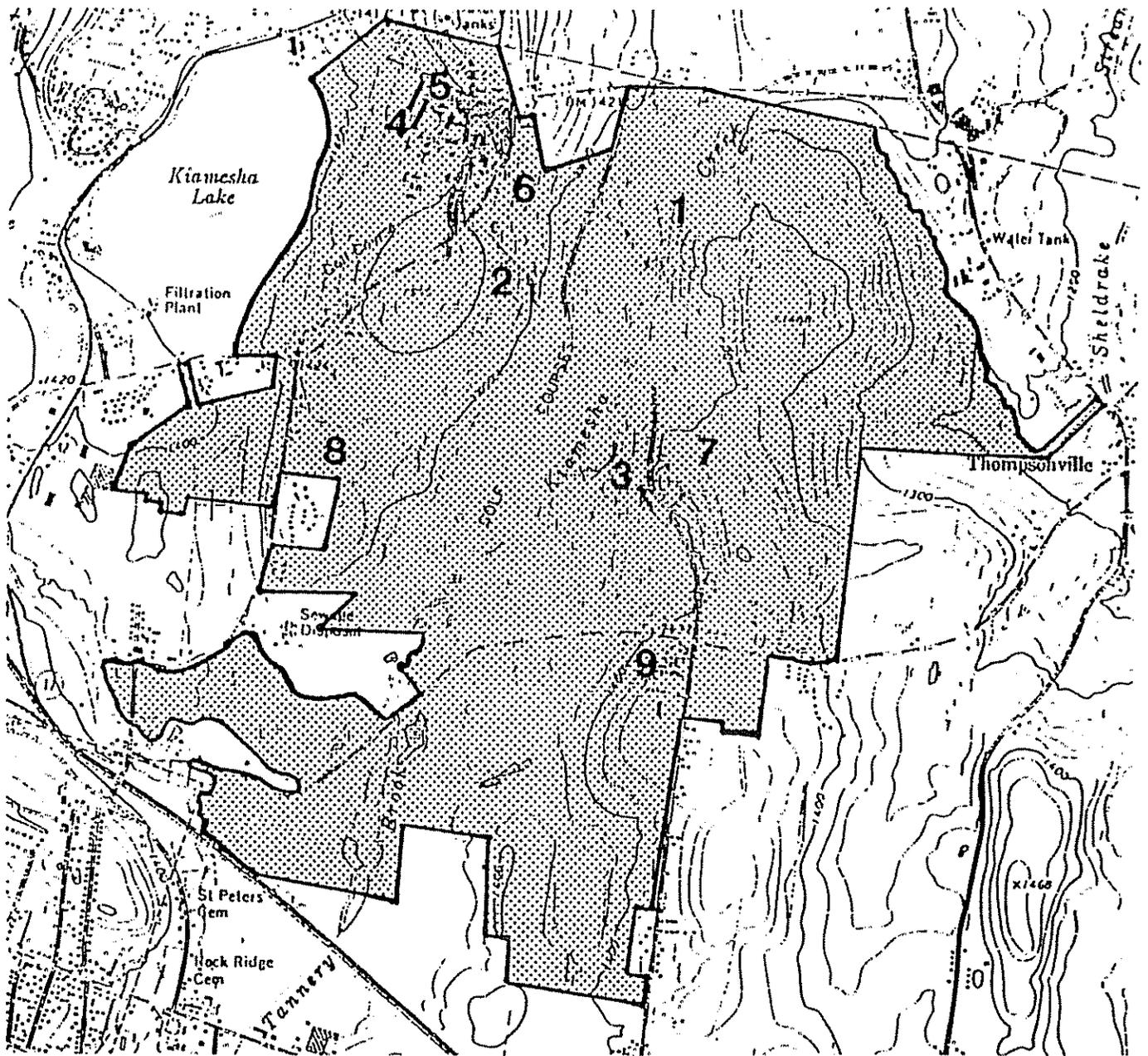
If you should have any questions regarding the above, please feel free to call.

Very truly yours,
ENVIRONMENTAL COMPLIANCE SERVICES, INC.

Anthony P. Russo
President

APR/smr

Attachment



LEGEND

- 1 - EXISTING DUMP SITE
- 2 - GAS STATION SITE
- 3 - MAINTENANCE SHOP
- 4 - HOTEL USTs and ASTs
- 5 - HOTEL BOILERS
- 6 - MAIN HOTEL PARKING AREA FILL SITE
- 7 - CHALET SOUTHEAST DUMP SITE
- 8 - BAILEY ROAD CASINO PROPERTY
- 9 - BREEZY CORNERS

SCALE 1" = 2,000'

**EXISTING CONDITIONS
FIGURE**

SOURCE:

USGS MONTICELLO, N.Y. (1966 PHOTO REV. 1982)
7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES

CONCORD RESORT HOTEL
TOWN OF THOMPSON, NEW YORK



Environmental
Compliance
Services, Inc.
ENVIRONMENTAL CONSULTING

VIA FACSIMILE

January 22, 1998

Joseph M. Murphy, President
Value Resort & Spa, Inc.
300 East 42nd Street
New York, New York 10017

Re: Preliminary Phase I Environmental Site Assessment Report
Concord Hotel, Kiamesha Lake, Sullivan County, New York
(ECSI Project No. 4051.EA)

Dear Mr. Murphy:

This is to provide you with a preliminary report on our services completed to date for conducting ongoing Environmental Site Assessment activities for properties owned by Kiamesha Concord Inc (KCI) and the Concord Development Corporation (CDC). Our work efforts have been conducted in accordance with ASTM standards on Environmental Site Assessments for Commercial Real Estate (E-1527-94) as well as recognized practices suitable for typical lending institutions. A general description of the scope of our services is as follows:

- ◆ Interviews with applicable agency and property owners/operators as well as the completion of an Environmental Questionnaire to facilitate evaluation of past and present site conditions.
- ◆ Performance of site walkover surveys to visually evaluate the physical conditions of the subject parcels.
- ◆ Evaluation of the level of regulatory compliance the site may be subject to.
- ◆ Review of agency records on any spills/releases at or in the vicinity of the site.
- ◆ Review of available environmental reports completed for the site and related correspondence.
- ◆ Preparation of a Phase I Environmental Site Assessment Report.

Joseph M. Murphy, President
January 22, 1998
Page 2

As you know, we have commenced Phase II Environmental Site Assessment activities to further evaluate property conditions, based on the preliminary findings discussed below. Activities include preparation of a Work Plan for Waste Pile Removal and Disposal at the Concord Resort Hotel (dated October 1996) and performance of a preliminary test pit investigation currently performed by your staff in conjunction with our assistance. The purpose of the investigation is to acquire additional information on previous surface waste disposal practices conducted on properties either owned by KCI and CDC or which lie adjacent to these subject parcels. Information obtained under the investigation will be incorporated into a revised Work Plan scheduled for completion later this month. The Work Plan will include:

- ◆ Identification of property areas of concern and the types of further investigations to conduct
- ◆ Evaluation of waste removal and disposal options (with recycling possibilities)
- ◆ Confirmatory soil sampling and analyses
- ◆ Underground storage tank (UST) compliance issues and requirements
- ◆ Agency liaison and regulatory requirements for each area of concern
- ◆ Site restoration activities, as necessary
- ◆ Agency reporting requirements, as necessary

As part of our work effort, we investigated 19 parcels at and in the vicinity of the Concord Resort Hotel. The lands investigated are listed in the following table and have been entered by Section, Block and Lot as designated by the Town of Thompson Tax Assessor's Office. In addition, the acreage, as noted on tax property record cards and associated tax maps have been included for each site. The general location of each parcel, by street name as well as current ownership as noted on each property record card has been included as well. Please note, this information was obtained from the Town of Thompson Tax Assessor's Office in November 1996, and represents updated official information until that date. No indication of change in ownership of Concord lands has been offered, as such it is assumed for the purpose of this report, that the information presented is current.

Parcels Designated for Investigation			
Section, Block, Lot	Acreage	Street Location	Current Owner
9-1-27	28.8	County Highway 109	Kiamesha Concord, Inc.
9-1-28	0.26	County Highway 109	Kiamesha Concord, Inc.
9-1-29	1.8	County Highway 109	Kiamesha Concord, Inc.
9-1-31	0.21	County Highway 109	Kiamesha Concord, Inc.
9-1-34.1	93.66	Concord Road	Kiamesha Concord, Inc.
10-15-9	2	County Highway 109	Kiamesha Concord, Inc.
10-15-10	0.34	County Highway 109	Concord Development Corp.
10-15-11	2.8	County Highway 109 & Pine Drive	Kiamesha Concord, Inc.
10-16-5	2.5	County Highway 109	Kiamesha Concord, Inc.
13-3-17	0.46	Back Kiamesha Road	Kiamesha Concord, Inc.
13-3-20	66	Back Kiamesha Road	Concord Development Corp.
15-1-14	197.37	Ski Run Road	Kiamesha Concord, Inc.
15-1-22	25.32	Thompsonville Road	Concord Development Corp.
15-1-35.7	132.84	Thompsonville Road	Concord Development Corp.
15-1-49	0.17	County Highway 109	Concord Development Corp.
15-1-51	27.08	Town Road 45	Kiamesha Concord, Inc.
23-1-54.2	57.5	Joyland Road	Kiamesha Concord, Inc.
23-1-54.3	7.6	Joyland Road	Kiamesha Concord, Inc.
23-1-61.2	10.05	Joyland Road	Concord Development Corp.

As part of completing our investigations of these properties in accordance with ASTM Standard Practice E-1527-94, ECSI included an investigation of adjacent and surrounding parcels to determine if on-site or nearby conditions exist that may affect the environmental quality of the subject parcels. Presented below is a description of preliminary findings for the above noted properties. The attached Existing Conditions Figure presents the approximate locations of each finding situation described, the numbers presented correspond to the numbered locations on the attached figure.

1) EXISTING DUMP SITE (KCI PARCEL 15-1-14, 197.37 ACRES)

- Case File Still Open With the New York State Department of Environmental Conservation (NYSDEC), Verification of Remediation Is Necessary Via Contact With Staff Previously Requested To Review Groundwater and Surface Water Investigation Information Obtained During 1989 By KCI

2) GAS STATION SITE (ADJACENT TO KCI PARCEL 9-1-34.1, 93.66)

- Two USTs Need To Be Closed Or If Placed Back Into Service Then Tested In Accordance With NYSDEC Requirements
- Adjacent Parking Area Needs Waste Removed And Cleanup Levels Verified

3) MAINTENANCE SHOP (Adjacent to KCI Parcel 15-1-14, 197.37 Acres)

- Salt/sand Pile Must Be Managed In Accordance With NYSDEC Storm Water Regulations
- Overfill Prevention On Waste Oil Tank & Possible Retrofitting
- Perform Sump Clean Out and Sludge Disposal
- Conduct Test Pit Investigation To Determine Extent Of Waste Removal Along Storage Area Limits & Confirm Cleanup
- Remove Junked Materials And All Unused Cleaning Product Drums

4) HOTEL Underground and Above Ground Storage Tanks (KCI Parcel 9-1-34.1, 93.66 Acres)

- Ensure Protection Of Fillports And Implement Spill Prevention Measures
- Complete Registration Of All On-Site USTs and ASTs
- Complete Integrity Testing For USTs In Accordance With NYSDEC Requirements.

- 5) **HOTEL BOILERS (KCI Parcel 9-1-34.1, 93.66 Acres)**
 - Ensure Emissions Compliance with Pending Federal And State Clean Air Act Requirements for Boiler Emissions
- 6) **MAIN HOTEL PARKING AREA FILL SITE (KCI Parcel 15-1-14, 197.37 Acres)**
 - Conduct Test Pit Investigation & Sample/Analyze Soil & Water Resources Adjacent to Main Parking Lot Area
- 7) **CHALET SOUTHEAST DUMP SITE (KCI PARCEL 15-1-51, 27.08 ACRES)**
 - Conduct Test Pit Investigation To Determine Extent Of Waste Removal & Confirm Cleanup
- 8) **BAILEY ROAD CASINO PROPERTY (CDC PARCEL 13-3-20, 66 ACRES)**
 - Cleanup Surface Dumping At Rear Of Casino Building And Confirm Cleanup Levels
 - Remove/Dispose of Trash In Swimming Pool
 - Conduct Test Pit Investigation At Adjacent Properties To Determine Extent Of Waste Disposed For Possible Removal
- 9) **BREEZY CORNERS (Adjacent To KCI Parcel 23-1-54.2, 57.5 Acres)**
 - Breezy Corners SPDES Applicability & Health Department Code Verification On Treatment System And Removal of Trash Behind Casino Building

In addition to the above, surface water/watershed regulations established by the Kiamesha Water Company exist for Kiamesha Lake and surrounding areas which include properties owned by KCI and CDC. Regulations require safeguards for pesticide applications and sediment and erosion precautions to protect the water quality of Kiamesha Lake, a public water supply source.

Based on the above findings to date, we expect that areas which contain discarded trash will not pose a significant environmental threat, risk or liabilities to surrounding groundwater and surface water resources or public health and welfare. With respect to the old dump site (location number 1), a response from NYSDEC Division of Solid Waste Management staff must be obtained regarding their review of surface and groundwater information previously provided to them

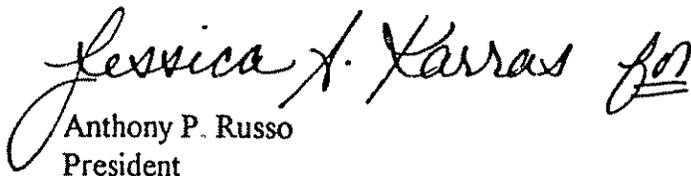
Joseph M. Murphy, President
January 22, 1998
Page 6

during 1989 and 1990. The response will likely indicate appropriate actions to undertake to further investigate and verify environmental risks or liabilities by way of additional surface and groundwater sampling and analysis. The analysis will provide indication of the extent possible remediation activities will to need be addressed, as necessary. In addition, it is our understanding that KCI will continue efforts to address the other above noted matters including the removal and disposal of waste/trash piles, register petroleum bulk storage facilities and arrange for integrity testing of in-use USTs, and complete UST closure of the two USTs at the adjacent service station property.

In the interim, we will continue to assist your efforts to address all matters noted in this correspondence as well as arrange to contact representatives in the NYSDEC Division of Solid Waste Management regarding the old dump site. Please be aware that the NYSDEC has recently published requirements for boiler emissions, we will verify applicability for the hotel facility.

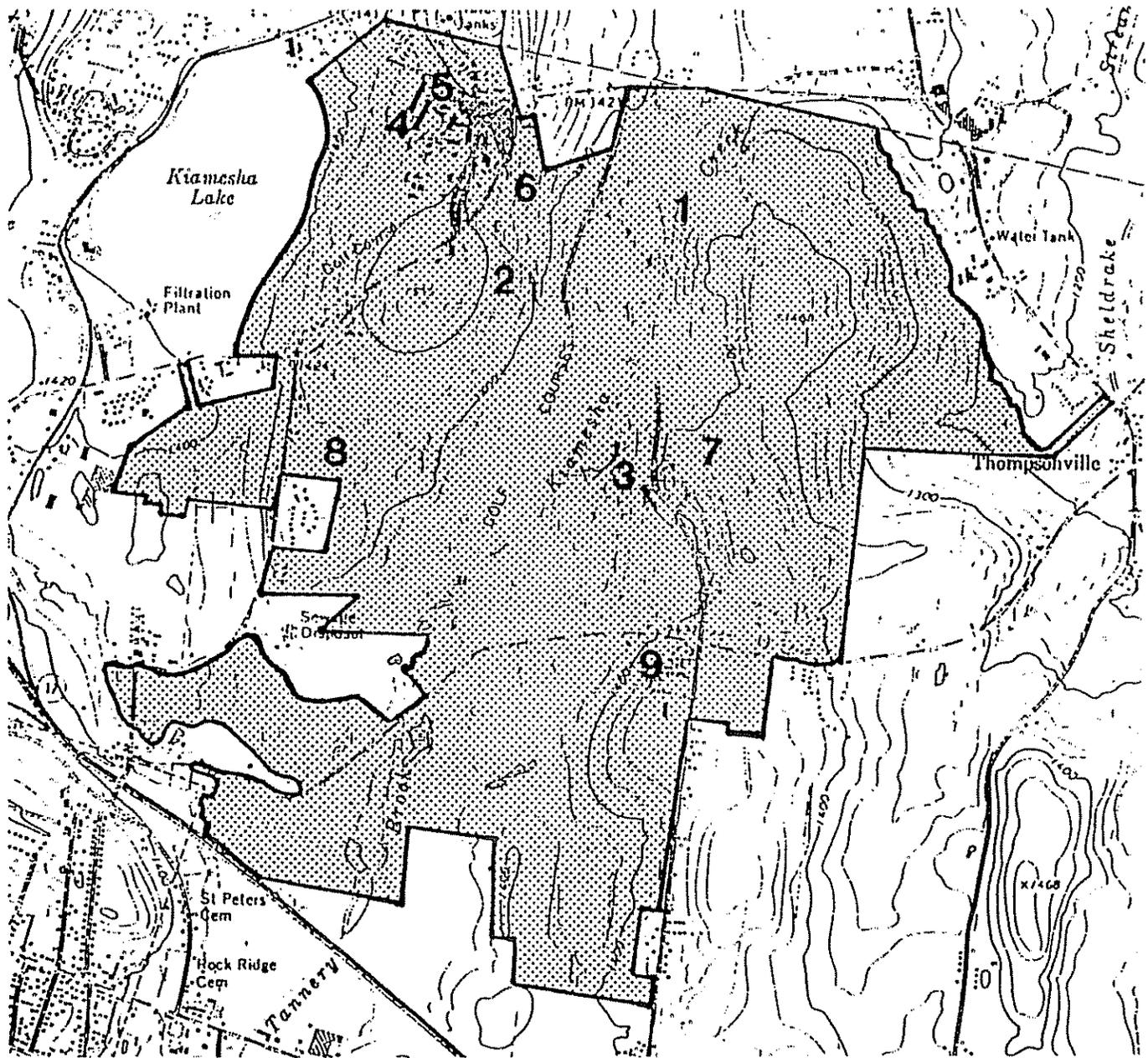
If you should have any questions regarding the above, please feel free to call.

Very truly yours,
ENVIRONMENTAL COMPLIANCE SERVICES, INC.


Anthony P. Russo
President

APR/dcb

Attachment



LEGEND

- 1 - EXISTING DUMP SITE
- 2 - GAS STATION SITE
- 3 - MAINTENANCE SHOP
- 4 - HOTEL USTs and ASTs
- 5 - HOTEL BOILERS
- 6 - MAIN HOTEL PARKING AREA FILL SITE
- 7 - CHALET SOUTHEAST DUMP SITE
- 8 - BAILEY ROAD CASINO PROPERTY
- 9 - BREEZY CORNERS

SCALE 1" = 2,000'

SOURCE:

USGS MONTICELLO, N.Y. (1966 PHOTO REV. 1982)
7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES

**EXISTING CONDITIONS
FIGURE**

CONCORD RESORT HOTEL
TOWN OF THOMPSON, NEW YORK

ELECTRICAL TRANSFORMER PACKAGE

Building an Energy Alliance

September 19, 1996

RECEIVED SEP 23 1996

Ms. Jessica Karras
 Environmental Compliance Services Inc.
 P O Box K
 9 Academy Ave
 Middletown NY 10940

Re: Concord Hotel

Dear Jessica,

Enclosed, you will find information regarding the power transformers that we have on record that are in use at the Concord Hotel. After speaking with you on the phone, I searched through our files and made copies of various memos and letters over many years that referenced the transformers. I do not know of any additional units since the last letter that is attached. So, please verify this against your field inventory.

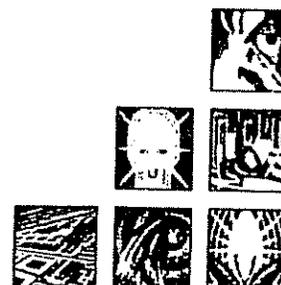
As you will see, we assisted the Concord in a previous effort to determine PCB content by assisting them by providing serial numbers and other company information. New York State Electric and Gas (NYSEG) does not have record of PCB content of any of these transformers.

If you are in need of having tests performed on any or all of the transformers to determine PCB content, or to test the electrical integrity of the transformers, NYSEG offers a full spectrum of testing services. I have enclosed a price schedule for your perusal. If you would like more specific information on any of the different testing services, or if you would like to arrange to have testing performed, please do not hesitate to call me at 1-800-225-7026, extension 443.

Sincerely,


 Paul Lounsbury
 Key Account Manager

cc: George Parker - The Concord
 John Hendrix - Boris Shalman Electric



file

Waples
Concord
file
TW

October 1, 1981

Boris Shalman Inc.
Sackett Lake Road
Monticello, New York 12701

ATT: George Friedberg

Dear George:

Enclosed are rough drafts of letters you might use to inquire about PCB's in the transformers at the Concord. These are only suggestions, and you can change whatever you would like.

If I can be of further assistance, please contact me.

Sincerely,

Russell G. Wakeman
Marketing Services Representative

RGW/dc

cc: RAP

Enc.

ROUGH DRAFT

McGraw Edison Company
1 Lincoln Center
Suite 990
Syracuse, New York 13202

ATT: Mr. George Rushford

Dear Mr. Rushford:

Due to the recent PCB eruption, we have been concerned about some transformers we own, which are near our food preparation area.

We understand you purchased Pennsylvania Transformer and Line Material companies, so we are including a list of serial numbers of transformers manufactured by them. If possible would you please tell us if the oil these transformers contain PCB's.

Pennsylvania Serial #36596-1 60 Spec 3682L - 333 KVA

Pennsylvania Serial #36596-2 60 Spec 3682L - 333 KVA

Pennsylvania Serial #36596-3 60 Spec 3682L - 333 KVA

Line Material Serial #1004289 Type La DA 211048 100 KVA

Line Material Serial #1431553 Type RW Cat.TD 211048 167 KVA

Line Material Serial #1431554 Type RW Cat.TD 211048 167 KVA

Line Material Serial #1431555 Type RW Cat.TD 211048 167 KVA

Line Material Serial #1707280 Type RW Cat.TD 211048 167 KVA

Line Material Serial #1707281 Type RW Cat.TD 211048 167 KVA

Line Material Serial #1707282 Type RW Cat.TD 211048 167 KVA

Thank you for your cooperation in this matter and if I can be of further assistance, please contact me.

Sincerely,

George Friedberg

ROUGH DRAFT

General Electric Company
P.O. Box 407
Vestal, New York 13850

ATT: Mr. Al. Londa

Dear Mr. Londa:

Due to the recent PCB eruption, we have been concerned about some transformers we own, which are near our food preparation areas.

Listed below are the serial numbers of transformers manufactured by G.E.

If it is possible could you please tell us if the oil in these transformers contain PCB's.

Serial #454180 - 60P - 250 KVA

#454181 - 60P - 250 KVA

#454182 - 60P - 250 KVA

H696733Y68AA - 100 KVA

C119697 - 100 KVA

Thank you for your cooperation in this matter and if I can be of further assistance, please contact me.

Sincerely,

George Friedberg

Boris Shalman, Inc.

LICENSED ELECTRICAL CONTRACTOR

P. O. Box 248 • Monticello, New York 12701 • (914) 794-5678

200 -BASEMENT VAULT..

Spirakore Trans- 4800/8320Y- 120/240

3-- G.E. S/N D 454180-60P KVA 250
454181-60P KVA 250
454182-60P KVA 250

TRANSFORMER VAULT NEXT TO BOILER ROOM OFFICE..

3- Pennsylvania transformers KVA 333

1-36596-3 cyl 60Spec 3682-L

2-36596-1

3-36596-2

Voltage Rating ---4800/8320Y

BACK OF NITE CLUB OUTSIDE OF LOADING DOCK.

1- GE-H 696733Y68AA 4800/7200 -100KVA

2- CENTER -GE -C119697- 4800/8320Y 120/240- 100KVA

3- Line Material 1004289 Type La DA 211048-100KVA ,4800/8300 120/240

OLD VAULT NEXT TO PANTRY

1st BANK.....

1.-L.M. Ser# 1431554 Type RW-Cat T-D 211048-167 ,4800/8300Y,120/240 ,167KV

2.-L.M. Ser# 1431555 Type RW,Cat TD 211048-167 KVA

3.-L.M. Ser # 1431553 Type RW,Cat T_D 211048-167KVA

Bank #2,

1- L.M. Ser# 1707282 Type RW Cat T-D 211048-167 KVA

2. L.M. 1707281 Type RW Cat T-D 211048-167 KVA

3. L.M. Ser# 1707280 Type RW Cat T_D 211048-167 KVA

All the Above are at Concord Hotel.Kiamesha Lake,

File

Monticello

December 2, 1977

TO: W.H. Bury

RE: Concord Hotel Transformer

The following is the name plate data on the new transformer at the above location.

Mfg.	Vantron
KVA	1500
Voltage-Primary	7200/4800
Secondary	208/120
	65° c Rise
Imp.	5.75 @ 85° c
Serial Number	77V5358
Weight	14,000 lbs.
Class	OA 60 cycle 3 φ

Russell G. Wakeman

RGW/dc

COPY

TRANSFORMER INFORMATION

<u>CUSTOMER</u>	<u>LINE & POLE #</u>	<u>SIZE</u>	<u>TYPE</u>	<u>MFG.</u>	<u>P.R. YR.</u>	<u>DEPREC. VALUE</u>	<u>INSTALL COST</u>	<u>TOTAL</u>
Concord Hotel	1383	25	Conv.	GE	1967	233.45	220.12	
	1-1	25	"	"	"	"	"	
		25	"	"	"	"	"	
1383	2	15	**CSP	West.	1951	137.69	67.44	
		5	CSP	West.	1951	82.59	"	
1383	12-1	100	*Conv.	MGED	1973	891.95	305.33	
		100	*Conv.	"	"	"	"	
		100	*Conv.	"	"	"	"	
1383	14	75	Conv.	West.	1954	394.02	133.38	
		75	"	"	"	"	"	
		75	"	"	"	"	"	
1383	18	25	**Conv.	LM	1945	157.60	95.93	
		25	**Conv.	West.	1945	"	"	
1383	21-1	10	Conv.	West.	1966	130.31	211.74	
		10	"	"	"	"	"	
		10	"	"	"	"	"	
1383	22	25	Conv.	West.	1963	213.35	106.80	
		10	Conv.	GE	1964	126.46	249.23	
1383	25	50	Conv.	LM	1964	358.76	249.22	
		50	"	"	"	"	"	
		50	"	"	"	"	"	
1445	1A	250	Conv.	GE	1960	1,423.50	207.35	
		250	"	"	"	"	"	
		250	"	"	"	"	"	
1445	3	50	CSP	West.	1961	399.64	174.00	
		50	CSP	West.	1960	397.81	95.04	
		50	CSP	West.	1960	397.81	95.04	

* Dual voltage high side 4800/7200V

**Dual voltage high side 2400/4800V

TRANSFORMER INFORMATION

<u>CUSTOMER</u>	<u>LINE & POLE #</u>	<u>SIZE</u>	<u>TYPE</u>	<u>MFG.</u>	<u>P. R. YR.</u>	<u>DEPREC. VALUE</u>	<u>INSTALL COST</u>	<u>TOTAL</u>
Concord Hotel	1445	100	Conv.	LM	1942	384.51	95.12	
	5	100	**Conv.	GE	1954	477.47	146.80	
		100	**Conv.	LM	1949	424.69	121.75	
1445	6A	50	*Conv.	West.	1970	468.29	247.17	
		50	"	West.	1970	468.29	247.17	
		50	"	West.	1970	"	"	
1445	7	333	Conv.	Penn.	1956	1,340.30	195.74	
		333	"	"	"	"	"	
		333	"	"	"	"	"	
1445	8	167	Conv.	LM	1954	704.21	148.61	
		167	"	"	"	"	"	
		167	"	"	"	"	"	
		167	"	"	1957	754.19	165.94	
		167	"	"	"	"	"	
1445	11	75	CSP	West.	1955	436.27	78.38	
		75	"	"	"	"	"	
		75	"	"	"	"	"	
1445	13-1	167	Conv.	Penn.	1959	843.86	179.74	
		167	"	"	"	"	"	
		167	"	"	"	"	"	
1445	14-3	10	**Conv.	Wagner	1947	84.74	102.84	
		10	Conv.	GE	1964	126.46	249.23	
		10	Conv.	GE	1964	126.46	249.23	
1445	16-4	100	Conv.	West.	1966	668.96	233.04	
		100	Conv.	West.	1966	"	"	
		100	"	"	"	"	"	

*Dual voltage high side 4800/7200V

**Dual voltage high side 2400/4800V

TRANSFORMER INFORMATION

<u>CUSTOMER</u>	<u>LINE & POLE #</u>	<u>SIZE</u>	<u>TYPE</u>	<u>MFG.</u>	<u>P.R. YR.</u>	<u>DEPREC. VALUE</u>	<u>INSTALL COST</u>	<u>TOTAL</u>
Concord Hotel	1445	100	**Conv.	Penn.	1959	553.31	177.55	
	22	100	**Conv.	Penn.	1959	"	"	
		100	**Conv.	Penn.	1959	"	"	
	1611 3	50	CSP	AC	1963	401.51	106.80	
	1445	1500	PadMtd.	GE	1969	10,190.27	446.80	
						<u>41,890.80</u>	<u>10,825.35</u>	
								<u>\$52,716.15</u>

*Dual voltage high side 4800/7200V
 **Dual voltage high side 2400/4800V

INTER-OFFICE MEMORANDUM

NEW YORK STATE ELECTRIC & GAS CORPORATION

Liberty, New York

(Office)

TO: MR. H. M. HARDING (Ithaca, N. Y.)

March 23, 1959

Re: Concord Hotel Private Lines

Please advise the present day value of the following transformer installations including the transformer itself, fixtures, primary and secondary bus work, C/O's, L/A's, etc. If you wish you may fill in your figures after our last column and return one copy of this letter to us. All transformers are 1Ø and of 4800 volt rating. The purpose of this report is to accumulate data for the Power Sales Department in their dealings with the customer. We prefer to have the costs listed pole by pole so items may be deleted if necessary. More than one transformer per pole, platform, or vault indicates a three phase power installation. The costs should be depreciated to July 1, 1959.

<u>Line #</u>	<u>Pole #</u>	<u>Size Transf. in KVA</u>	<u>Type</u>	<u>Mfr.</u>	<u>Year Purchased</u>	<u>Year Installed</u>
445	Vault #1	167	Conv.	L.M.	1954	1954
"	"	167	"	"	"	"
"	"	167	"	"	"	"
"	"	167	"	"	1957	1957
"	"	167	"	"	"	"
"	"	167	"	"	"	"
"	Vault #2	333	"	Perm	1956	1956
"	"	333	"	"	"	"
"	"	333	"	"	"	"
"	Vault #3	100	RW	L.M.	1951	1958
"	"	100	"	"	"	"
"	"	100	STB	"	1957	"
"	1-4	75	CSP	West.	1955	1957
"	"	75	"	"	"	"
"	"	75	"	"	"	"
"	4	75	Conv.	"	1956	1958
"	"	75	"	"	"	"
"	"	75	"	"	"	"
1	27	37½	OISC	A.C.	1947	1952
83	2	15	CSP	West.	1951	1957
"	"	5	"	"	"	1954
"	14	75	Conv.	"	1954	"
"	"	75	"	"	"	"
"	"	75	"	"	"	"

We would also like the present day value of the following cutout installations.

<u>Line #</u>	<u>Pole #</u>	<u>Type</u>	<u>Date Installed</u>
1	26	3-100 amp.-8 Kv.-enclosed	1954
45	2	3-100 amp.-8 Kv.-open	"
1 45	7	3-100 amp.-8 Kv.-enclosed	1958
1 45	7-1	3-100 amp.-8 Kv.-open	"

S. H. Hasbrouck

Wednesday, September 24, 1997

Ms. Jessica Karras
Environmental Compliance Services Inc.
9 Academy St
Middletown NY 10940

Re: Concord Hotel and Parcels

Dear Jessica,

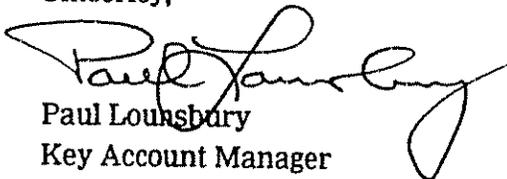
Thanks for calling yesterday regarding Nyseg's Concord and Kiamesha Substations. The information you requested is as follows:

	<u>Concord</u>	<u>Kiamesha</u>
Approx Date of Construction	1960	1955
Voltages (Transmission/Distribution)	34,500/4800	34,500/12,470
Current Status of transformer oil	Non PCB	Non PCB
Approx Date of PCB oil retrofill	1993	1995
PCB Content prior to retrofill	180 ppm	100 ppm
Record of Spills **	None	None

(**Record keeping of spills commenced only several years ago.)

If you have any additional questions, please give me a call.

Sincerley,


Paul Lounsbury
Key Account Manager

RECEIVED SEP 26 1997

cc: Greg Miller - Nyseg

PESTICIDE QUARANTINE ORDER



BUREAU OF PESTICIDES
ALBANY, NEW YORK 12233-7254
QUARANTINE ORDER

TO Concord Resort Hotel		DATE 9-29-97	REGION NO. 3
STREET ADDRESS		SPECIALIST NO. 346	ORDER NO. 11841
POST OFFICE Riamesha Lake	STATE NY	ZIP CODE	COUNTY Sullivan

OWNER, CUSTODIAN, OR VENDOR OF THAT CERTAIN LOT OF PESTICIDES MARKED OR DESCRIBED AS FOLLOWS:

Product Name	EPA Number	Amount
① Embarck Growth Regulator	7152-7-AA	⑬ gal. cont.
② Asway Fruit Tree Spray	3570-563	④ 1/2 gal. cont.
③ Trex-San Bent	2217-529-AA-373	① 2 1/2 gal. cont.
④ Crabgrass Killer	572-199	⑪ gal. cont.
⑤ Gas Cartridge	6704-1	⑩ 3oz. cartridge

LABEL AND ADDRESS OF Distributor

① **Aranchemicals/3M, 3M Center, St. Paul, MN 55101**

② **Manufacturer**

③ **Asway, Inc., Syracuse, NY** ④ **Hallinckrodt Inc., St. Louis, MO 631**

④ **Other**

④ **Rockland Chemical Co., Passaic Ave., West Caldwell, N.J.**

LOCATION OF MATERIAL

⑤ **Pocattello Supply Depot, Pocattello, ID 83201 (Pesticides)**

YOU ARE HEREBY NOTIFIED that the above described pesticide, upon inspection or test is found to be a violation of provisions of the Environmental Conservation Law or the rules and regulations promulgated thereunder in the following respect:

Act. 33, Sect. 33-1301(1-a)

YOU ARE HEREBY DIRECTED AND ORDERED, in accordance with the provisions of the Environmental Conservation Law from and after the time of service upon you of this order, to stop and refrain from further sale, use, disposition, and movement of said pesticide or any part thereof until this order shall have been withdrawn by the enforcing officer, upon evidence that the law or rules and regulations promulgated thereunder has been complied with. IT IS UNLAWFUL FOR ANY PERSON TO MOVE OR ALLOW TO BE REMOVED OR OTHERWISE HANDLE OR DISPOSE OF ANY PESTICIDE HELD UNDER A "QUARANTINE ORDER" OR TAGS ATTACHED THERETO EXCEPT WITH THE WRITTEN PERMISSION OF THE ENFORCING OFFICER, AND FOR THE PURPOSE SPECIED THEREIN.

ENFORCING OFFICER (Print Name) Thomas DeChillo	SIGNATURE <i>Thomas DeChillo</i>	TELEPHONE NUMBER (714) 256-3123
ADDRESS 21-Sol. Patt. Corners Rd., New Paltz		Al Huvach Director, Bureau of Pesticides
I hereby accept service of the above order this 29th day of September 19 97		SIGNED <i>Al Huvach</i>

QUARANTINE RELEASE

PRODUCT	EPA NUMBER	AMOUNT

YOU ARE HEREBY NOTIFIED THAT THE ABOVE LISTED QUARANTINE MATERIAL IS RELEASED FROM QUARANTINE FOR THE SPECIFIC PURPOSE LISTED BELOW:

Shipment back to dealer, and/or manufacturer Pick up by Bureau of Pesticides

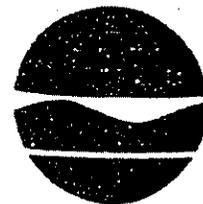
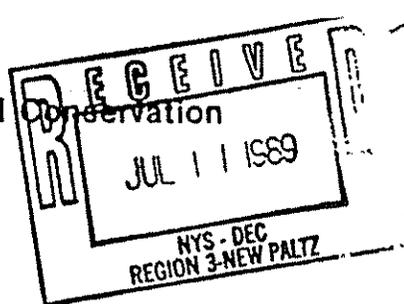
Other _____

MANAGER'S SIGNATURE	FREIGHT DRIVER'S SIGNATURE
PESTICIDE SPECIALIST'S SIGNATURE	DATE

DEALER:

NYSDEC ORDER ON CONSENT

New York State Department of Environmental Conservation
21 South Putt Corners Road
New Paltz, NY 12561
(914) 255-5453



Thomas C. Jorling
Commissioner

July 10, 1989

Carl Goldstein, Esq.
Goldstein & Stoloff
26 Hamilton Avenue
P. O. Box 1129
Monticello, NY 12701

RE: Alleged Violations of Article 27 of the Environmental Conservation Law ("ECL") and Part 360 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York ("6NYCRR") by Kiamesha Concord, Inc. Case #3-1632/8902

Dear Mr. Goldstein:

Enclosed please find a Consent Order which has been drafted as a proposed settlement of the above-referenced violations. The Order concerns your client's operation of a solid waste management facility without a permit.

If your client is willing to resolve this matter on the terms outlined in the Order, please have an officer sign the Consent Page and have the signature notarized. The Order should then be returned to me at the address indicated on the letterhead, together with your client's check in the amount of \$10,000. You will be provided with a copy of the Order after it has been executed by the Department.

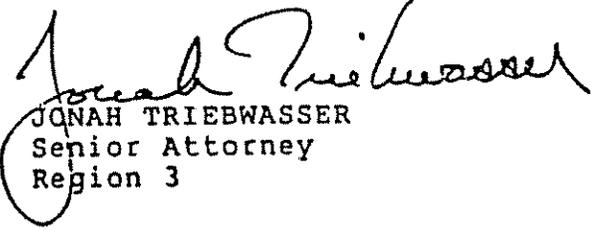
If you wish the opportunity to discuss the enclosed Order, please contact the undersigned to schedule a compliance conference.

If we do not receive the signed and notarized Order by July 24, 1989, or if you do not contact me by that date to schedule a compliance conference, we will assume that you are not willing to consent to the Order and its offer will be withdrawn. Formal legal proceedings will then be instituted by the Department to obtain the necessary remediations and appropriate penalties.

Carl Goldstein, Esq.
Page 2
July 10, 1989

If you have any further questions about the proposed Order, please contact me at the above telephone number.

Very truly yours,


JONAH TRIEBWASSER
Senior Attorney
Region 3

JT/bs
Enclosure

cc: R. Gardineer
Capt. Washburn/ECO Haberle

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of Alleged Violations of
Article 27 of the Environmental Conservation
Law ("ECL") and Part 360 of Title 6 of the
Official Compilation of Codes, Rules and
Regulations of the State of New York
("6NYCRR") by

ORDER
ON
CONSENT

KIAMESHA CONCORD, INC.,

Case #3-1632/8902

Respondent.

WHEREAS:

1. The Department of Environmental Conservation (hereinafter "the Department" or "DEC") regulates Solid Waste Management Facilities pursuant to Article 27, Title 7 of the ECL, and 6NYCRR Part 360.
2. Respondents are the owners and operators of a solid waste management facility, in the Town of Thompson, County of Sullivan, State of New York (the "Facility"). The term "Respondent," as used herein, shall refer to all named Respondents.
3. Part 360 of 6NYCRR was amended effective December 31, 1988. The violations described herein were committed prior to that date, and were governed by pre-amendment Part 360. The facility was in violation as of December 31, 1988, and closure of the facility is therefore governed by Part 360 as amended. Citations herein to specific provisions of Part 360 refer to pre-amendment Part 360, except that citations in the Schedule of Compliance refer to Part 360 as amended.
4. Respondent has not applied for or obtained a permit to operate a solid waste management facility, as required by ECL Section 27-0707(1) and 6NYCRR 360.2(b).
5. Waste disposed of at the Facility included waste which was not construction and demolition debris, as defined at 6NYCRR Section 360.1(d)(12). The Facility was therefore not entitled to the permit exemption set forth at Section 360.1(f)(1)(x), and its operation without a permit was in violation of Section 360.2(b).
6. Pursuant to ECL Section 71-2703, violations of Part 360 are punishable by a penalty of \$2,500 per violation, plus up to \$1,000 per day of continuing violation. Effective July 11, 1988, violations relating to deposition of construction and demolition debris are punishable by an additional penalty of \$5,000 per day of deposition.

7. Respondent has affirmatively waived its right to notice and hearing in the manner provided by law and has consented to the issuing and entering of this Order, and agrees to be bound by the terms, provisions and conditions contained herein.

NOW, having considered this matter and being duly advised, it is ORDERED that:

I. Civil Penalty. (a) In respect of the aforesaid violations, a civil penalty in the amount of \$310,000 is hereby assessed against Respondent, which amount shall be payable as follows: \$10,000 shall be paid by Respondent to the Department upon Respondent's return of an executed copy of this Order to the Department; \$300,000 of which shall be suspended upon condition that Respondent remain in compliance with each term, provision and condition of this order, and shall become payable within 15 days after service upon Respondent of a notice of noncompliance. Such notice shall be deemed a part of this Order. Service of such notice may be by personal service or by certified mail return receipt requested (restricted delivery not required), or, if such service is refused or cannot be completed, by ordinary mail. Service shall be at the following address, unless Respondent hereafter notifies the Department in writing of a different address:

Kiamesha Concord, Inc.
c/o Goldstein & Stoloff, Esqs.
P. O. Box 1129
Monticello, NY 12701

(b) In the event that the Department serves upon the Respondent a notice of noncompliance pursuant to Paragraph I hereof, demanding payment of all or a portion of the suspended penalty, and Respondent fails to make payment thereof within 15 days after service of such notice, this Order on Consent, together with a copy of the notice of noncompliance, shall be deemed the equivalent of a civil judgment after trial for the amount specified in such notice, and may be filed and enforced as a judgment for said amount, in any jurisdiction in which Respondent may reside, do business or have any assets, within or without the State of New York, without the need for any further proceedings whatsoever.

II. Operation prohibited. Respondent shall immediately cease and prohibit the acceptance or disposal of waste at the Facility, and shall immediately take such steps as are necessary, including, without limitation, installation of fencing, gates, locks and signs, to prevent unauthorized access to the Facility.

III. Schedule of Compliance. Respondent shall comply with the Schedule of Compliance incorporated herein and made a part hereof.

IV. Full settlement. The Department shall not institute any action or proceeding for penalties or other relief for the violations described above for so long as Respondent remains in compliance with this Order. Any failure by Respondent to comply fully with the terms of this Order may subject the Respondent to further enforcement action for the violations alleged herein. Compliance with this Order shall not excuse nor be a defense to charges of any violations of the ECL or any regulation or permit issued thereunder, which may occur subsequent to the date of this Order.

V. Force majeure. Respondent shall not be in default of compliance with this Order if Respondent is unable to comply with any provision of this Order because of the action of a national or local government body or court, an act of God, war, strike, riot or catastrophe as to any of which the negligence or willful misconduct on the part of Respondent was not approximate cause. Respondent shall notify the Department in writing immediately upon obtaining knowledge of such event, and request an appropriate modification to this Order. Relief under this clause shall not be available if Respondent fails to timely comply with this notice requirement.

VI. Modification. (a) If, for any reason, Respondent desires that any provision of this Order be changed, Respondent shall make timely written application therefor to the Department setting forth reasonable grounds for the relief sought, together with any supporting documentation tending to establish such grounds. Such request shall be made as soon as reasonably possible after Respondent learns of the grounds for such relief.

(b) This Order may be modified by the Department pursuant to the criteria and procedures set forth at ECL Section 70-0115 and 6NYCRR Section 621.13.

(c) No change or modification to this Order shall be made or be effective except as may be specifically set forth in writing by the Department, pursuant to the procedure set forth in subparagraph (a) or (b) above.

VII. Submissions. All reports and submissions herein required shall be made to the Region 3 headquarters, New York State Department of Environmental Conservation, 21 South Putt Corners Road, New Paltz, New York 12561-1696 Attn: Richard Gardineer. Four (4) copies shall be submitted.

VIII. Access. For the purpose of insuring compliance with this Order, duly authorized representatives of this Department shall be permitted access to the site in question and relevant records during reasonable hours, in order to inspect and/or require such tests as may be deemed necessary to determine the status of Respondent's compliance herewith.

IX. Filing. Within 30 days after the effective date of this Order, Respondent shall file a copy of this Order with the real property records of the Sullivan County Clerk's Office, for the purpose of providing notice of this Order to all potential future purchasers of any portion of the Site. Upon transfer of ownership of the Site containing the solid waste management facility herein, Respondent will include a provision in the property deed indicating the period of time during which the property has been used as a landfill, a description of the wastes contained within, and the fact that the records for the facility have been filed with the department. Said deed shall also make reference to a map which shall be filed with the Sullivan County Clerk, showing the limits of the landfill areas within the property. Any successor in title to any portion of the Site shall be responsible for implementing the provisions of this Order.

X. Conveyance. In the event that Respondent proposes to convey the whole or any part of its ownership interest in the facility, Respondent shall, not less than 30 days prior to the consummation of such proposed conveyance, notify the Department in writing of the identity of the transferee and of the nature and date of the proposed conveyance. In advance of such proposed conveyance, Respondent shall notify the transferee in writing, with a copy to the Department, of the applicability of this Order.

XI. Split samples. The Department shall have the right to obtain for the purpose of comparative analysis "split samples" or "duplicate samples", at the Department's option, of all substances and materials sampled by Respondent pursuant to this Order.

XII. Notice of work. Respondent shall provide notice to the Department of any excavating, drilling or sampling to be conducted pursuant to the terms of this Order at least five (5) working days in advance of such activities.

XIII. Review of submissions. After the Department's receipt of each of the submissions required pursuant to the Schedule of Compliance, the Department shall notify Respondent, in writing, of its approval or disapproval of the submission. If the Department approves the submission, Respondent shall implement it in accordance with its schedule and terms, as approved. If the Department disapproves the submission, within 30 days after Respondent receives written notice of disapproval, Respondent shall submit a revision in accordance with the Department's objections. After the Department's receipt of Respondent's revision, the Department shall notify Respondent, in writing, of its approval or disapproval. If the Department approves the revised submission, Respondent shall implement it in accordance with its schedule and terms, as approved. If the Department disapproves the revised submission, the Respondent shall be in violation of this Order. Each submission made pursuant to the Schedule of Compliance, as approved, shall be deemed incorporated into this Order.

XIV. Other remedies. (a) Nothing contained in this Order shall be construed as barring, diminishing, adjudicating or in any way affecting (1) any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against anyone other than Respondent; (2) the Department's right to enforce, administratively or at law or in equity, the terms, provisions and conditions of this Order against Respondent, its directors, officers, employees, servants, agents, successors and assigns in the event that Respondent shall be in material breach of the provisions hereof; (3) the Department's right to bring any action, administratively or at law or in equity against Respondent, its directors, officers, employees, servants, agents, successors and assigns which the Department could otherwise maintain with respect to areas or resources that may have been affected or contaminated as a result of the release or migration of wastes from the site or from areas in the vicinity of the site; (4) the Department's right to commence any action or proceeding relating to or arising out of any disposal of hazardous wastes at the site, as those wastes are defined by applicable regulation; or (5) the Respondent's right to challenge any such action by the Department, whether by administrative hearing or otherwise, to the extent otherwise permitted by law.

(b) This Order shall not be construed to prohibit the Commissioner or his duly authorized representative from exercising any summary abatement powers, either at common law or as granted pursuant to statute or regulation.

(c) The Commissioner may, at any time, make a determination pursuant to Title 13 of Article 27 of the ECL as to whether the site constitutes a significant threat to the environment and whether Respondent shall be required to undertake an inactive hazardous waste disposal site remedial program. Any such determination shall be provided to Respondent by the Department in writing. In the event such determination is made, the Department shall have the right to take such enforcement or other action as may be authorized by law, and to require appropriate modifications in any Closure Plan for the Facility. The Respondent shall have the right to challenge such action, to the extent otherwise permitted by law.

XV. Entire agreement. The provisions hereof shall constitute the complete and entire Order between Respondent and the Department concerning the Facility. No terms, conditions, understandings or agreements purporting to modify or vary the terms hereof shall be binding unless made in writing pursuant to Paragraph VI above. No informal advice, guidance, suggestions or comments by the Department regarding reports, proposals, plans, specifications, schedules or any other writing submitted by Respondent shall be construed as relieving Respondent of its obligations to obtain such formal approvals as may be required by this Order.

XVI. Indemnification. Respondent shall indemnify and hold the Department, the State of New York, and their representatives and employees harmless for all claims, suits, actions, damages and costs of every name and description arising out of or resulting from the fulfillment or attempted fulfillment of the provisions hereof by Respondent, its directors, officers, employees, servants, agents, successors or assigns.

XVII. Default. The failure of Respondent to comply fully and in timely fashion with any provision of this Order shall constitute a default and a failure to perform an obligation under this Order and under the ECL, and shall constitute sufficient grounds for revocation of any permit, license, certification or approval issued to the Respondent by the Department.

XVIII. Binding effect. The provisions of this Order shall be deemed to bind Respondent, its officers, directors, agents, employees, successors and assigns, and all persons, firms and corporations acting under or for it, including, without limitation, any successor in title to the property.

DATED: New Paltz, New York
1989

THOMAS C. JORLING
Commissioner
New York State Department of
Environmental Conservation

BY:

PAUL D. KELLER
Regional Director
Region 3

TO: Carl Goldstein, Esq.
Goldstein & Stoloff
26 Hamilton Avenue
P. O. Box 1129
Monticello, NY 12701

Schedule of Compliance

1. Interim leachate control. Respondent shall install an interim leachate collection system within 30 days after Respondent's execution of this Order. Leachate collected shall be transported via a hauler permitted under Part 364, to a facility approved to accept such waste.
2. Intermediate cover. Respondent shall place an intermediate barrier soil cover, as specified in Section 360-7.9(i)(1), within 60 days after Respondent's execution of this Order.
3. PCIP. Within 60 days after execution of this Order by Respondent, Respondent shall submit a Proposed Closure Investigation Plan ("PCIP") to determine:
 - a. the nature of the wastes disposed,
 - b. the effect of the site on the environment, and
 - c. the type of remediation required for closure.

The PCIP shall include all information listed in Appendix A. The PCIP, as approved, shall be deemed incorporated into this Order as Appendix C.

4. CIR. Within 90 days of receiving notice that the PCIP is approved, Respondent shall submit a Closure Investigation Report (CIR) determining the following:
 - a. the proposed classification of the waste disposed,
 - b. the environmental setting,
 - c. the effect of the site on the environment.

The CIR Format and implementation schedule to be applied are found in Appendix B. The CIR, when approved, shall be deemed incorporated into this Order as Appendix D.

5. CIR supplementation. The Department reserves the right to require a modification and/or an amplification and expansion of the closure investigative report by Respondent if the Department determines that further investigation is necessary, as a result of reviewing data generated by the closure investigation or as a result of reviewing other data or facts concerning the Facility.
6. Facility classification. After DEC's review of the approved CIR, DEC shall notify the Respondent in writing whether the facility is classified as a construction and demolition debris site or as a landfill (household waste and/or industrial waste).

7. Closure and Post Closure Monitoring. Closure of the facility shall be in compliance with the standards of Part 360, according to the classification of the facility. After notice of facility classification is given to Respondent by DEC, the Respondent shall comply with the following:
- a. In the event that the facility is classified as a construction and demolition debris site, Respondent shall, within 90 days after receipt of notice pursuant to Paragraph 6, submit a closure plan in compliance with Section 360-7.11.
 - b. In the event that the facility is classified as a landfill (household waste and/or industrial waste), Respondent shall, within 90 days after receipt of notice pursuant to Paragraph 6, submit a closure plan in compliance with Section 360-2.15.

The closure plan shall include a detailed estimate of the total costs of closure and post-closure monitoring.

8. Surety. The Department shall have the authority to require Respondent to provide surety or financial responsibility conditioned upon compliance with this Order, including the Appendices incorporated herein, pursuant to Section 360-1.12. Respondent shall comply with this requirement if requested by DEC.

APPENDIX A

PROPOSED CLOSURE INVESTIGATION PROGRAM (PCIP)

- I) Borings and Groundwater Monitoring wells
 - a. Proposed location based on surficial geology, topography, published information, fracture tracing, etc.
 - b. Borings
 - o borings for installation of piezometers and groundwater monitoring wells will have continuous split-spoon sampling during drilling with detailed boring logs utilizing the United Soil Classification System for field identification.
 - o other borings shall have periodic split-spoon sampling (once every 5 feet and at each change in strata).
 - c. Proposed design of Monitoring Wells
 - o Couples/or clusters and piezometers
 - o Materials
 - o Locking mechanisms
 - d. Proposed schedule of installation and monitoring
 - o Timing for installation (5 day prior notice to DEC)
 - o A proposed schedule for an initial round of sampling for all parameters listed on Attachment I, and for periodic sampling of appropriate parameters thereafter until such time as a different sampling regimen shall become effective under a permit or Closure Plan.
- II) Methods and scheduling for the determination of the aquifer characteristics, eg., pump test, in-situ permeability test.
 - o Timing for testing (5 day prior notice to DEC)
- III) Proposed geophysical surveys and their approximate locations in order to help better define the subsurface conditions (if applicable).
- IV) Proposed Means of Determining Waste Classification; to include:
 - o Trenching and test pits for visual observation of waste
 - o Organic Vapor Analysis or H₂ Analysis (detection from soil or excavated waste)

- o priority pollutant analysis of waste, soil, leachate, groundwater, surface water, public and/or private water supply wells

V) Site specifics

- o Location of surface waters
- o Monitoring of surface waters
- o Location of aquifer and water supply wells
- o Monitoring of private and public water supplies including frequency and parameters.

VI) A schedule for carrying out the PCIP. The PCIP may be implemented in phases.

VII) Names, certifications, and scope of services provided

- a. Engineering/Geological Consultant(s)
- b. Subcontractors (well driller, analytical laboratories)

VIII) Location of all public and private water wells within a mile radius and a sampling protocol for all nearby wells.

APPENDIX B

Closure Investigation Report (CIR)

The hydrogeologic report must meet the requirements of Section 360-7.6.

In addition, the CIR must include:

1. the location of public and private wells
2. all sampling results
3. analysis of waste from trenching
4. effect on the environment
5. contingency plan for sensitive environmental problems, i.e., floodplains and wetlands

APPENDIX B

VILLAGE OF MONTICELLO PUBLIC WATER SUPPLY REGULATIONS

RULES AND REGULATIONS
FOR
PROTECTION FROM CONTAMINATION
OF THE
PUBLIC WATER SUPPLY
OF THE
VILLAGE OF MONTICELLO
SULLIVAN COUNTY

Promulgated by the New York State Commissioner of Health under §1100 of the
Public Health Law

Pursuant to the authority vested in me as State Commissioner of Health by §1100 of the Public Health Law, I hereby repeal §148.2 of Part 148, Title 10 (Health) of the Official Compilation of Codes, Rules and Regulations of the State of New York, and add a new §148.2 to be effective upon filing with the Secretary of State, to read as follows: §148.2, Village of Monticello, Sullivan County.

Commissioner of Health of the
State of New York

Albany, New York

19

(a) Application The rules and regulations herein set forth, duly made and enacted in accordance with the provisions of §1100-1107 of the Public Health Law shall apply to Kiamesha Lake and all watercourses tributary thereto or which may ultimately discharge into said Kiamesha Lake or which may be developed in the future to serve as sources of the water supply to the Village of Monticello.

(b) Definitions

- (1) Agricultural Associated Animal Waste shall mean manure obtained from agricultural industries.
- (2) Herbicide shall mean any substance used to destroy or inhibit plant growth.
- (3) Human Excreta shall mean human feces and urine.
- (4) Junkyard shall mean an area where two or more unregistered, old, or secondhand motor vehicles are being accumulated for purposes of disposal, resale of used parts or reclaiming certain materials such as metal, glass, fabric, and/or the like.
- (5) Linear Distance shall mean the shortest horizontal distance from the nearest point of a structure or object to the high water mark of a reservoir or to the edge, margin, or steep bank forming the ordinary high water line of a watercourse.
- (6) Manure shall mean animal feces and urine.
- (7) Nonagricultural Associated Animal Waste shall mean manure obtained from nonagricultural industries.
- (8) Pesticide shall mean any substance used to destroy or inhibit pests such as rodents and insects.
- (9) Pollutant shall mean dredge, spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, chemical waste, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal wastes, agricultural and nonagricultural associated animal wastes.
- (10) Radiation shall mean ionizing radiation, that is, any alpha particle, beta particle, gamma ray, x-ray, neutron, high-speed proton, and any other atomic particle producing ionization, but shall not mean any sound or radio wave, or visible, infrared, or ultraviolet light.

- (11) Radioactive Material shall mean any material in any form that emits radiation spontaneously.
- (12) Refuse shall mean all putrescible and nonputrescible solid wastes including garbage, manure, rubbish, ashes, incinerator residue, street cleanings, dead animals, offal and solid commercial and industrial wastes.
- (13) Refuse Disposal Area shall mean land used for the depositing of refuse except that it shall not include the land used for the depositing of refuse from a single family, a member of which is the owner, occupant, or lessee of said land, or any part of a farm on which only agricultural associated animal wastes resulting from the operation of such farm are deposited.
- (14) Reservoir shall mean any natural or artificial lake or pond which is tributary to or serves as a source of the Village of Monticello water supply.
- (15) Sewage shall mean any liquid or solid waste matter from a domestic, commercial, private, or industrial establishment which is normally carried off in sewers or waste pipes.
- (16) Sewage Disposal System shall mean any system used for disposing of sewage and includes treatment works.
- (17) Toxic Chemical shall mean any toxic substance as so defined by statute (see subdivision two of §4801 of the Public Health Law).
- (18) Treatment Works shall mean any treatment plant, sewer, disposal field, lagoon, pumping station, septic system, constructed drainage ditch or surface water intercepting ditch, incinerator, area devoted to sanitary landfill, or other works not specifically mentioned in this paragraph, installed for the purpose of treating, neutralizing, stabilizing, or disposing of sewage.
- (19) Watershed shall mean the entire drainage area contributing water to the Village of Monticello water supply.
- (20) Water Supply shall mean the public water supply of the Village of Monticello.
- (21) Watercourse shall mean every spring, stream, marsh, or channel of water of any kind which flow or may flow into the Village of Monticello water supply.

(c) General Prohibitions No person, including State agencies or political subdivisions having jurisdiction, shall perform any act or grant any permit or approval which may result in the contravention of the standards for raw water quality as contained in Part 170 of Title 10 (Health) of the Official Compilation of Codes, Rules and Regulations of the State of New York (10 NYCRR Part 170).

(d) Specific Prohibitions

(1) Cementaries No interment of human body shall be made within a 250 foot linear distance of any reservoir or watercourse.

(2) Chloride Salt No chloride salt shall be used for the purpose of snow and ice control on State, County, or Town roadways within 500 feet linear distance of any reservoir or watercourse. Nor shall private contractors execute the same for housing development roadways. No chloride salt shall be stored within 500 feet linear distance of any reservoir or watercourse except in weather-proof buildings or watertight vessels.

(3) Herbicides and Pesticides No herbicides or pesticides shall be stored, discharged, applied, or allowed to enter into any reservoir or watercourse unless a permit to do so has been obtained from the appropriate State agency having jurisdiction.

(4) Human Excreta and Sewage

[i] No human excreta or sewage shall be deposited or allowed to escape into any reservoir or watercourse on the watershed.

[ii] No human excreta or sewage shall be deposited or spread upon the surface of the ground at any point on the watershed.

[iii] No human excreta or sewage shall be buried in the soil on the watershed unless deposited in trenches or pits at a linear distance of not less than 250 feet from any reservoir or watercourse and covered with not less than one foot of soil in such a manner as to effectually prevent its being washed into any reservoir or watercourse by rain or melting snow.

[iv] No privy receptacle or facilities of any kind for the deposit, movement, treatment or storage of human excreta or sewage shall be constructed, placed, maintained, or allowed to remain within a 150 foot linear distance of any reservoir or watercourse except (a) watertight receptacles; (b) water-flushed toilets connected by a watertight pipe to a sewage disposal system that has been approved by the appropriate

- State agency having jurisdiction over such facilities; and
(c) a properly designed, constructed, and operated treatment works that has been approved by the appropriate State agency having jurisdiction over such facility.
- [v] No portion of the seepage unit (title field, seepage pit or equivalent) of a subsurface sewage disposal system shall be constructed, placed or allowed to remain within a 150 foot linear distance of any reservoir or watercourse.
 - [vi] Every watertight receptacle used for containing human excreta or sewage shall be emptied when the receptacle is filled to within six inches of the top.
 - [vii] In emptying a watertight receptacle or in transferring its contents to a transportation receptacle, all necessary care shall be exercised to prevent contamination of any reservoir or watercourse. All such transportation receptacles shall be provided with tightly fitting covers which are securely fastened when transporting wastes to the place of ultimate disposal. The contents of the watertight receptacles shall be disposed of in accordance with paragraph [iii] of this subdivision or at a properly designed, constructed, and operated sewage disposal system that has been approved by the appropriate State agency having jurisdiction over such facility.
 - [viii] Before any existing sewage disposal system is altered or any new sewage disposal system is constructed on the watershed, the plans in relation thereto shall have been first approved by the appropriate State agency having jurisdiction over such facility. Standards for waste treatment works as published from time to time by the appropriate State agency having jurisdiction over such facility and paragraph [v] of this subdivision shall comprise the criteria to approve any proposed sewage disposal system.
- (5) Radioactive Material No radioactive material shall be disposed of by burial in soil within 1000 foot linear distance of any reservoir or watercourse and not within a 2000 foot linear distance of any reservoir or watercourse unless authorization has been obtained from the appropriate State agency and such burial is in accordance with the provisions of Part 16 of Title 10 (Health) of the Official Compilation of Codes, Rules, and Regulations of the State of New York (10 NYCRR Part 16).

(6) Recreation

- [i] Bathing, Wading, and Swimming No bathing, wading, or swimming shall be allowed in or on any reservoir serving as a source of the water supply for the Village of Monticello.
- [ii] Boating No baots that are powered by the utilization of fossil fuels will be permitted on any reservoir serving as a source of the water supply for the Village of Monticello. Boats designed to hold a capacity of more than four (4) people will not be permitted. Sail boats that do not enclose or have a containment area for the operator and passengers are prohibited on any reservoir serving as a source of the water supply for the Village of Monticello. Boat trailers are prohibited from entering the waters of any reservoir serving as a source of the water supply for the Village of Monticello.
- [iii] Rafts No docks, floats, or rafts will be permitted on the surface of any reservoir serving as a source of the water supply for the Village of Monticello which are not attached to the shore. They must be removed no later than October 31st, so as not to be in or on any reservoir serving as a source of the water supply for the Village of Monticello during the winter months.
- [iv] Float Tubes Inflatable water devices ie: mattresses, tubes, boats, rafts, etc. are not permitted on any reservoir serving as a source of the water supply for the Village of Monticello.

BOATING PERMIT

1. Any person, party, or business that wishes to place a boat on the waters of any reservoir serving as a source of the water supply for the Village of Monticello will make application for a permit at the Village Hall, 2 Pleasant Street, Monticello, New York, between 9AM to 4PM, Monday thru Friday.
2. The Applicant will provide the following information:
 - A. Serial # of boat.
 - B. Color of boat.
 - C. Make & Model of boat.
 - D. Size of boat.
3. Prior to the issuance of a permit, the boat will be inspected.

No boat that is deemed unsafe will be issued a permit or allowed on any reservoir serving as a source of the water supply for the Village of Monticello.

4. The following emergency equipment shall be on the boat at the time of inspection and on the boat when in use on any reservoir serving as a source of the water supply for the Village of Monticello:
 - A. One (1) C.G. approved P.F.D. for each person aboard.
 - B. One (1) battery operated light for boats used between sunset and sunrise.
5. The fee for the permit will be \$5.00 annually. Boats issued a permit will display a decal issued by the Village on the bow. Failure to obtain a permit will result in a \$50.00 fine.

(7) Solid Waste

- [i] Junkyards No junkyard shall be located within 500 foot linear distance of any reservoir serving as a source of the water supply for the Village of Monticello.
- [ii] Refuse No refuse or litter shall be deposited on or beneath the surface of ground within a 250 foot linear distance of any reservoir serving as a source of the water supply for the Village of Monticello.
- [iii] Refuse Disposal Area No refuse disposal area shall be located within a 1000 foot linear distance of any reservoir serving as a source of the water supply for the Village of Monticello.

- (8) Toxic Substance No container used for the storage of toxic substances shall be buried beneath the surface of the ground within a 1000 foot linear distance of any reservoir serving as a source of the water supply for the Village of Monticello.

(9) Miscellaneous

- [i] Structures No hut, tent, shelter, or building of any kind except a waterworks structure, shall be permitted on the water or ice of any reservoir serving as a source of the water supply for the Village of Monticello.
- [ii] Other Wastes No pollutant of any kind shall be discharged or allowed to flow into any reservoir serving a a source of the water supply for the Village of Monticello or on or beneath the surface of the ground on the watershed within

1000 feet of any reservoir serving as a source of the water supply for the Village of Monticello. This restriction shall not apply to the effluent from a treatment works installed in accordance with plans which first have been submitted to and approved by the appropriate State agency having jurisdiction over such facilities.

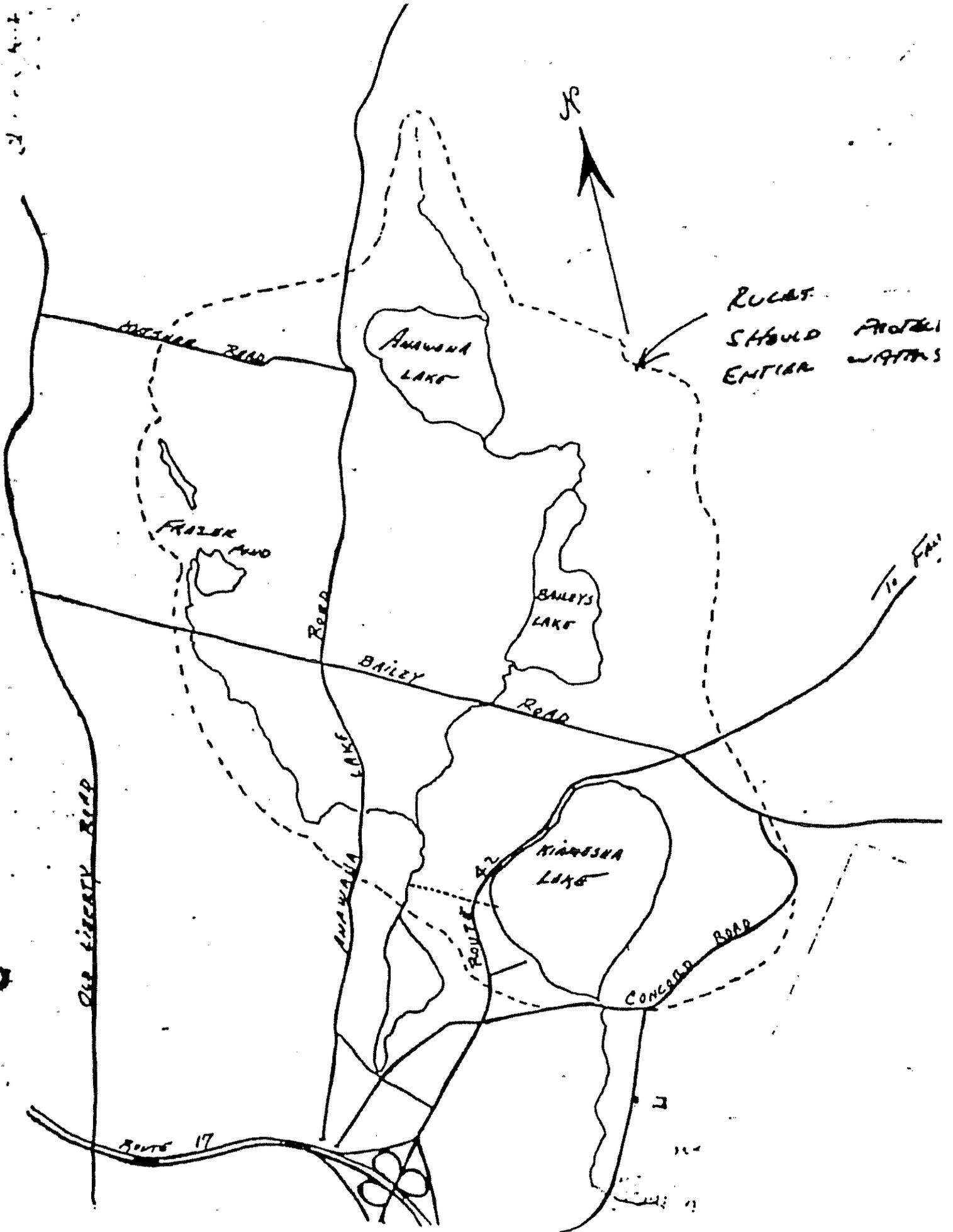
- [iii] All houses and garages within the immediate watershed area of Kiamesha Lake will have oil traps and or oil separators in the foundation or footing drains. Fuel oil filling areas must have spillage containment areas approved by the Village of Monticello Water Department.
 - [iv] Land stripping of sod, rock, brush, or trees will not be permitted under any conditions within seventy-five (75) feet of any reservoir serving as a source of the water supply for the Village of Monticello. Selective tree or brush cutting will be permitted under direct supervision of a duly appointed representative of the Village of Monticello Water Department.
 - [v] Raising or keeping of livestock, farm animals, or operations of kennels, animal hospitals and animal boarding will be prohibited within the immediate watershed area of Kiamesha Lake.
 - [vi] Before construction of housing, roads, and parking areas or development of any form is to proceed and proper permits have been obtained, sedimentation basins must be built of the appropriate number, size, and shape to handle runoff of storm water during construction. These basins must not be closer than 100 feet from the shoreline of any reservoir serving as a source of the water supply for the Village of Monticello with approval of the Village of Monticello Water Department. Basins will be inspected by the Water Department personnel, during and after construction.
- (10) Inspections The Village of Monticello's Water Department Superintendent or any person or persons charged with the maintenance or supervision of the public water supply system shall by its officers or their duly appointed representatives make regular and thorough inspections of the reservoir, watercourses, and watershed to ascertain whether these rules and regulations are being complied with.

It shall be the duty of the aforesaid Superintendent to cause copies of any rules and regulations violated to be served upon the persons violating the same, together with notices of such violations. If such persons do not immediately comply with the rules and regulations, it shall be the further duty of the aforesaid Water Department Superintendent to promptly notify the State Commissioner of Health of such violations. The aforesaid Superintendent shall report to the State Commissioner of Health in writing annually, prior to the 30th day of January, the results of the regular inspections made during the preceding year. The report shall state the number of inspections which were made, the number of violations found, the number of notices served, the number of violations abated, and the general condition of the watershed at the time of the last inspection.

[i] In addition to observing the foregoing requirements, all persons living on or visiting the watershed shall refrain from any action, though not hereinbefore specified, which may result in contamination of any portion of the water supply of the Village of Monticello. Tenants and owners of property are, therefore, advised to consult with the Village of Monticello Water Department before committing any act that may lead to the pollution of any spring, marsh, watercourse, or reservoir in any way connected with the Water Shed area.

- (11) Penalties for Violations Penalties for violations of these rules and regulations shall be those specified by §1103 of the Public Health Law.

APPENDIX C
PAST PBS REGISTRATION



PETROLEUM BULK STORAGE APPLICATION

Pursuant to the Petroleum Bulk Storage Law,
Article 17, Title 10 of ECL; and 6 NYCRR 612-614.

Please Type or Print Clearly
and Complete All Items

(Continued on Reverse Side—Please Be Sure to Complete Section B)

SECTION A—See Instructions on Cover Sheet

NYS DEC - REGION 3
21 SOUTH PUTT CORNERS ROAD
NEW PALTZ, NY 12561
(914) 255-5453



<p>PBS NUMBER <u>3-410225</u></p> <p>Indicate Other Existing DEC Numbers, if any, for this Facility:</p> <p>CBS Number: <u>N/A</u></p> <p>SPDES Number: <u>N/A</u></p> <p>TRANSACTION TYPE (Check all that apply) NOTE: Transaction Types 1, 2 and 5 require a fee.</p> <p><input type="checkbox"/> Initial/ New Facility</p> <p><input type="checkbox"/> Change of Ownership</p> <p><input type="checkbox"/> Substantial Tank Modification</p> <p><input type="checkbox"/> Information Correction</p> <p><input checked="" type="checkbox"/> Renewal</p> <p>Geographical Locator for this Facility: (if known)</p> <p>LATITUDE: <u>41 44 40</u> DEG MIN SEC</p> <p>LONGITUDE: <u>71 43 92 0</u> DEG MIN SEC</p>	<p>FACILITY</p> <p>NAME <u>CONCORD RESORT HOTEL</u> LOCATION (Not P.O. Boxes) <u>KIAMESHA LAKE</u> LOCATION (Continued) CITY/TOWN/VILLAGE <u>KIAMESHA LAKE</u> COUNTY <u>SULLIVAN</u> STATE <u>NY</u> ZIP CODE <u>12751</u> TOWNSHIP OR CITY <u>THOMPSON</u> NAME OF OPERATOR AT FACILITY <u>KIAMESHA CONCORD</u> FACILITY TELEPHONE NUMBER <u>(914) 794-4000</u> EMERGENCY CONTACT NAME <u>KIAMESHA CONCORD</u> EMERGENCY CONTACT PHONE NO. <u>(914) 794-4000</u></p>	<p>OWNER</p> <p>NAME <u>KIAMESHA CONCORD INC</u> ADDRESS (Street and/or P.O. Box) <u>CONCORD RESORT HOTEL</u> CITY <u>KIAMESHA LAKE</u> STATE <u>NY</u> ZIP CODE <u>12751</u> OWNER TELEPHONE NUMBER <u>14-0799922</u> FEDERAL TAX ID NO. <u>(914) 794-4000</u></p> <p>TYPE OF OWNER (Check only one)</p> <p><input type="checkbox"/> Private Resident <input type="checkbox"/> State Government <input type="checkbox"/> Local Government</p> <p><input checked="" type="checkbox"/> Federal Government <input checked="" type="checkbox"/> Corporate/Commercial</p>	<p>CORRESPONDENCE MAILING</p> <p>ATTENTION <u>GEORGE PARKER, VICE PRESIDENT</u></p> <p>NAME OF COMPANY <u>KIAMESHA CONCORD INC</u></p> <p>ADDRESS <u>CONCORD RESORT HOTEL</u></p> <p>CITY/STATE/ZIP CODE <u>KIAMESHA LAKE, NY 12751</u></p> <p>TELEPHONE NUMBER <u>(914) 794-4000</u></p>	<p>TYPE OF PETROLEUM FACILITY: (Check all that apply)</p> <p>A. <input type="checkbox"/> Storage Terminal/Petroleum Distribution</p> <p>B. <input type="checkbox"/> Retail Gasoline Sales</p> <p>C. <input type="checkbox"/> Other Retail Sales</p> <p>D. <input type="checkbox"/> Manufacturing</p> <p>E. <input type="checkbox"/> Utility</p> <p>F. <input type="checkbox"/> Trucking/Transportation</p> <p>G. <input type="checkbox"/> Apartment Building</p> <p>H. <input type="checkbox"/> School</p> <p>I. <input type="checkbox"/> Farm</p> <p>J. <input type="checkbox"/> Private Residence</p> <p>K. <input type="checkbox"/> Airline (Air Taxi) <input checked="" type="checkbox"/> Other (Specify) <u>RESORT HOTEL</u></p>	<p>I hereby certify under penalty of perjury that the information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.</p> <p>NAME OF OWNER OR AUTHORIZED REPRESENTATIVE <u>GEORGE N. PARKER</u></p> <p>TITLE <u>VICE PRESIDENT</u></p> <p>SIGNATURE <i>George N. Parker</i></p> <p>DATE <u>12/14/92</u></p> <p>AMOUNT ENCLOSED <u>\$ 250.00</u></p>	<p>Page <u>1</u> of <u>1</u></p> <p>Date Received: <u>12, 10, 92</u></p> <p>Date Processed: <u>12, 28, 92</u></p> <p>Amount Received \$ <u>250.00</u></p> <p>Reviewed By: <i>[Signature]</i></p>
--	---	--	--	--	---	--

7276

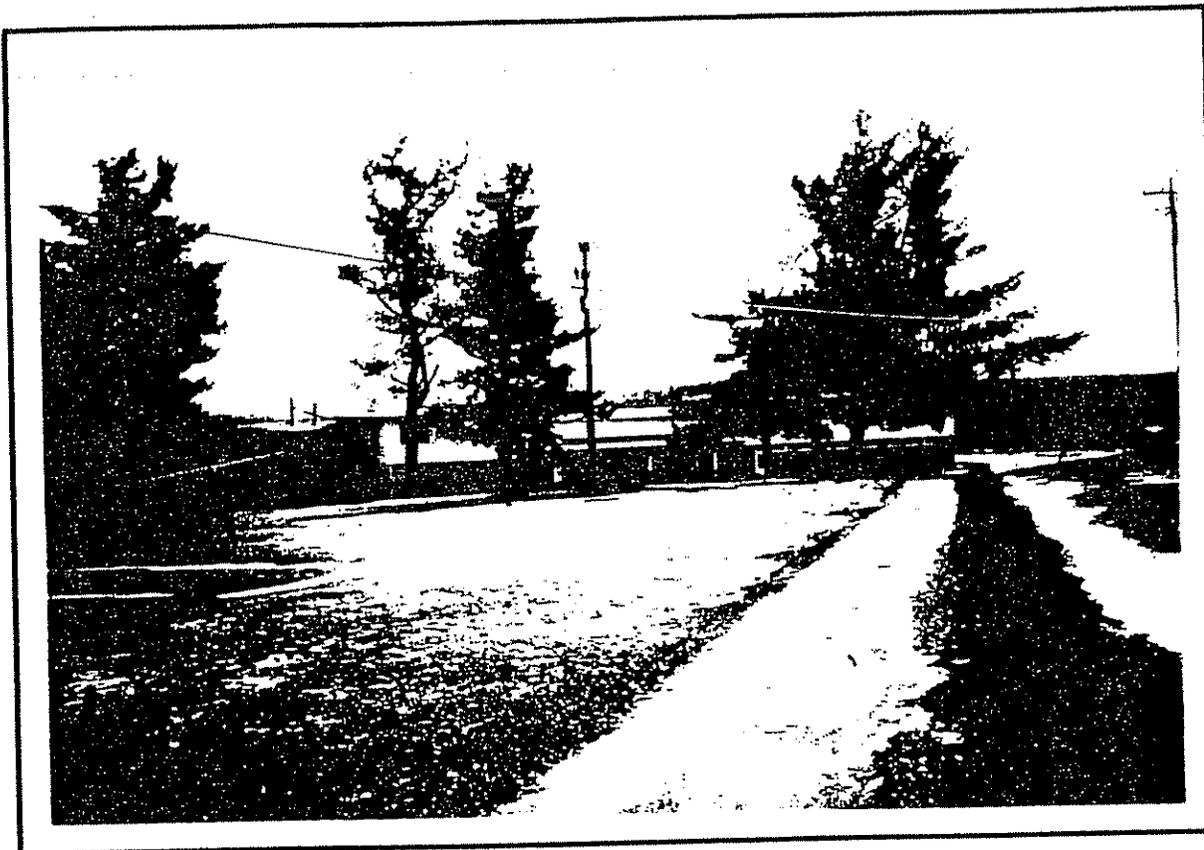


Photo No. 3 - View of International Golf Club building.



Photo No. 4 - View of Main Parking Area, located east of hotel complex.

Tank Information for Petroleum Bulk Storage Facility

EXPIRATION DATE: 02/03/93

SECTION B—See Instructions on Cover Sheet

Action	Tank Number	Tank Location	Status	Installation or Permanent Closure Date (MO) (YR)	Capacity (Gallons)	Product Stored	Tank Type	Tank Internal Prot.	Tank External Protection	Piping Location	Piping Type	Piping Internal Prot.	Piping External Protection	Secondary Containment	Leak Detection	Spill/Overflow Prevention	Dispenser	Last Test Date (Underground Tanks) (MO) (YR)
1	BL	4	1	0 0 0	15,000	3	1				2			0	0		3	0 9 8
1	BU	4	1	0 0 0	15,000	3	1				2			0	0		3	1 0 8
1	CHI	4	1	0 0 0	10,000	3	1				2			0	0		3	0 9 8

KEY FOR SECTION B	INTERNAL PROTECTION: Tank/Piping	SECONDARY CONTAINMENT	SPILLOVERFILL PREVENTION
ACTION	TANK TYPE	SECONDARY CONTAINMENT	SPILLOVERFILL PREVENTION
1 Initial Listing	1 Steel/Carbon Steel	0 None	0 None
2 Add Tank	2 Stainless Steel Alloy	1 Vault	1 Float Vent Valve
3 Close/Remove Tank	3 Concrete	2 Double-Walled Tank	2 High Level Alarm
4 Information Correction	4 Fiberglass Coated Steel	3 Excavation Liner	3 Automatic Shut-off
5 Recondition/Repair/Reline Tank	5 Fiberglass Reinforced Plastic (FRP)	4 Cut-off Walls	4 Product Level Gauge
	6 Equivalent Technology	5 Impervious Underlayment	5 Catch Basin
	9 Other*	6 Earthen Dike	6 Vent Whistle
STATUS	INTERNAL PROTECTION: Tank/Piping	SECONDARY CONTAINMENT	SPILLOVERFILL PREVENTION
1 In-service	0 None	0 None	0 None
2 Temporarily out-of-service	1 Epoxy Liner	1 Vault	1 Float Vent Valve
3 Closed—Removed	2 Sacrificial Anode	2 Double-Walled Tank	2 High Level Alarm
4 Closed—In Place	3 Impressed Current	3 Excavation Liner	3 Automatic Shut-off
5 Tank Converted to Non-Regulated Use	4 Fiberglass	4 Cut-off Walls	4 Product Level Gauge
	5 Jacketed	5 Impervious Underlayment	5 Catch Basin
	9 Other*	6 Earthen Dike	6 Vent Whistle
PRODUCT STORED	EXTERNAL PROTECTION: Tank/Piping	SECONDARY CONTAINMENT	SPILLOVERFILL PREVENTION
0 Empty	0 None	0 None	0 None
1 Leaded Gasoline	1 Painted/Asphalt Coating	1 Vault	1 Float Vent Valve
2 Unleaded Gasoline	2 Sacrificial Anode	2 Double-Walled Tank	2 High Level Alarm
3 Nos. 1, 2, or 4 Fuel Oil	3 Impressed Current	3 Excavation Liner	3 Automatic Shut-off
4 Nos. 5 or 6 Fuel Oil	4 Fiberglass	4 Cut-off Walls	4 Product Level Gauge
5 Kerosene	5 Jacketed	5 Impervious Underlayment	5 Catch Basin
6 Diesel	9 Wrapped (Piping)	6 Earthen Dike	6 Vent Whistle
A Lube Oil	9 Other*	7 Prefabricated Steel Dike	9 Other*
9 Other*	PIPING LOCATION	8 Concrete Dike	DISPENSER
	0 None	A Synthetic Liner	1 Submersible
	1 Aboveground	B Natural Liner	2 Suction
	2 Underground	9 Other*	3 Gravity
	3 Aboveground, vaulted, with access	LEAK DETECTION	
		0 None	
		1 Interstitial Monitoring	
		2 Vapor Well	
		3 Groundwater Well	
		4 In-tank System	
		5 Concrete Pad with channels	
		6 Other*	

* If Other, please list on separate sheet including the Tank Number

PETROLEUM BULK STORAGE REGISTRATION CERTIFICATE

NYS DEC - REGION 3
 21 SOUTH PUTT CORNERS ROAD
 NEW PALTZ, NY 12561

(914) 255-5453 Page 1 of 1

TANK NUMBER	DATE INSTALLED	TANK TYPE	CAPACITY (GALLONS)	DATE LAST TESTED	TESTING DUE DATE
BL	00/00	Steel/Carbon Steel	15,000	09/89	09/94
BU	00/00	Steel/Carbon Steel	15,000	10/87	10/92
CH1	00/00	Steel/Carbon Steel	10,000	09/89	09/94

OWNER
 KIAMESHA CONCORD INC
 CONCORD RESORT HOTEL
 KIAMESHA LAKE, NY 12751

SITE
 CONCORD RESORT HOTEL
 KIAMESHA LAKE
 KIAMESHA LAKE, NY 12751

OPERATOR (Name and Telephone Number)
 KIAMESHA CONCORD INC
 (914) 794-4000

EMERGENCY CONTACT (Name and Telephone Number)
 KIAMESHA CONCORD INC
 (914) 794-4000

As an authorized representative of the above named facility, I affirm under penalty of perjury that the information displayed on this form is correct to the best of my knowledge. Additionally, I recognize that I am responsible for assuring that this facility is in compliance with all sections of 6 NYCRR Parts 612, 613 and 614, not just those cited below:

- The facility must be re-registered if there is a transfer of ownership.
- The Department must be notified within 30 days prior to adding, replacing, reconditioning, or permanently closing a stationary tank.
- The facility must be operated in accordance with the code for storing petroleum, 6 NYCRR Part 613.
- Any new facility or substantially modified facility must comply with the code for new and substantially modified facilities, 6 NYCRR Part 614.
- This certificate must be posted on the premises at all times. Posting must be at the tank, at the entrance of the facility, or the main office where the storage tanks are located.
- Any person with knowledge of a spill, leak or discharge must report the incident to DEC within two hours (1-800-457-7362).

Signature of Authorized Representative/Owner _____ **Date** _____

Name of Authorized Representative/Owner (Please Print) _____ **Title** _____

ISSUED BY:
 Commissioner Thomas C. Jorling

PETROLEUM BULK STORAGE ID NUMBER
 3-410225

DATE ISSUED
 12/28/92

EXPIRATION DATE
 02/03/98

FEE PAID
 \$ 250

MAILING CORRESPONDENCE
 GEORGE PARKER, V.P.
 KIAMESHA CONCORD INC
 CONCORD RESORT HOTEL
 KIAMESHA LAKE, NY 12751

THIS REGISTRATION CERTIFICATE IS NON-TRANSFERABLE

APPENDIX D

CONCORD SERVICE STATION UST QUESTIONNAIRE

UST QUESTIONNAIRE
FORMER EXXON SERVICE STATION
CONCORD HOTEL PROPERTY

Who owned the underground storage tanks (USTs) at the time of removal and disposal?

Premium Gas Service, Inc.
Station Hill Road, PO Box 217, Ferrisdale, NY 12734

Please provide copies of all UST registration certificates, including the New York State Department of Environmental Conservation (NYSDEC) petroleum bulk storage (PBS) number.

PBS # 179159 - Copy of Registration & Modification Attach.

Which firms (and key contact people involved) were retained to assist in the removal and disposal of the USTs and their function? Please note telephone numbers if available. 3 pages

Robert Dubas Excavating 914-985-2286

Please indicate the types of documentation available (and attach copies of receipts) to explain the amount of contaminated soil removed, the disposal destination of these soils, and the disposal destination of each UST. Test from Envirotec for soil -

mostly No stone Attached 3 pages - No disposal Required

3 RRF Tanks were broken up & taken to Sull. Co. Landfill - No docum
1 Steel Tank was retained by Premium used as house to contractors as a Temp Tank.

Please provide receipts for the amount of contaminated groundwater removed and disposed, as well as the disposal destination. Removal by Huzon Environmental

Total 12,300 gallons, disposed of at Huzon's facility
1 Industrial Park, Woodridge, NY 12789

4 pages

Please provide copies of analytical data obtained for confirming that all contaminated soils were removed from the UST excavation areas. None

Please list the names of NYSDEC personnel present during UST/soil removal activities, also include the dates that NYSDEC personnel were present.

Dolores Wehrfritz, Various times during tank removal & disposal. 9/20/91 - 10/2/91 approx.

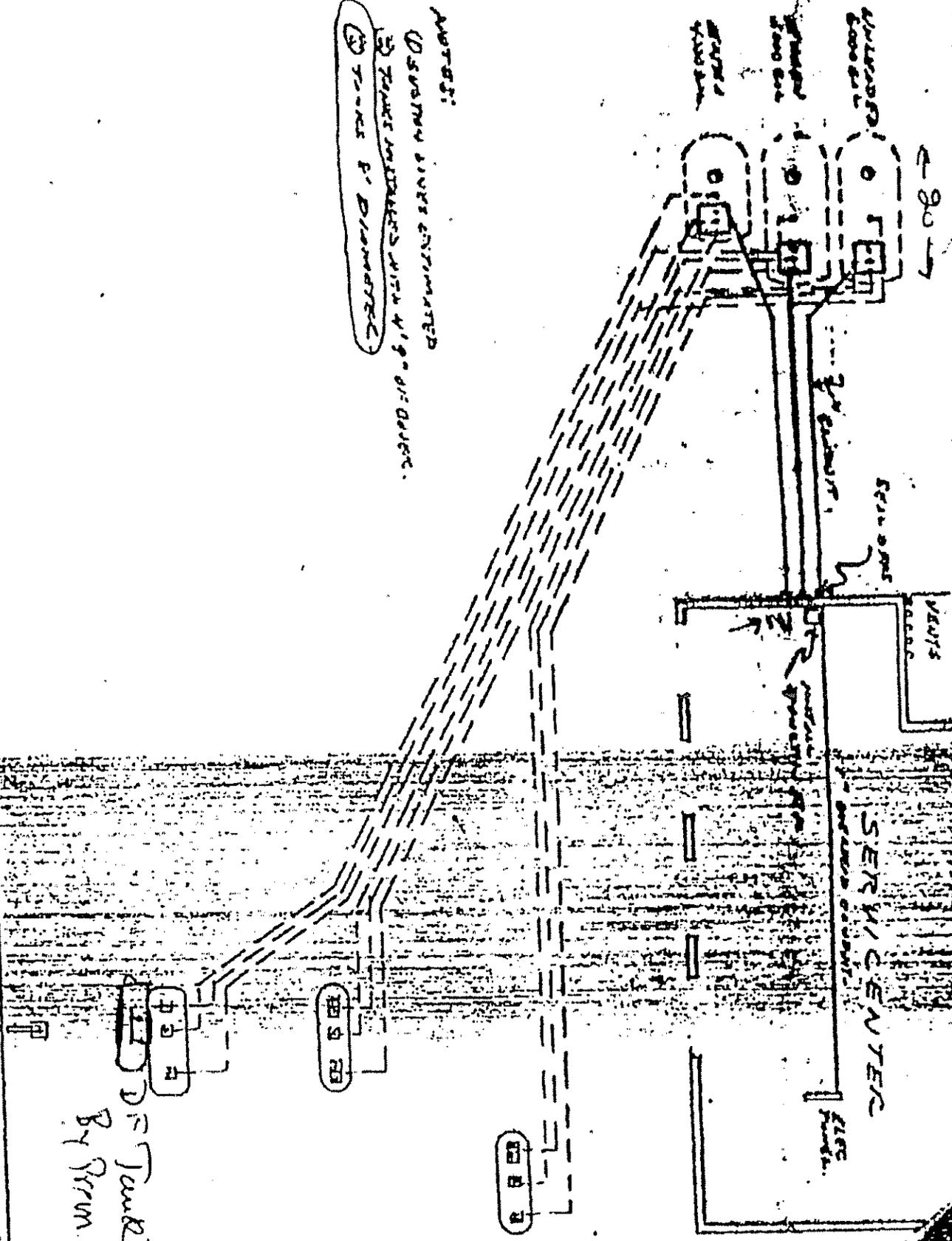
Please provide copies of documentation sent to the NYSDEC to de-list the USTs as part of removal/disposal activities. *see PBS modification*

Please provide information on prior UST ownership and list contacts and telephone numbers so as we can discuss these matters further. *Exxon Corp., 101 Merritt 7 Corporate Park, Norwalk, CT. Sold Tanks to Premium on 7/7/83. 3 RFG Gasoline Tanks.*

Please provide copies of analytical data obtained to explain whether or not the quantities of contaminated soil and groundwater removed is non-hazardous. As necessary, please explain details on these matters. *See Test Results on Soil attached. Water was recycled by Luzon at their permitted facility in Wood Ridge, N.Y.*

Please provide a sketch of the approximate location of the former UST locations on the attached Site Layout Supplemental Sheet, please note the service station building and any dispenser isles.

NOTES:
 (1) SUTURE DIVERS ESTIMATED
 (2) TANKS INSTALLED WITH 4" 9" DI. DUCT.
 (3) TANKS 5' DIAMETER



CONCORD ROAD

DR Tank Installation
 By RRM

STA # 1540
 GENELO EXHON
 WAMENSTON LAKE
 DRUG # 1540-1
 3/11/76
 M.S.



STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 DIVISION OF WATER • BUREAU OF SPILL PREVENTION AND RESPONSE
PETROLEUM BULK STORAGE APPLICATION
 Pursuant to the Petroleum Bulk Storage Law,
 Article 17, Title 10 of ECL, and 6 NYCRR 612.614.



Please Type or Print Clearly
 and Complete All Items

(Continued on Reverse Side—Please Be Sure to Complete Section B)
SECTION A—See Instructions on Cover Sheet

PMS NUMBER 179154		Indicates Other Existing DEC Numbers, if any, for this Facility: DEC Number: _____ SPDES Number: _____	
TRANSACTION TYPE (Check all that apply) NOTE: Transaction Types 1, 2 and 5 require a fee 1. <input type="checkbox"/> New Facility 2. <input type="checkbox"/> Change of Ownership 3. <input checked="" type="checkbox"/> Substantial Information 4. <input checked="" type="checkbox"/> Correction 5. <input type="checkbox"/> Renewal		NAME Kiamiska Concord Service Station	
LOCATION (Not P.O. Box) Concord Road		LOCATION (continued) CITY/TOWNSHIP/VILLAGE Kiamiska	
COUNTY Sullivan		TOWNSHIP OR CITY Thompson	
NAME OF OPERATOR AT FACILITY Kiamiska Concord		FACILITY TELEPHONE NUMBER (914) 294-1265	
EMERGENCY CONTACT NAME Stephen Kalka		EMERGENCY CONTACT PHONE NO. 914 334-3509	
NAME Premium Gas Service, Inc.		TYPE OF PETROLEUM FACILITY: (Check all that apply) A. <input type="checkbox"/> Storage Terminal/Petroleum Distributor B. <input checked="" type="checkbox"/> Retail Gasoline Sales C. <input type="checkbox"/> Other Retail Sales D. <input type="checkbox"/> Manufacturing E. <input type="checkbox"/> Utility F. <input type="checkbox"/> Trucking/Transportation G. <input type="checkbox"/> Apartment Building H. <input type="checkbox"/> School I. <input type="checkbox"/> Farm J. <input type="checkbox"/> Private Residence K. <input type="checkbox"/> Airline (Air Taxi) L. <input type="checkbox"/> Other (Specify) _____	
ADDRESS (Street and/or P.O. Box) Station Hill Road		I hereby certify under penalty of perjury that the information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.	
CITY Fenimore		NAME OF OWNER OR AUTHORIZED REPRESENTATIVE Stephen Kalka	
FEDERAL TAX ID NO. 14-1410847		OWNER TELEPHONE NUMBER (914) 292-5550	
TYPE OF OWNER (Check only one) 1. <input type="checkbox"/> Private Resident 2. <input type="checkbox"/> State Government 3. <input type="checkbox"/> Local Government 4. <input type="checkbox"/> Federal Government 5. <input checked="" type="checkbox"/> Corporate/Commercial		TITLE General Manager	
ATTENTION Robert Blank		SIGNATURE Stephen Kalka	
NAME OF COMPANY Premium Gas Service, Inc.		DATE 10/15/91	
ADDRESS P.O. Box 247		OFFICIAL USE ONLY Page _____ of _____ Date Received: _____ Date Processed: _____ Amount Received \$ _____ Reviewed By: _____	
CITY/STATE/ZIP CODE Fenimore, NY 12234		LONGITUDE DEG MIN SEC _____	
TELEPHONE NUMBER (914) 292-5550		LATITUDE DEG MIN SEC _____	
CORRESPONDENCE MAILING ADDRESS		GEOGRAPHICAL LOCATOR for this Facility (if known)	

179159

Tank Information for Petroleum Bulk Storage Facility

SECTION B—See Instructions on Cover Sheet

ID No.	Tank Number	Tank Location	Status	Insulation or Permanent Closure (MO) (YR)	Capacity (Gallons)	Product Stored	Tank Type	Tank Internal Prot.	Tank External Protection	Piping Location	Piping Type	Piping Internal Prot.	Piping External Protection	Secondary Containment	Leak Detection	Spill/Overfill Prevention	Inventory	Last Test Date (MO) (YR)
	1		Y 3	9 9 1	6,000		2 5 0		0	2 2 0	2 2 0	0	0	0	0	0	0 1	N/A
	2		Y 3	9 9 1	6,000		2 5 0		0	2 2 0	2 2 0	0	0	0	0	0	0 1	N/A
	3		Y 3	9 9 1	Y,000		2 5 0		0	2 2 0	2 2 0	0	0	0	0	0	0 1	N/A
	4		Y 3	9 9 1	2,000		6 1 0		1	2 2 0	2 2 0	0	0	0	0	0	0 2	N/A

KEY FOR SECTION B

- ACTION**
- Initial Listing
 - Add Tank
 - Close/Remove Tank
 - Information Correction
 - Recondition/Repair
- Reline Tank**
- TANK LOCATION**
- Aboveground
 - Aboveground on address
 - Legal, utility, rack, or grade
 - Aboveground: 10% or more below ground
 - Underground
 - Underground, vaulted, with access
- STATUS**
- In-service
 - Temporarily out-of-service
 - Closed—Removal
 - Closed—In Place
 - Tank Converted to Non-Regulated Use
- PRODUCT STORED**
- Empty
 - Unleaded Gasoline
 - Unleaded Gasoline
 - Non. 1, 2 or 4 Fuel Oil
 - Non. 5 or 6 Fuel Oil
 - Kerosene
 - Diesel
 - Lube Oil
 - Other
- TANK TYPE**
- Steel/Carbon Steel
 - Stainless Steel Alloy
 - Concrete
 - Fiberglass Coated Steel
 - Fiberglass Reinforced Plastic (FRP)
 - Equivalent Technology
 - Other
- INTERNAL PROTECTION**
- None
 - Epoxy Liner
 - Rubber Liner
 - Fiberglass Liner (FRF)
 - Glass Liner
 - Other
- EXTERNAL PROTECTION**
- Painted Asphalt Coating
 - Sacrificial Anode
 - Impressed Current
 - Fiberglass
 - Jacketed
 - Wrapped (Pigging)
 - Other
- PIPING LOCATION**
- None
 - Aboveground
 - Underground
- SECONDARY CONTAINMENT**
- None
 - Vault
 - Double-Walled Tank
 - Elevation Liner
 - Cut-off Walls
 - Impervious Underlayment
 - Earth Dike
 - Prefabricated Steel Dike
 - Concrete Dike
 - Synthetic Liner
 - Natural Liner
 - Other
- LEAK DETECTION**
- Interstitial Monitoring
 - Vapor Weel
 - Groundwater Weel
 - In-tank System
 - Concrete Pad Mechanism
 - Other
- SPILLOVER/ILL PREVENTION**
- None
 - Float Vent Valve
 - High Level Alarm
 - Automatic Shut-off
 - Product Level Gauge
 - Catch Basin
 - Vent Venturis
 - Other
- DESIGNER**
- Submittable
 - Section
 - Garity

HITE PLAINS, NY 10601

(914) 761-6660

PETROLEUM BULK STORAGE REGISTRATION CERTIFICATE

TANK NUMBER	TESTING DUE DATE	DATE LAST TESTED	TANK TYPE	CAPACITY	DATE INSTALLED	FEE PAID
001	12/96		FIBERGLASS	6,000	12/81	250
002	12/96		FIBERGLASS	6,000	12/81	
003	12/96		FIBERGLASS	6,000	12/81	
004	12/93		RAIL STEEL	2,000	12/83	

Aboveground tanks require monthly visual inspections and documented Internal Inspections every ten years as described in 8 NYCRR Part 613.

ISSUED BY COMMISSIONER THOMAS C. JORLINE	OPERATOR KIAMISHA CONCORD
PETROLEUM BULK STORAGE ID NUMBER 179159	KIAMISHA CONCORD RD KIAMISHA NY
DATE ISSUED 08/17/87	EXPIRATION DATE 06/30/92
FACILITY KIAMISHA CONCORD SERVICE STATION CONCORD RD KIAMISHA NY	OWNER PREMIUM GAS SERVICE INC STATION HILL RD FERKDALE NY
12751	12751

As authorized representatives of the above named facility, I affirm under penalty of perjury that the information displayed on this form is correct to the best of my knowledge. Additionally, I recognize that I am responsible for assuring that this facility is in compliance with all sections of 8 NYCRR Parts 612, 613 and 614, not just those cited below:

- The facility must be reregistered if there is a transfer of ownership.
- The Department must be notified within 30 days prior to adding, replacing, reconditioning, or permanently closing a stationary tank.
- The facility must be operated in accordance with the Code for Storing Petroleum, 8 NYCRR Part 613.
- Any new facility or substantially modified facility must comply with the Code for New and Substantially Modified Facilities, 8 NYCRR Part 614.
- This certificate must be displayed on the premises at all times.

Signature of Representative/Owner _____ Date _____

EMERGENCY CONTACT
STEPHEN KALKA
RD 3 BOX 755
MONTEICELLO NY 12701
(914) 796-2553

OWNER COPY

ANALYTICAL REPORT

PREMIUM GAS SERVICE, INC.
P.O. BOX 247
FERMOALE NY 12734

Report Date: 25-OCT-91
Project: STANDARD
Lab Number: 104088
Sample Number(s): 104088-01
to
104088-01


Ronald A. Bayer
Laboratory Director

VOLATILE ORGANICS ANALYSIS DATA SHEET

Client Name: Premium Gas Service, Inc.
 Project Name: 3439
 Sample Location: Mason Jar
 Matrix: Soil
 Method: TCLP Method 1311 VOA
 Sample Wt/Vol:
 Level: Low
 Column: Pack

Lab Number: 104088-01
 Date Collected: 10/27/91
 Date Received: 10/3/91
 Date Extracted:
 Date Analyzed: 10/9/91
 Report Date: 10/15/91
 Lab File ID:
 Dilution Factor: 1

CAS NO.	COMPOUND	Detection Limit ug/l	Concn. ug/l
71-43-3	Benzene	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-1	Chlorobenzene	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethylene	5	U
78-93-3	2-Butanone	10	U
127-18-4	Tetrachloroethylene	5	U
79-01-6	Trichloroethylene	5	U
67-66-3	Chloroform	5	U
75-01-4	Vinyl chloride	5	U

FORM 1 -VOA

MEMO

DATE: SEPTEMBER 24, 1991

TO: ETHEL

RE: CONCORD EXXON

FROM: STEVE

COPY: ~~TRACY~~, *Rob*

ATTACHED ARE THE WASTE MANIFESTS FOR THE TWO LOADS OF CONTAMINATED WATER REMOVED FROM THE SITE YESTERDAY WITH THE OPERATOR'S TIME SHEET.

TOTAL REMOVED WAS 12,300 GALLONS AT AN AGREED COST OF \$.43/GALLON. EXPECT INVOICE FROM THEM FOR \$5,289.00.

11 INDUSTRIAL PARK
 WOODRIDGE, N.Y. 12789
 (914) 434-7805
 FAX: (914) 434-0307
 1-800-828-8240

2 WAREHOUSE LANE
 ELMSFORD, N.Y. 10523
 (914) 592-3418
 FAX: (914) 592-4325
 1-800-828-8249

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name Purina Gas
 Address Station Hill Rd
Franklin NY

Shipping Location Concord Essex
 Address Concord Rd
Kimberly NY

Phone No. [] [] [] - [] [] [] [] [] []

Phone No. [] [] [] - [] [] [] [] [] []

Lab Number	Description of Waste	Quantity		Containers		Code
		Units	No.	Type		
[] [] [] []	Fuel oil compatible liquid NA 1993 waste & water	26300	Q	01	<input checked="" type="checkbox"/>	G - Gallons D - Drum C - Carton B - Bag T - Truck P - Pounds Y - Yards O - Other <input checked="" type="checkbox"/> HCL
[] [] [] []						
[] [] [] []						

I hereby certify that the above named material is not a hazardous waste nor does it contain PCB's as defined by 40 CFR Part 261 or any applicable state law.

Generator Authorized Agent Name Steve Kalika Signature [Signature] Shipment Date 092391

TRANSPORTER

Transporter Name Ken-oil Corp
 Address Industrial Park
Woodbridge NY

Driver Name (Print) Frank Ruffino
 Vehicle No. / License No. 401091A NY
 Vehicle Certification 3A-005

I hereby certify that the above named material was picked up at the generator site listed above.

I hereby certify that the above named material was delivered without incident to the destination listed below.

Generator Signature [Signature] Shipment Date 092391 Driver Signature [] [] [] [] [] [] Delivery Date [] [] [] [] [] []

DESTINATION

This is to certify that _____ of the above cited waste material was received at _____
(Name, amount or portion in cubic yards, gallons, or truck loads)

Site Name Ken-oil Corp Phone No. 914-434-7805
 Address Industrial Park Woodbridge NY

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent [] [] [] [] [] [] Signature [] [] [] [] [] []
 Vehicle - Destination [] [] [] [] [] [] Carrier - Transporter [] [] [] [] [] [] Pick - Return to Generator [] [] [] [] [] []
 Gold - Leave with Generator [] [] [] [] [] []

INDUSTRIAL PARK
 DODD BRIDGE, N.Y. 12789
 (518) 434-7808
 X: (518) 434-0007
 800-828-8249

2 WAREHOUSE LANE
 ELMSFORD, N.Y. 10523
 (914) 592-3418
 FAX: (914) 592-4325
 1-800-828-8249

NON-HAZARDOUS WASTE MANIFEST

Generator Name: Franklin Co. Inc. Shipping Location: Cascad T. area
 Address: Station Hill Rd Address: Cascad Rd
Frankfort NY K. macho NY
 Phone No. [] [] [] - [] [] [] [] [] []

Lab Number	Description of Waste	Quantity	Units	Containers	
				No.	Type
[] [] [] []	<u>Frail oil</u> <u>Combustible liquid</u> <u>NA 1997</u> <u>waste & residue</u>	<u>6000</u>	<u>Q</u>	<u>01</u>	<u>V</u>
[] [] [] []		[] [] [] []	[] [] [] []	[] [] [] []	[] [] [] []
[] [] [] []		[] [] [] []	[] [] [] []	[] [] [] []	[] [] [] []

- Codes
 Q - Quillone
 D - Drum
 C - Carton
 B - Bag
 T - Truck
 P - Pounds
 Y - Yards
 O - Other
 V - Vol

I hereby certify that the above named material is not a hazardous waste nor does it contain PCB's as defined by 40 CFR Part 261 or any applicable state law.

Generator/Authorized Agent Name: Steve Malkin Signature: [Signature] Shipment Date: 09/23/91

Transporter Name: Wagon Co. Inc. Driver Name (Print): Frank Ruppertis
 Address: Industrial Park Vehicle No. / License No.: 21630 Y NY
Frankfort NY Vehicle Certification: 31-005
 I hereby certify that the above named material was picked up at the generator's listed address. I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature: [Signature] Delivery Date: [] [] [] [] [] []

This is to certify that _____ of the above cited waste material was received at _____
 (Enter address or location in cube yards, gallons, or truck loads)

Site Name: Franklin Co. Inc. Phone No.: 914-479-7505
Industrial Park Frankfort NY
 I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Receiver Date: [] [] [] [] [] []

Copy - Transporter Pink - Return to Generator Gold - Leave with Generator

APPENDIX E
SITE PHOTOGRAPHS



Photo No. 1 - North view of hotel complex.

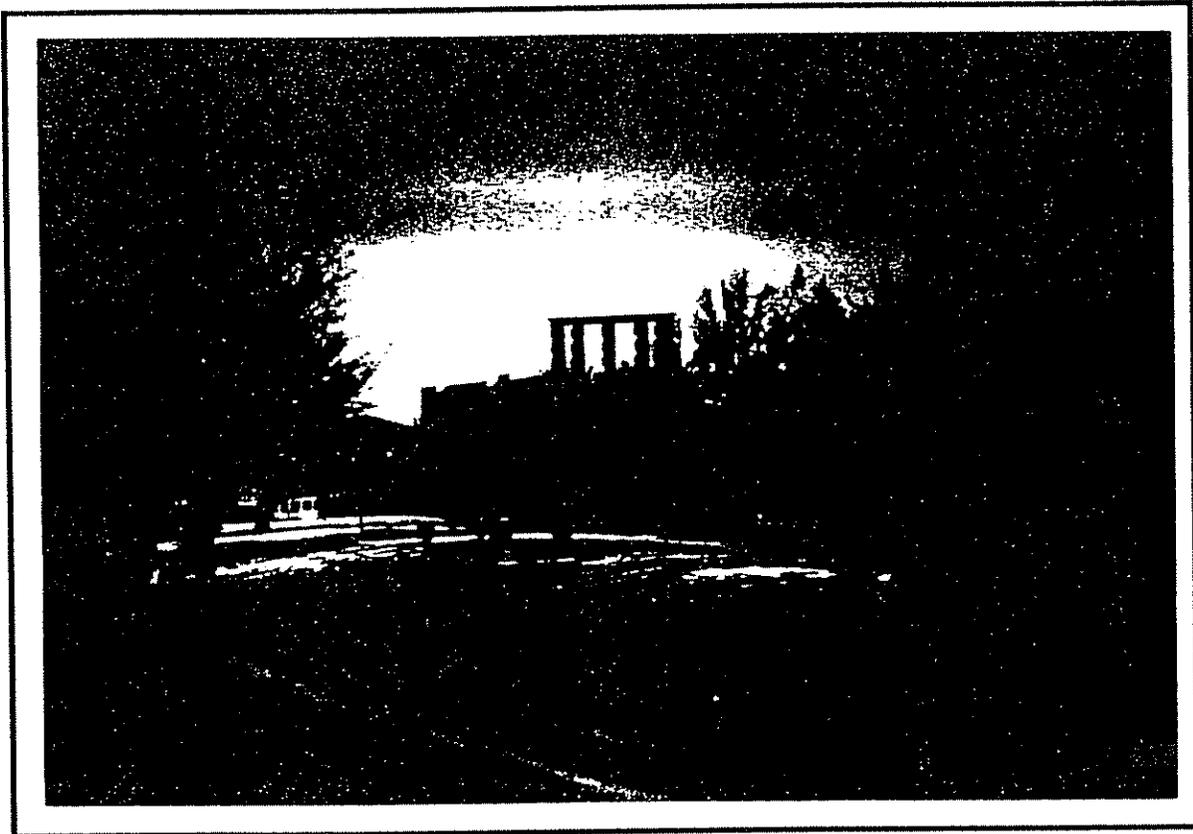


Photo No. 2 - Northeast view of hotel complex.

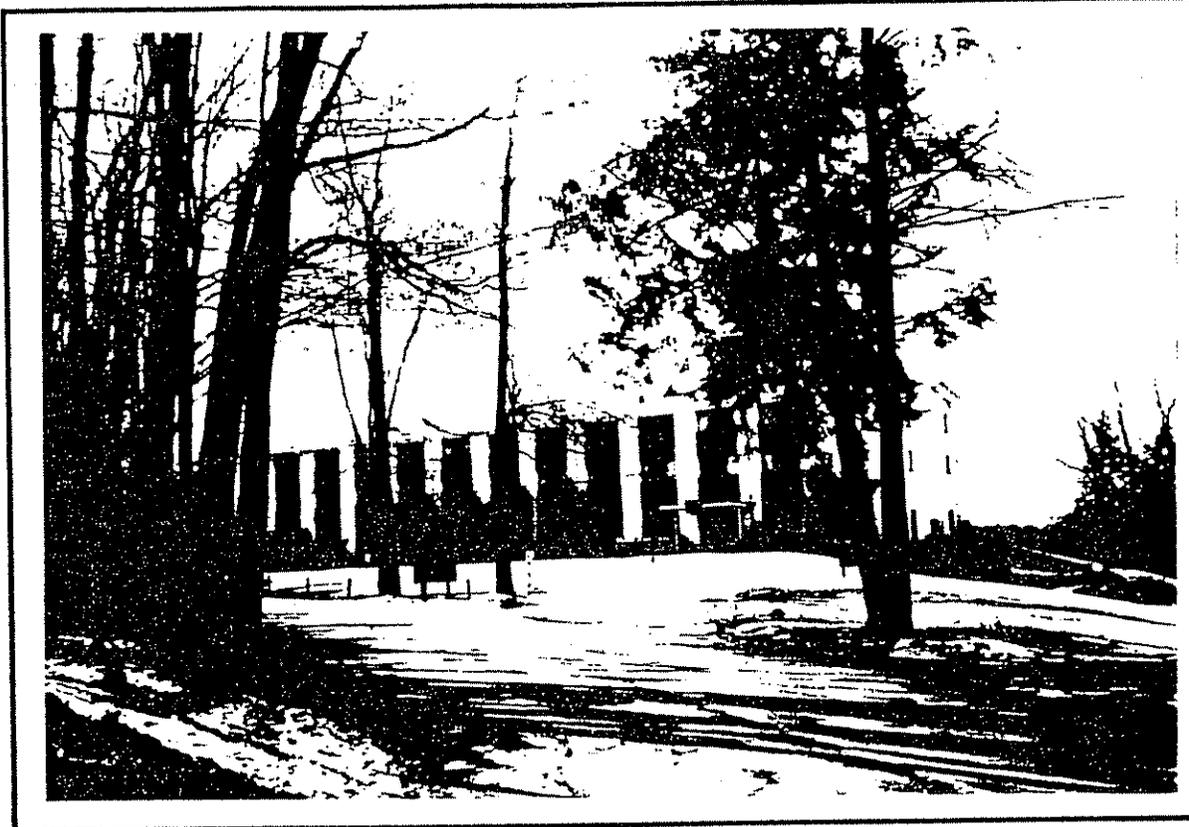


Photo No. 5 - View of Clubhouse / Raymond's Restaurant, looking south from Chalet Road.



Photo No. 6 - View of Concord ski area.

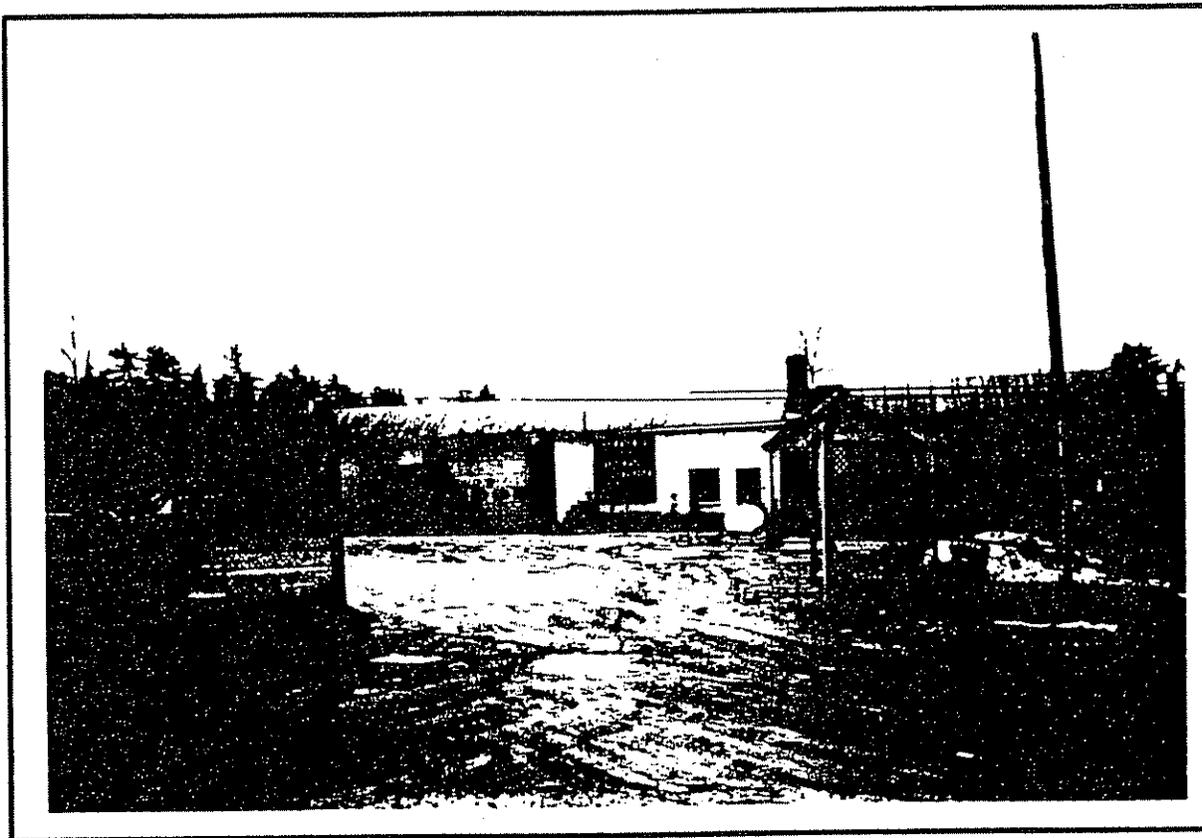


Photo No. 7 - Front view of Golf Maintenance Shop, from Chalet Road entrance.

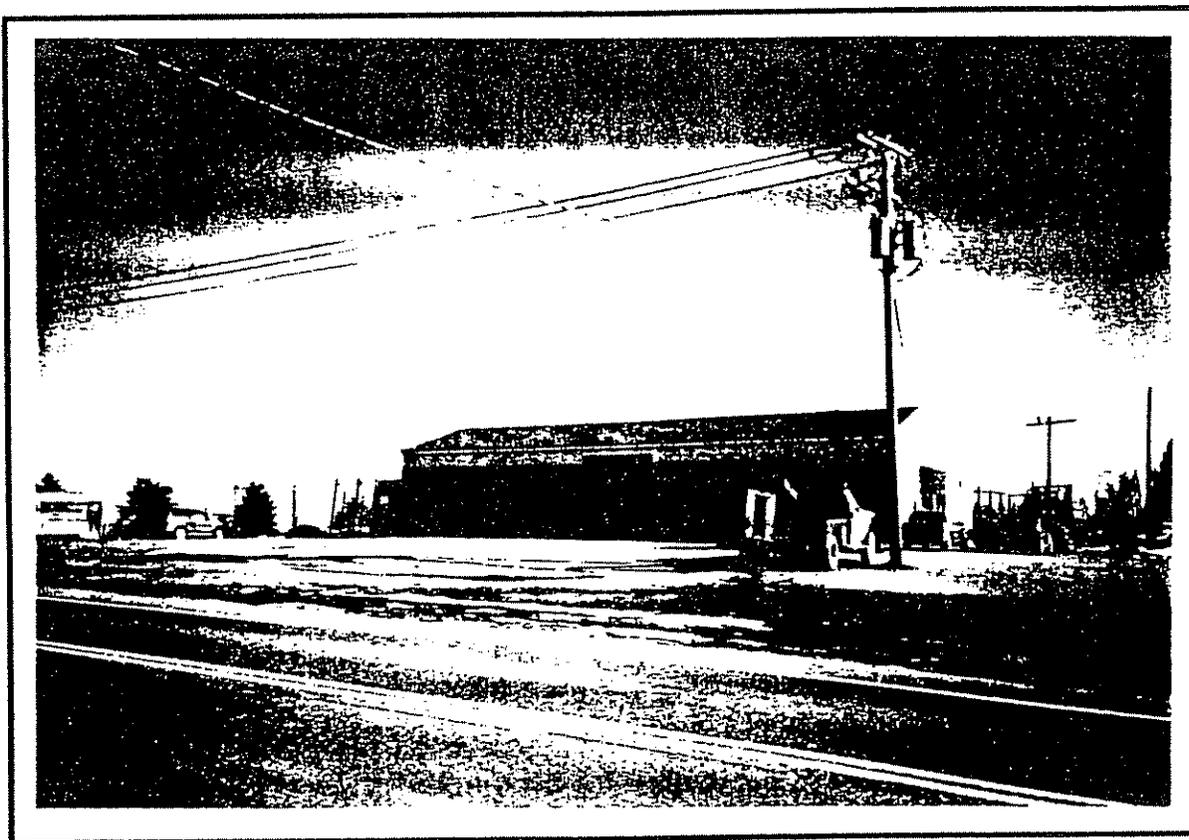


Photo No. 8 - Front view of Concord Service Station off of Concord Road.

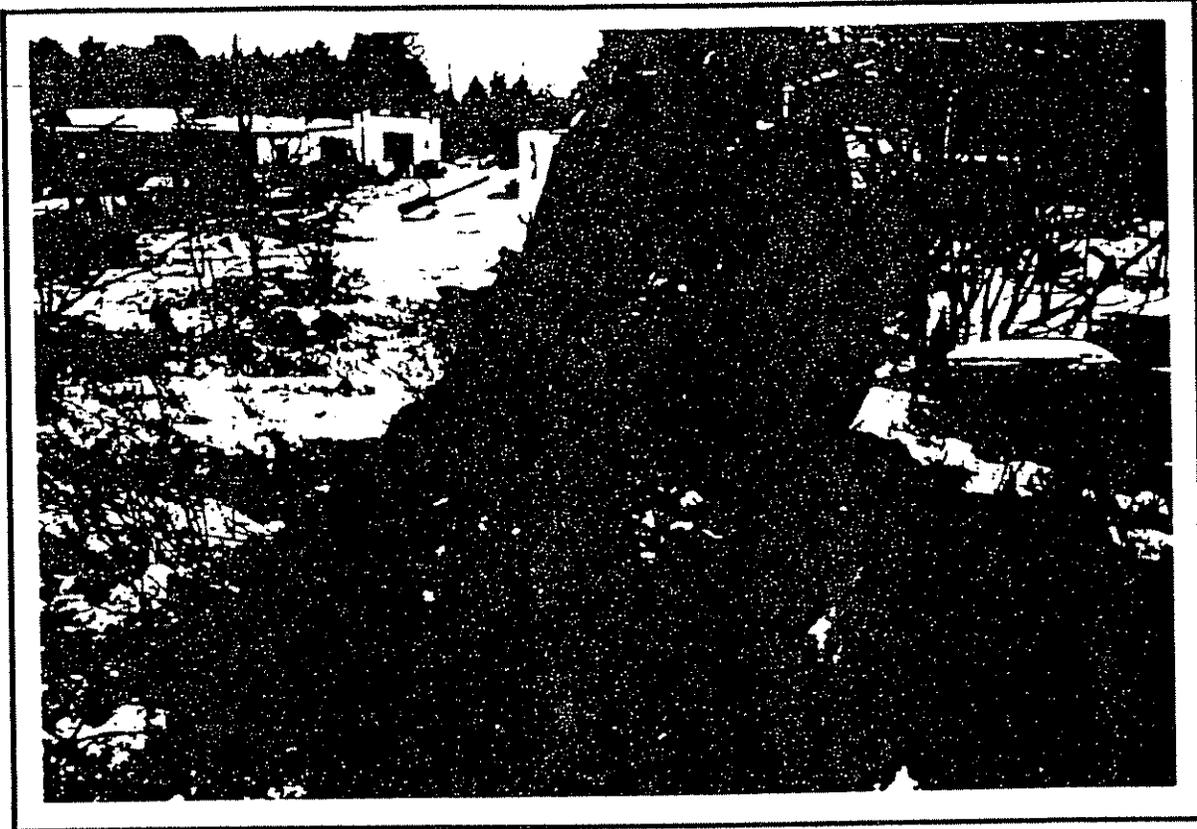


Photo No. 9 - Excavated materials at the Golf Maintenance Shop dump site. Shop and equipment/vehicle storage area in background, left.



Photo No. 10 - Excavated test pit at the Golf Maintenance Shop dump site depicting ash and soil fill layers. The ash is the result of waste burning over time.



Photo No. 11 - A view of surface waste at the Chalet dump site.

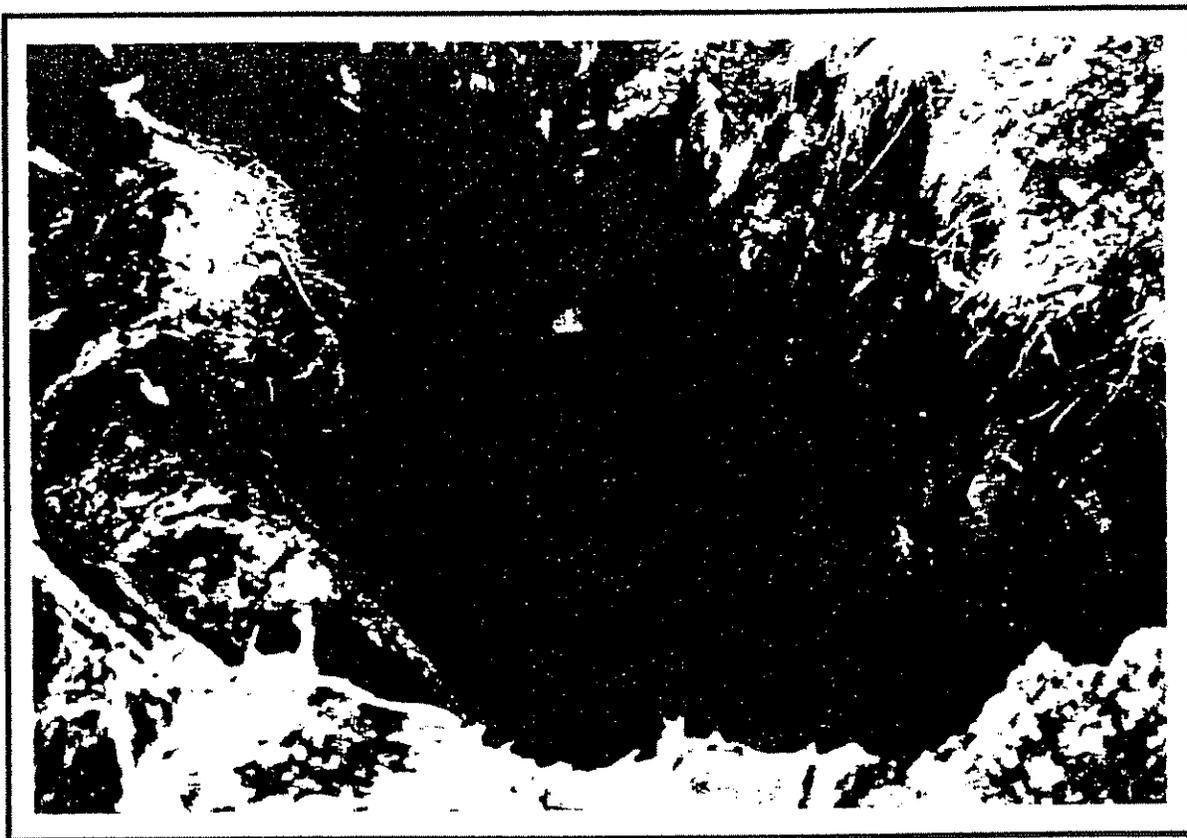


Photo No. 12 - Excavated test pit depicting waste and soil layers at the Chalet dump site.

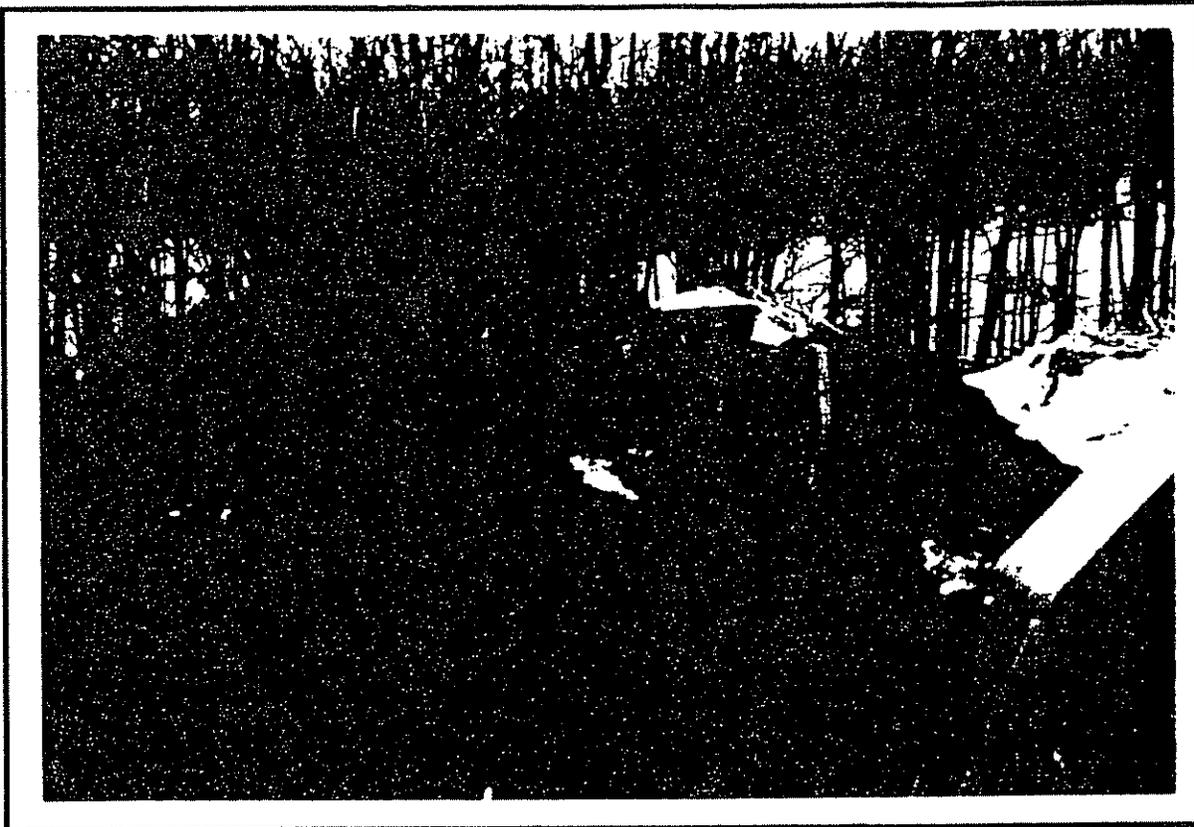


Photo No. 13 - Excavated materials at the Main Parking Area dump site.

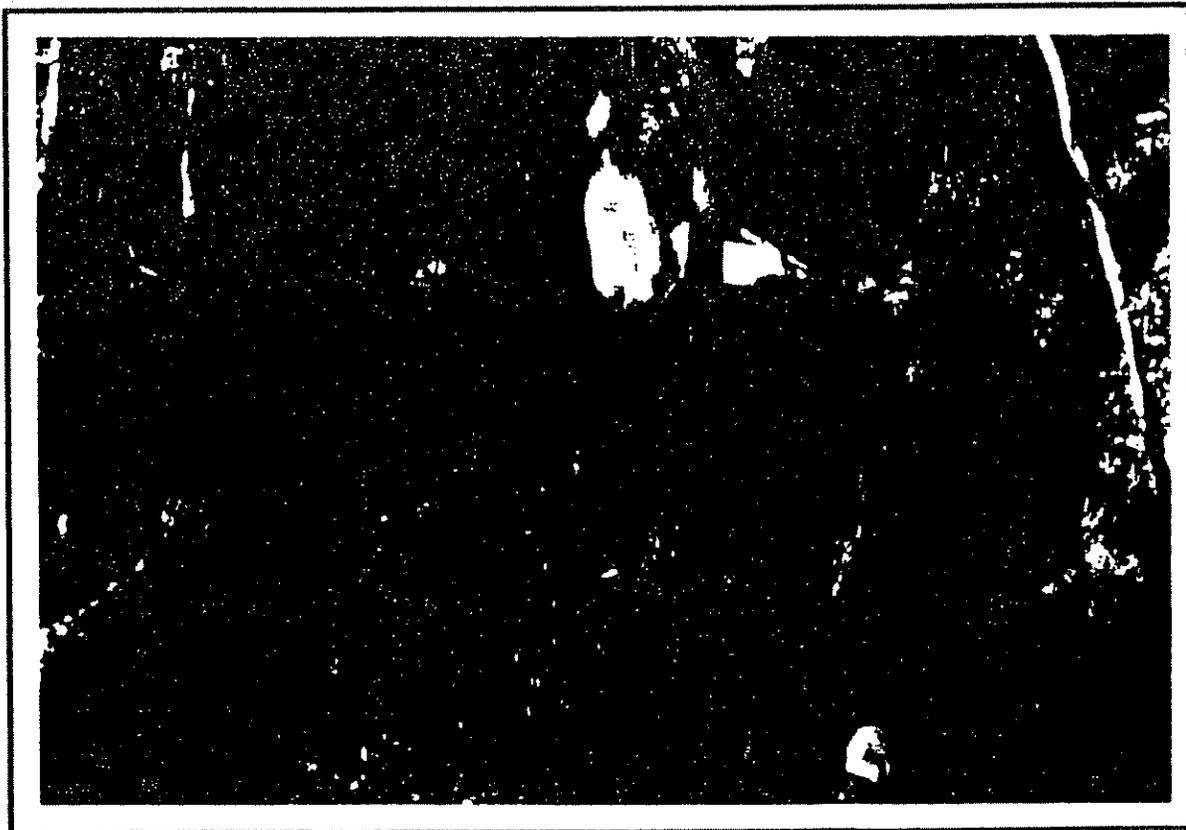


Photo No. 14 - View of seep identified at the Main Parking Area dump site.



Photo No. 15 - East side slope view of Casino dump site.



Photo No. 16 - Excavated waste at Casino dump site.



Photo No. 17 - Downgradient (east) view of Concord Service Station dump site.



Photo No. 18 - Excavated waste at Concord Service Station dump site.



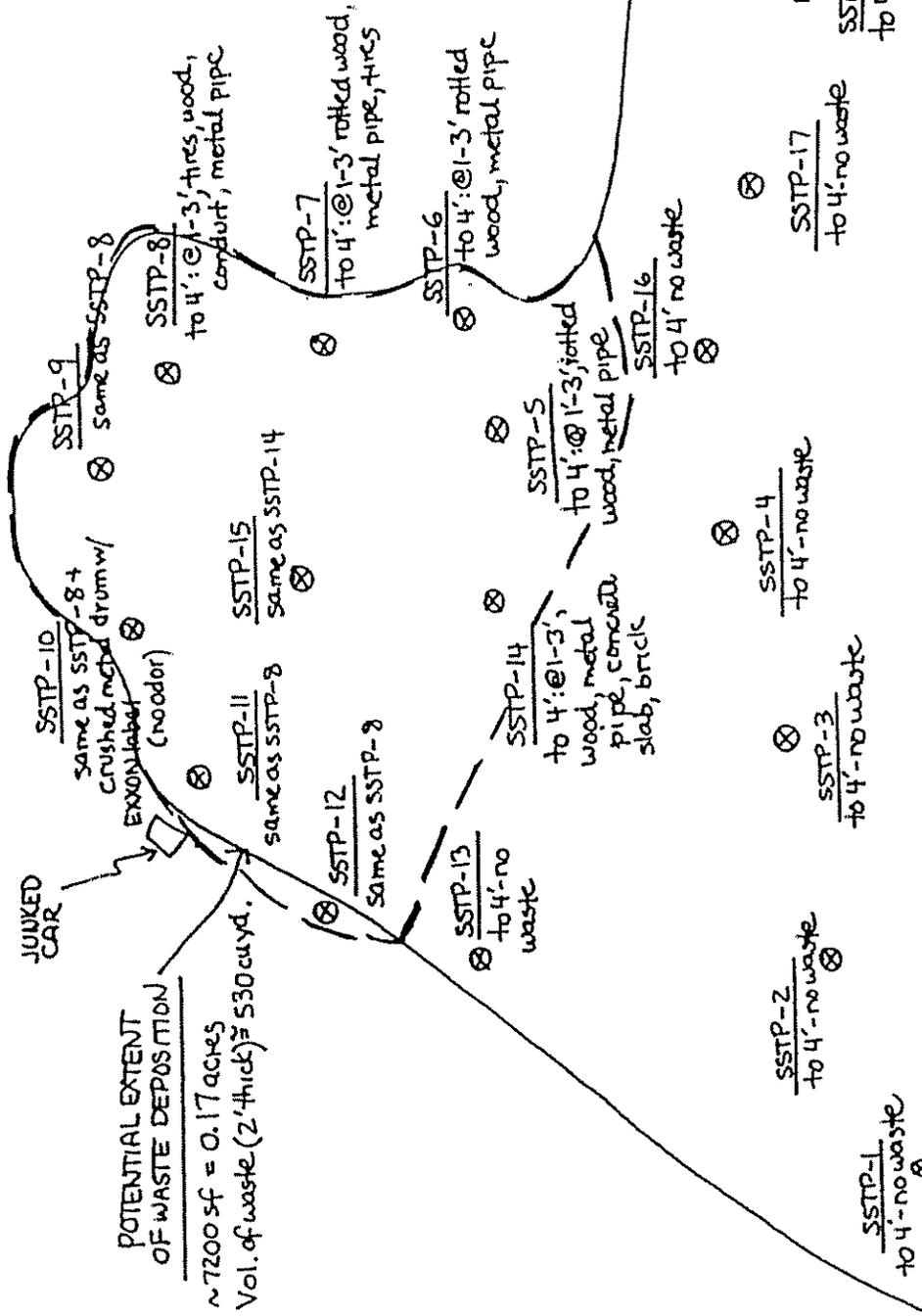
Photo No. 19 - View of excavated waste materials at the Cemetery dump site.



Photo No. 20 - Excavated test pit depicting limited waste materials at the Cemetery dump site.

APPENDIX F
TEST PIT INVESTIGATION SKETCHES

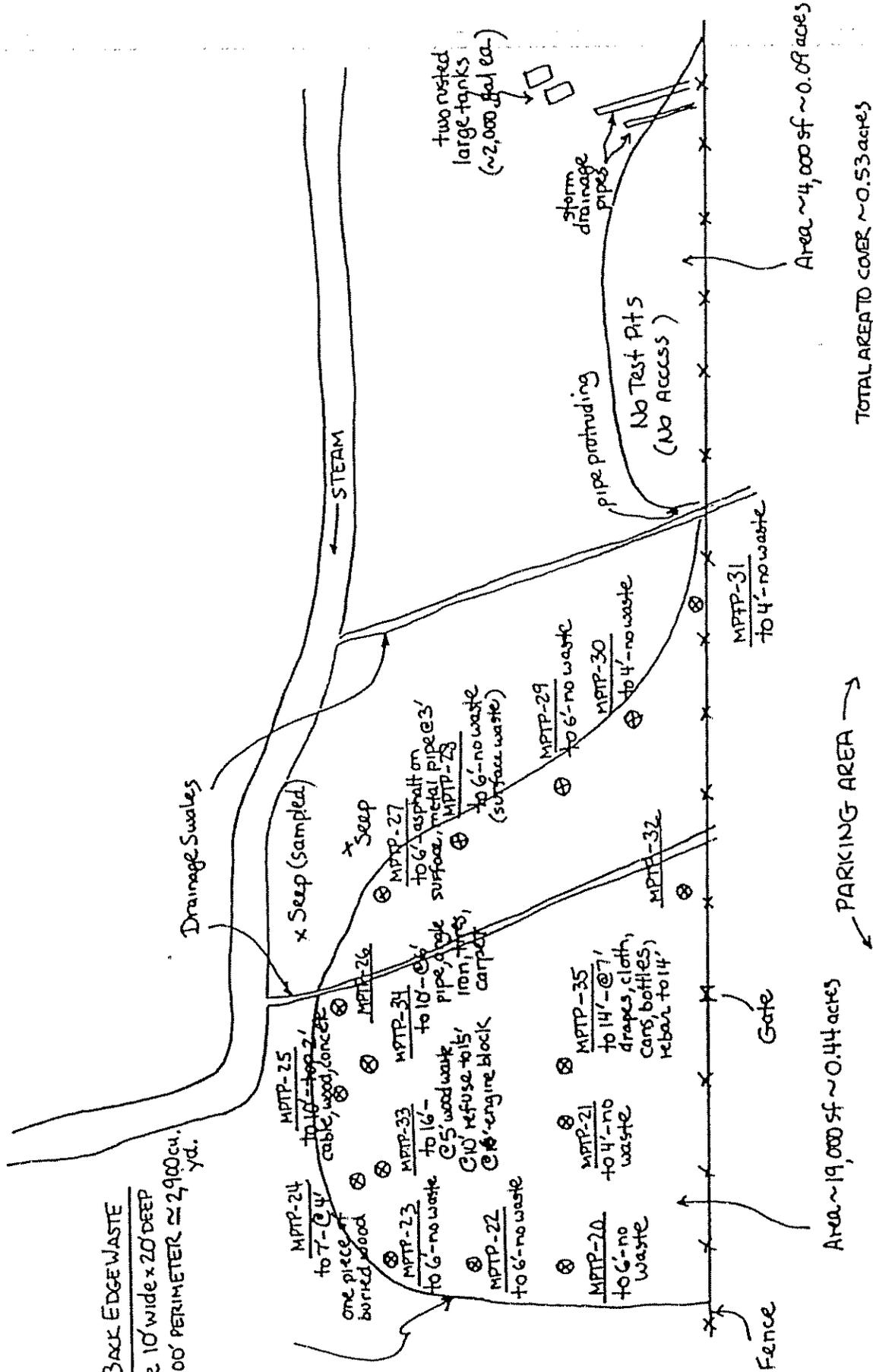
TOTAL AREA ~ 23,000 sf
= 0.53 acres



CONCORD PHASE II
CONCORD SERVICE STATION DUMP

PULL BACK EDGEWASTE

Assume 10' wide x 20' DEEP
x 400' PERIMETER ≈ 2,900 cu. yd.



**CONCORD PHASE II
MAIN PARKING DUMP**

TOTAL AREA TO COVER ~0.53 acres

Area ~19,000 sf ~0.44 acres

1" ~ 50'

MW-2 ●

MW-3 ●

Total Area ~ 1.1 acres

Area to be Covered ~ 0.5 acres

GMP-9
to 12'-@4'-p'
ash

GMP-13
to 6' (rock) @ 0-6'
refuse, pipes,
wood, cans, bricks
(refuse odor)

GMP-5
to 2' (rock) -
no waste

GMP-6
to 3' (rock) -
no waste

GMP-4
to 4' (rock) -
no waste

GMP-3
to 6' (rock) -
no waste

GMP-2
to 6' - no
waste

GMP-1
to 8' @ 4'
glass,
sand

GMP-8
to 13' - @ 3'-13'
bottles, wire,
plaster, cinder block
4'-5'-ash

GMP-7
to 16' - @ 3'-16'
bottles, wood,
scrap metal,
wire, kitchen
pans

GMP-11
to 10' - @ 1'-10'
burned garbage
with glass, metal, wood,
brush, concrete block,
dishes & cups

GMP-10
to 12' - @ 1'-8'
burned garbage,
glass, metal, wood,
concrete block
@ 8'-12' clean-fill
with base grade
vegetation

POTENTIAL
LIMIT OF WASTE
TO BE REMOVED
960 sf = 0.02 acres
vol. of waste @ 6' thick
= 215 cu. yd.

POTENTIAL EXTENT
OF WASTE DEPOSITION
TO BE REMOVED
~ 1960 sf = 0.05
acres
vol. of waste @
3' thick = 220 cu. yd.

Heavy
Surface
Debris

Heavy
Surface
Debris

Surface soil
Sample SS-1

SHED

1" ~ 40'

CONCORD PHASE II
GOLF MAINTENANCE DUMP

STREAM →

MW-1

⊗ GMTP-43
to 1' (water)
no waste

⊗ GMTP-44
to 7' - @ 0-1'
bricks, wood

⊗ GMTP-45
to 3' no
waste

⊗ GMTP-46
to 3' no
waste

⊗ GMTP-42
to 3' (water) -
@ 2-3' wood,
pipe

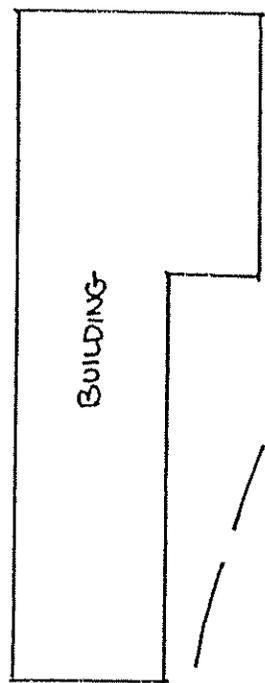
⊗ GMTP-41
to 5' (water) -
@ 3-4' - bricks,
wood

⊗ GMTP-40
to 5' (water) -
no waste

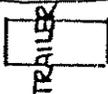
⊗ GMTP-48
to 3' (water) -
@ 2'-3' dim. wood,
cans

⊗ GMTP-49
to 6' (water) -
@ 2-6' concrete pipe,
cable, rope,
stumps, plastic sheeting,
slight petroleum odor

⊗ GMTP-47
to 6' - @ 2-5' wood,
bricks, pipe



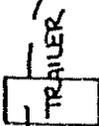
BUILDING



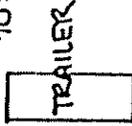
TRAILER



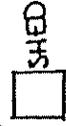
TRAILER



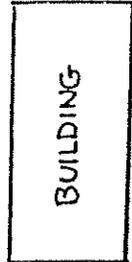
TRAILER



TRAILER



SHED



BUILDING

GOLF MAINTENANCE
DUMP

← TO GOLF
MAINTENANCE
DUMP

POTENTIAL LIMIT
OF WASTE TO BE
REMOVED

~ 42,400 sf = 0.97 acres
VOL. OF WASTE @ 3' thick
= 4,700 cu. yd.

TOTAL AREA ~ 2.75 acres

CONCORD PHASE II
GOLF MAINTENANCE AREA

1" ~ 50'

OLD TRICKLING-FILTER TREATMENT PLANT



GCTP-56
to 4' @ 2-3' one
piece of a cast
metal part

GCTP-55
to 4' - no waste

GCTP-54
to 4' - no waste

GCTP-53
to 4' - no waste

GCTP-52
to 4' - no waste

TOTAL AREA ~ 0.3 acres

GCTP-51
to 4' - no waste

TP-59
to 4' - no waste

GCTP-58
to 4' - no waste

POTENTIAL WASTE
DEPOSITION AREA
2,100sf = 0.05 acre
Vol. of waste (1' thick) =
78 cu.yd.

GCTP-57 (pile)
to 4' @ 2-3' rotted
dimensional wood,
electrical conduit

SURFACE
DEBRIS

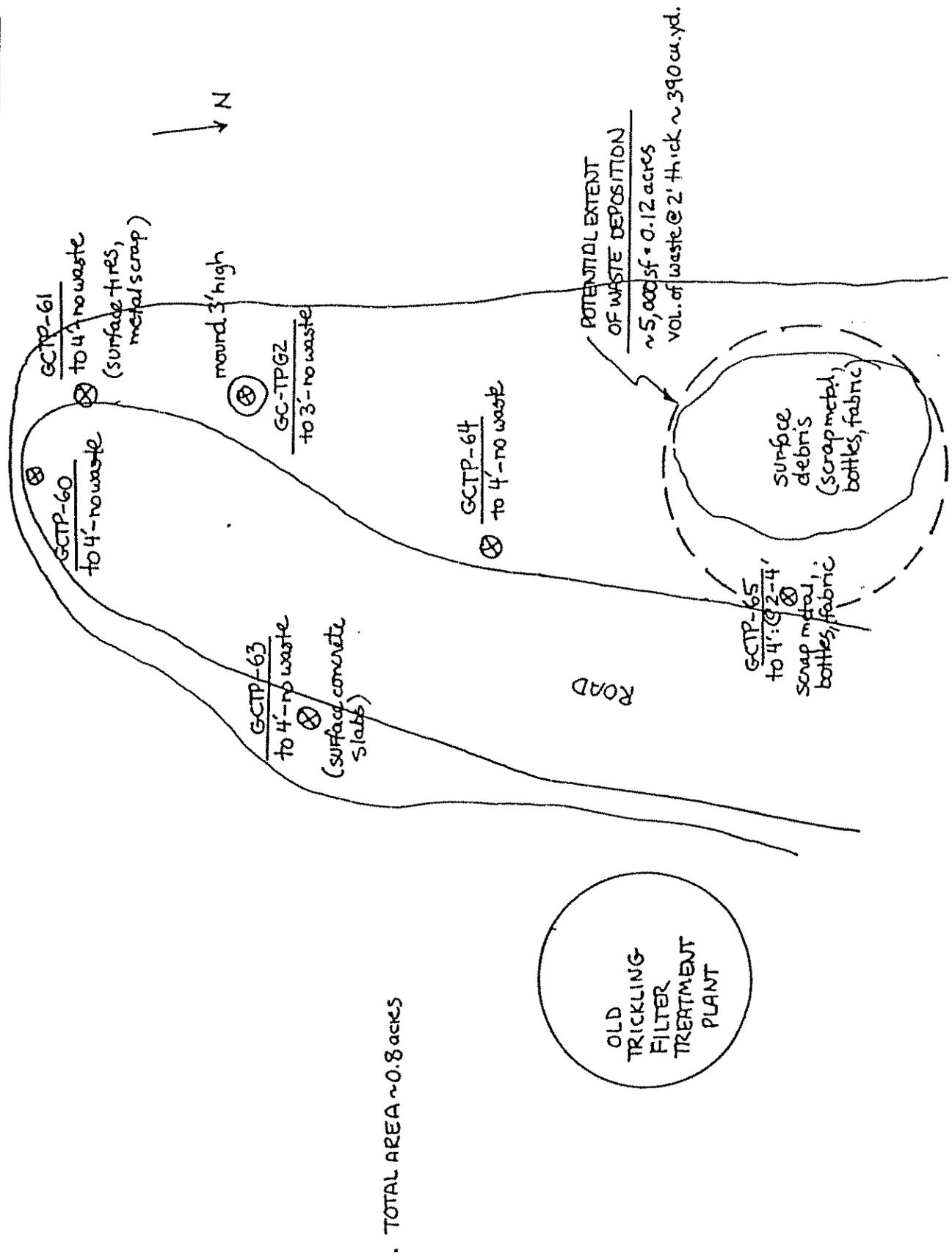
TO KNOWN
DEC DUMP AREA

CONCORD PHASE II
DEC/GOLF COURSE DUMP

Area South of Known Dump/Below Former Treatment Plant

1" ~ 20'

CONCORD PHASE II
 DEC/GOLF COURSE DUMP
 Area Adjacent to Former Treatment Plant

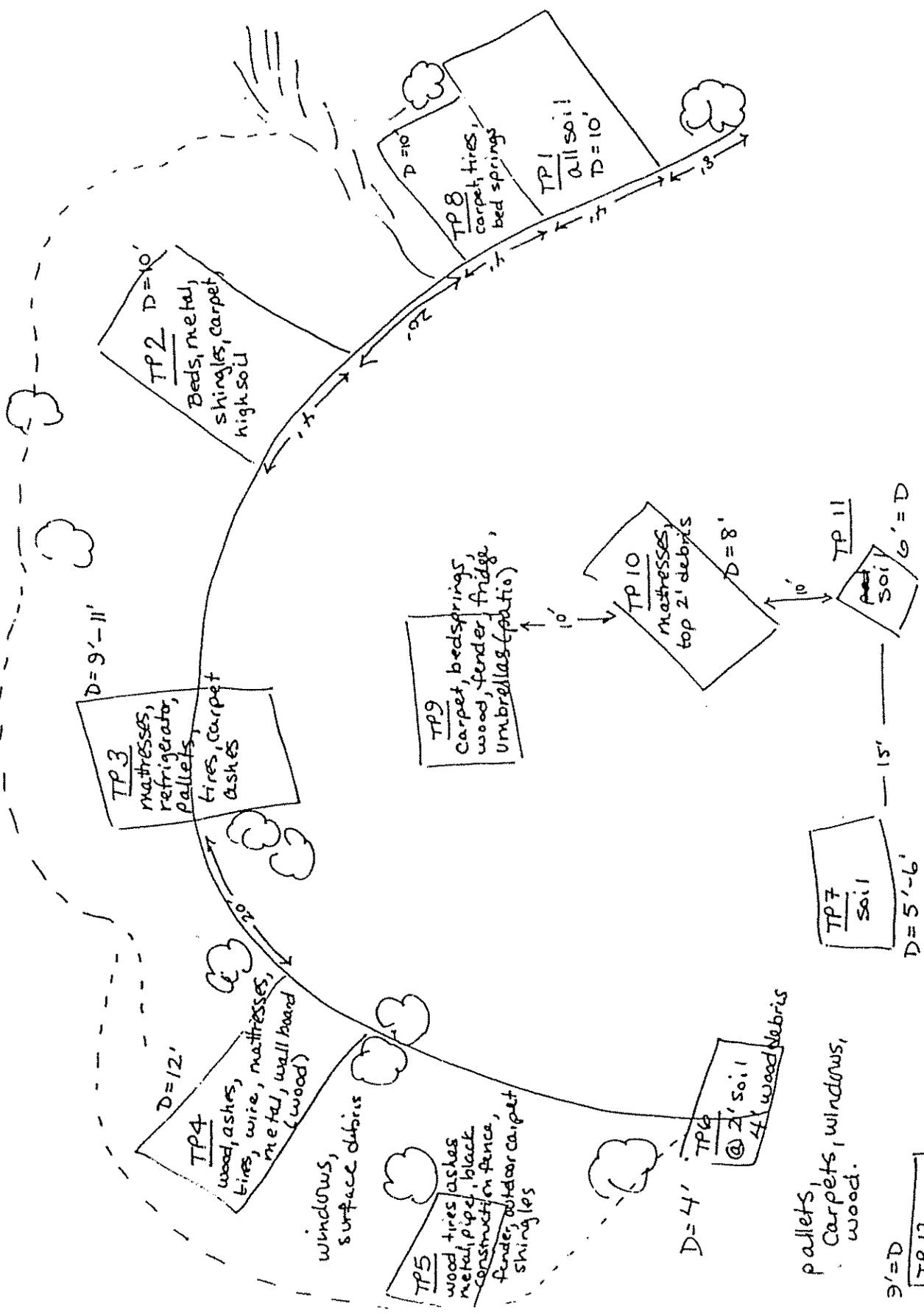


TOTAL AREA ~ 0.8 acres

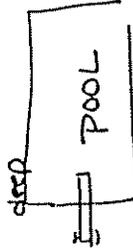
1" ~ 40'

CONCORD PHASE II
CHALET DUMP SITE

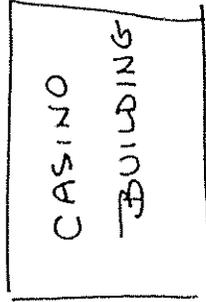
Area East of Ski Chalet within Former Mine Area



TP1 (@ center of pool)
old heater, air conditioners,
bed springs, dryers, tires



TP2 (@ deep end of pool)
hot water tanks, metal,
pallets, brick, carpet,
rubber hoses, conduit



TP6 D=6'
chairs, rocks,
pails on surface,
no buried waste



D=5'
Bags of
grinder,
pipes, wood debris,
paint, pails, carpet,
plywood, metal pipes,
concrete block

TP5
Bicycle, carpet,
part linoleum,
wood debris,
carpet, lawnmowers,
shingle

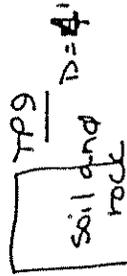


TP8
soil and
rock

D=6'

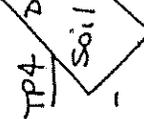
TP3
hot water tanks,
metal, boards, motor oil, quart
containers, hoses, bed
frames

D=6'



TP9
soil and
rock

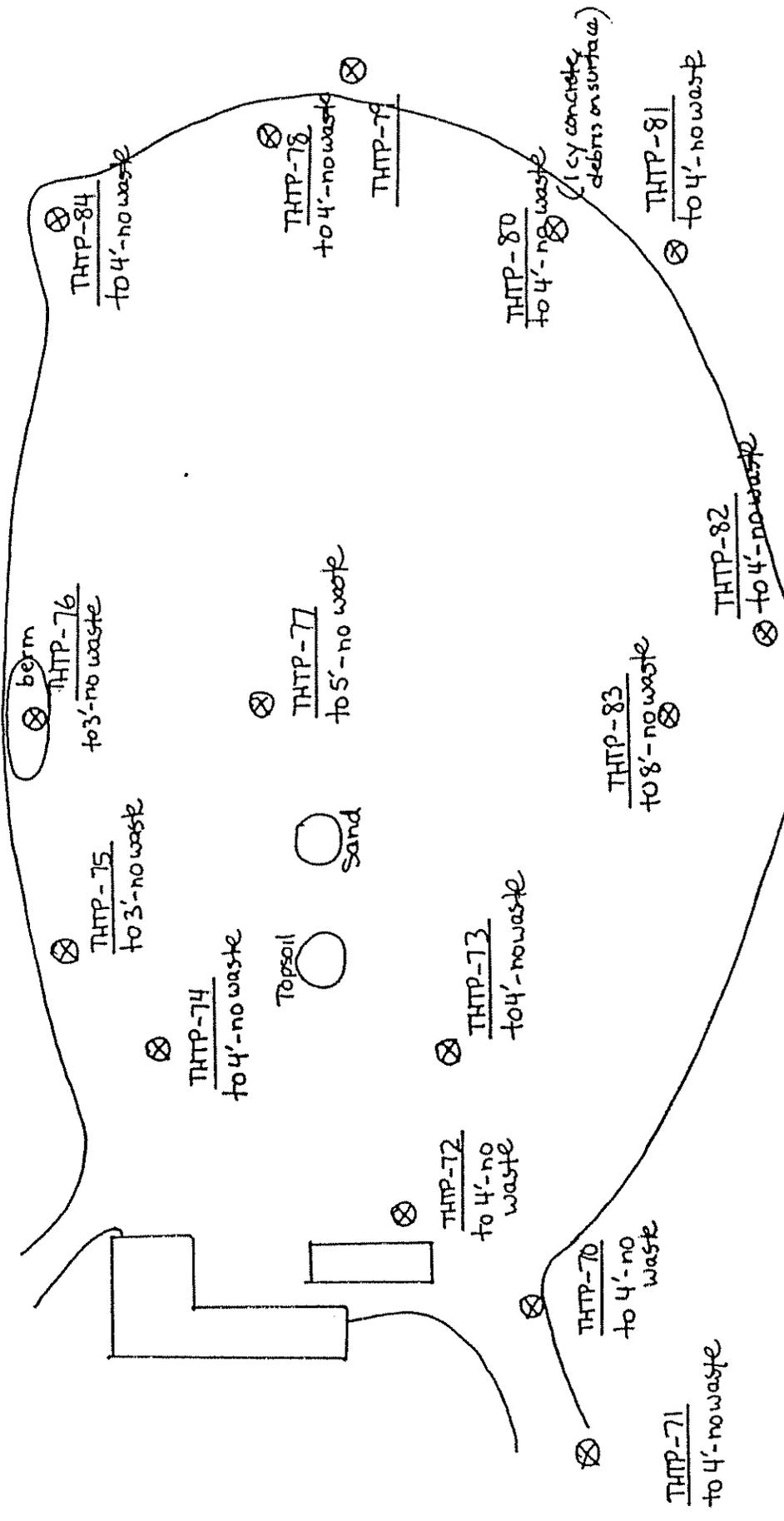
D=6'



TP4
Soil

CONCORD PHASE II
CASINO DUMP SITE

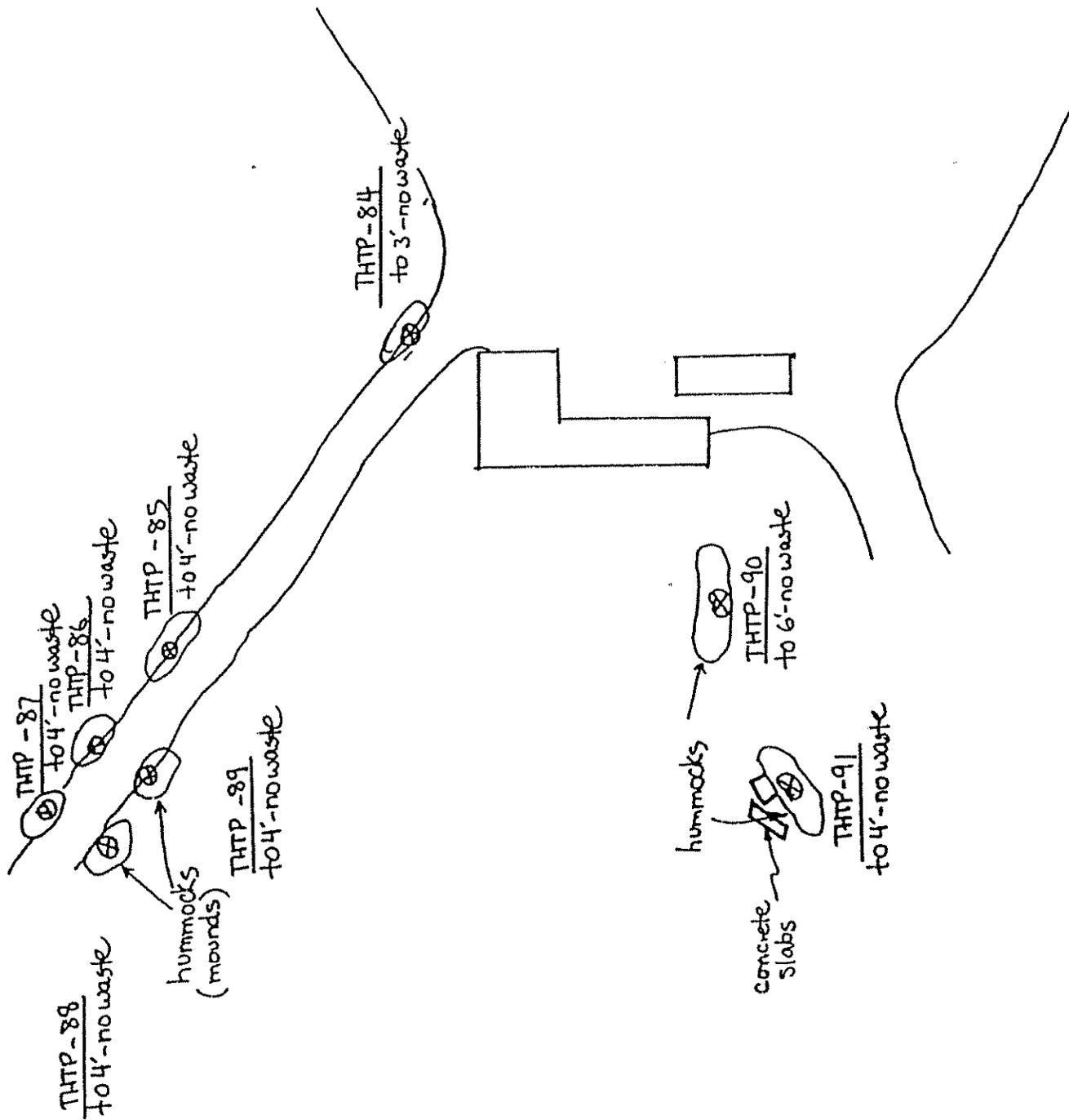
Area off of Rock Ridge Drive at Former Casino



CONCORD PHASE II
 THOMPSONVILLE ROAD

1" ~ 60'

CONCORD PHASE II
THOMPSONVILLE ROAD
Behind Sheds



1" ~ 60'

CONCORD PHASE II
THOMPSONVILLE ROAD SITE

DIRT ACCESS ROAD

← THOMPSONVILLE ROAD →

OLD CHICKEN COOP

6' **A** High Rock Content
Sandy clay loam
w/ shale

7' **B** Ground H₂O @ 2'
Flowing in

6.5' **C** ROCK, CLAY
APPEARS
UNDISTURBED

6' **F** CLAY, SHALE,
ROCK
SOME SAND

6.5' **D** SAME AS
C

4' **E** 7' CLAY, SILTY LOAM
H₂O @ 7' in
FINE SANDY LAYER

6' **G** HIGH
SHALE CONTENT,
TIGHT SOILS w/
SOME SAND

OLD
STONE
FOUNDATION

6' **I**
SAME
AS **H**

6' **H**
VERY SOFT,
SANDY
LOAMY SAND
w/ SOME
ROCK

4' **J** SANDY LOAMY SOILS,
ROCKY, VERY HARD
ROCK @ 4' (?LEDGER)

4' **K** SANDY LOAM,
MOIST w/ SOME
RED CLAY, ROCKY
w/ SOME
BOULDERS

5' **AA** SANDY LOAMS
ROCKY

5' **L** SANDY NO
LOAM,
WASTE
SOFT

6' **CC** VERY ROCKY
SANDY LOAM

6' **DD** ASH? @ TOP 2"
SOFT, SANDY,
SILTY LOAM,
HIGH ROCK CONTENT,
w/ SOME
LIGHT SAND

6' **BB** SILTY
LOAM

← abandoned car

refrigerators

surface refuse 30' x 50' x 6' ~330 cu yd

HFTP-100 to 3'-no waste

POTENTIAL LIMIT OF WASTE TO BE REMOVED
~14,000sf = 0.32 ac.
Vol. @ 1' thickness = 520 cu. yd.

HFTP-102 to 2'(rock)-no waste

HFTP-101 to 1'(rock)-no waste

HFTP-105 to 2'(rock) @ 1-2' bottles

HFTP-106 to 1'(rock) no waste

HFTP-104 to 4'-@ 1'-2' plastic bottles, dishes

HFTP-103 to 1'(rock)-no waste

HFTP-107 to 3'-@ 1' one tire

HFTP-108 to 4'-no waste

HFTP-109 to 3'-no waste (surface debris)

Area ~ 2.2 acres

Area ~ 2.9 acres

HFTP-112 to 3'-no waste

HFTP-110 to 2'(rock)-no waste

HFTP-116 to 3'-no waste

HFTP-117 to 3'-no waste

HFTP-113 to 4'-no waste

HFTP-111 to 3'-no waste

HFTP-115 to 5'-no waste

HFTP-118 to 3'-no waste

HFTP-114 to 2'(rock)-no waste

POTENTIAL LIMIT OF WASTE TO BE REMOVED
~2400sf = 0.06 ac.
Vol. @ 2' waste thickness = 180 cu. yd.

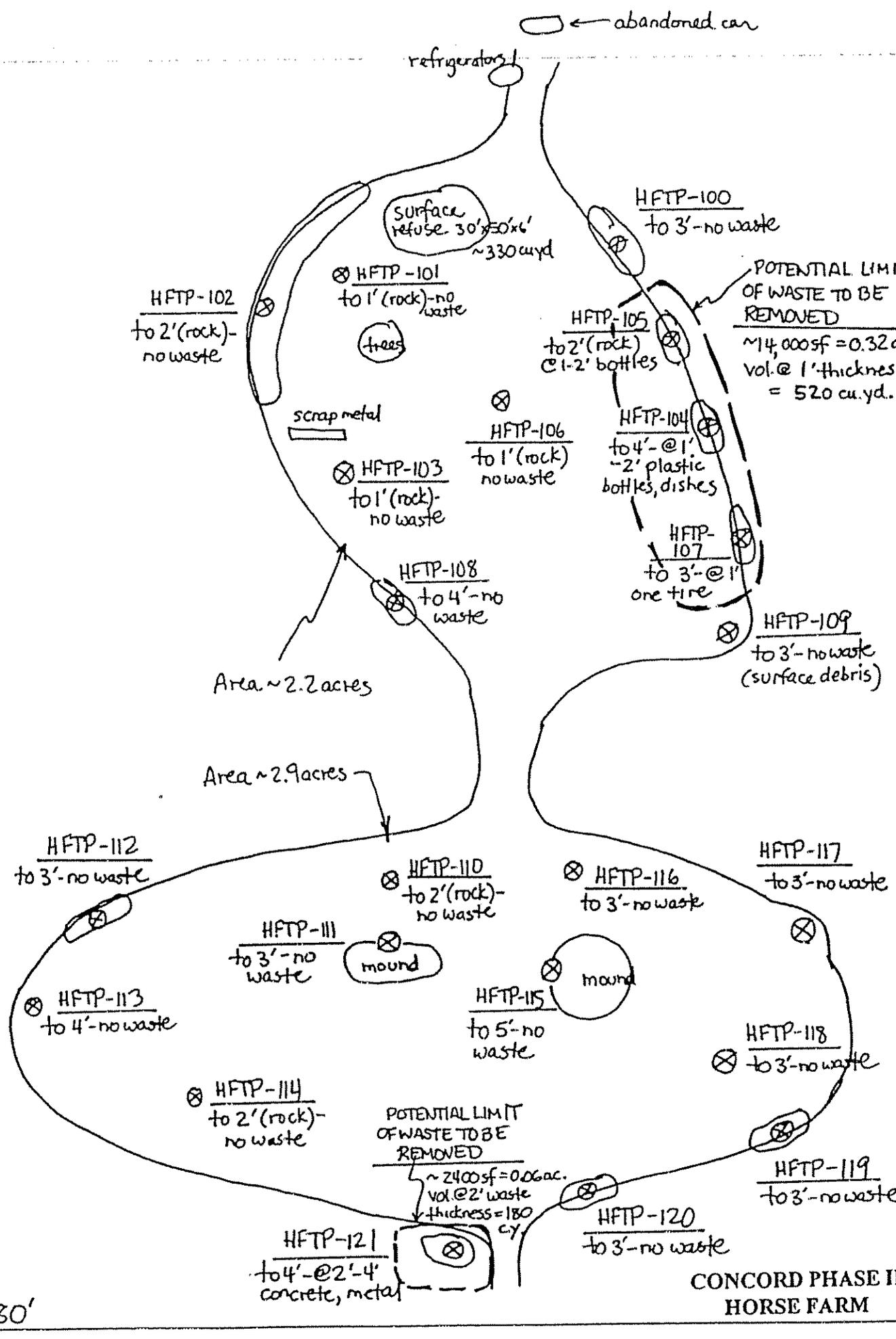
HFTP-121 to 4'-@ 2'-4' concrete, metal

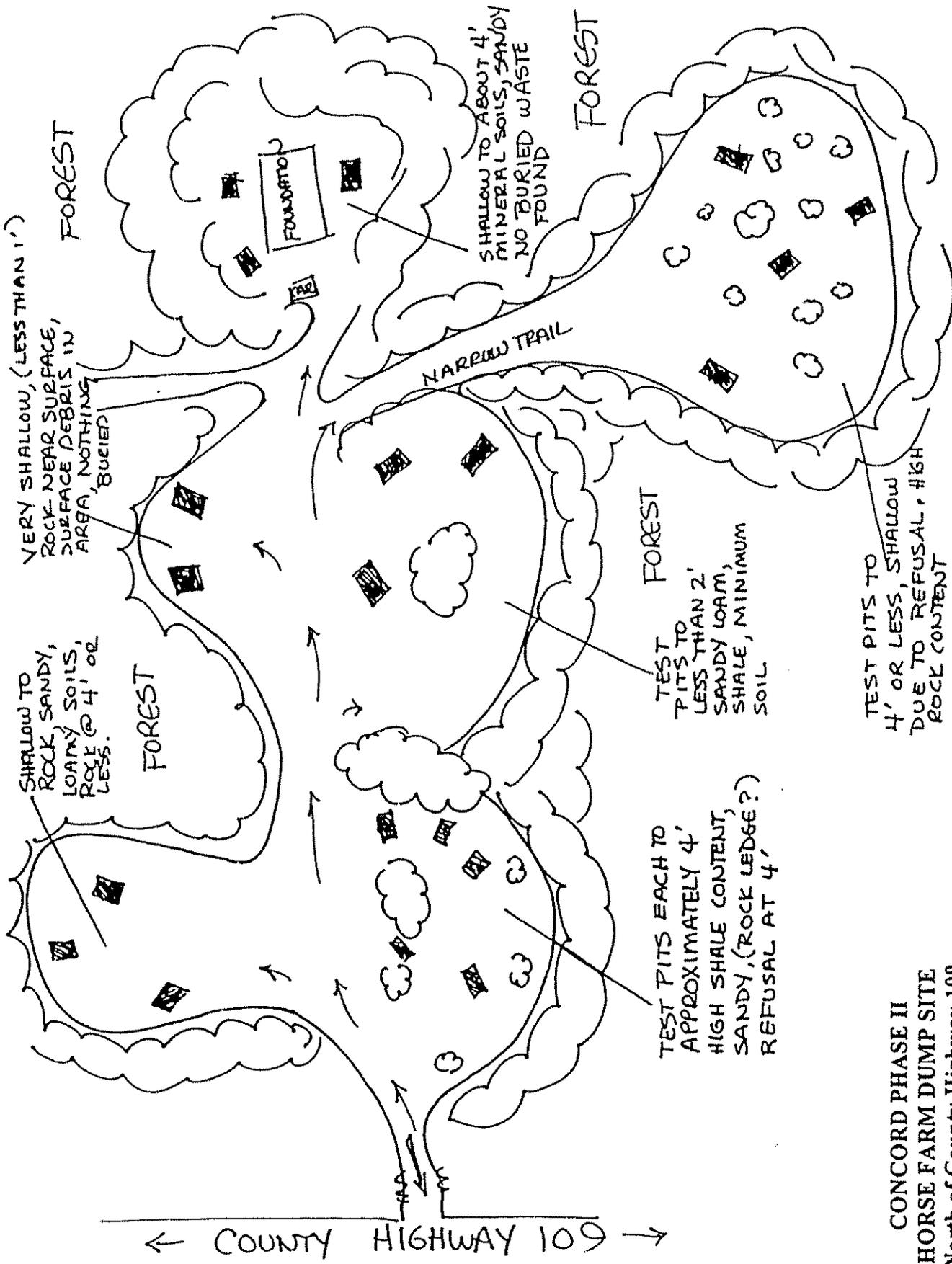
HFTP-120 to 3'-no waste

HFTP-119 to 3'-no waste

CONCORD PHASE II HORSE FARM

1" ~ 80'





VERY SHALLOW, (LESS THAN 1')
 ROCK NEAR SURFACE,
 SURFACE DEBRIS IN
 AREA, NOTHING
 BURIED

SHALLOW TO
 ROCK SANDY,
 LOAMY SOILS,
 ROCK @ 4' OR
 LESS.

SHALLOW TO ABOUT 4'
 MINERAL SOILS, SANDY
 NO BURIED WASTE
 FOUND

TEST PITS TO
 PITS TO
 LESS THAN 2'
 SANDY LOAM,
 SHALE, MINIMUM
 SOIL

TEST PITS EACH TO
 APPROXIMATELY 4'
 HIGH SHALE CONTENT,
 SANDY, (ROCK LEDGE?)
 REFUSAL AT 4'

TEST PITS TO
 4' OR LESS, SHALLOW
 DUE TO REFUSAL, HIGH
 ROCK CONTENT

← COUNTY HIGHWAY 109 →

CONCORD PHASE II
 HORSE FARM DUMP SITE
 North of County Highway 109

TEST PITS PLACED IN AREAS NOTED TO DEPTHS OF 6' TO 7'. SURFACE WASTES CONSISTING OF WOOD DEBRIS, FLOOR TILES, METAL CANS, PIPING, GLASS BOTTLES, AND BRICKS/CONCRETE FROM 2' TO 3' FROM SURFACE.

FOREST
PAVED CEMETERY ACCESS

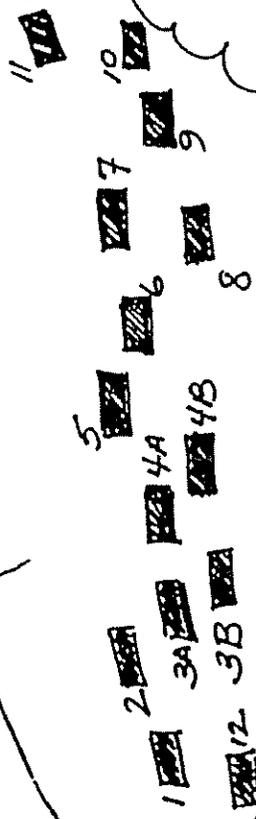
CEMETERY

WOOD TRAIL

FOREST

FOREST

FOREST



ROUTE 17

CONCORD PHASE II
CEMETERY DUMP SITE
Between Thompsonville Road and NYS Route 17

Concord Resort Solid Waste Disposal Chart

Landfills	Type of Waste Removed	Amount Cubic Yards	Disposal/Recycling Facility
Horse Farm LF	Misc. Wood Debris, Metal, Tires, Old Cars	20	Thompson Sanitation
Chalet LF	Misc. Wood Debris, Metal, Tires, Drums, Logs & Plastic	*	Thompson Sanitation
Kiamesha LF/Golf Course LF	Misc. Wood Debris, Metal, Tires, Logs,	50	Thompson Sanitation & Teplitz Recycling
* Golf Maint. LF	Misc. Wood Debris, Metal, Tires, Old Batteries, Drums, Wood Pallets	*	Thompson Sanitation
Breezy Corners LF	Misc. Wood Debris, Metal, Tires, Furniture, White Goods	60	Teplitz Recycling
✓ Casino LF	Misc. Wood Debris, Metal, Tires, Drums, Logs & Plastic	30	Thompson Sanitation
Chicken Coop LF	Misc. Wood Debris, Metal, Logs Old Machinery Creosote	30	Teplitz Recycling
Gas Station LF	Misc. Wood Debris, Metal, Tires, Drums, Logs, Old Cars & Parts & Plastic	30	Thompson Sanitation
Main Parking Lot LF	Misc. Wood Debris, Metal, Tires, Drums, Logs, Old Cars & Parts & Plastic	60	Thompson Sanitation

• Notes:

1. Misc. wood removed from the landfill area were transported to the Chalet landfill Burn area and burned under the facilities burn permit.
2. Tires removed from various landfill have been stored in the Old Gas Station Building located on Concord Road awaiting disposal.
3. The 5-gallon pails of Creosote removed from the Chicken Coop Landfill area are also stored in Old Gas Station Building located on Concord Road awaiting disposal.
4. The Misc. Debris such as plastic, plastic drums, batteries etc. were all placed in dumpsters located in the maintenance shop area and disposed with the normal maintenance debris.

APPENDIX B

March 18, 2002 Memo

JM ASSOCIATES, Inc.

• *On-Site Environmental Services* •

225 Railroad Avenue
Bedford Hills, New York 10507
(914) 241-3795 TEL
(914) 241-4499 FAX

March 18, 2002

Mr. Andrew Lent
Engineering Geologist II
NYS DEC Region 3
Division of Solid Waste
200 White Plains Road, 5th Floor
Tarrytown, NY 10591

RE: The Concord Hotel Resort, Kiamesha Lake, NY
Summary Report of Site Clean-up Activities

Dear Mr. Lent:

On January 4, 2002, as a representative of the New York State Department of Environmental Conservation (DEC), you and I performed a joint inspection of the several Solid Waste Management Facilities (SWMFs) or landfills at the above-referenced facility. I have submitted periodic reports to the Agency on the progress that has been made by the new owners in the continued effort to voluntarily remediate the on-site landfill areas. The previous facility owners violated the DEC 6NYCRR Part 360 regulations by creating these landfill areas. Substantial progress has been made by the present owners in the cleanup of the landfill areas.

The following is summary of the work performed at each of the landfill areas:

Since the November 8th report the following voluntary clean-up work has been performed:

1. **Horse Farm Landfill Area**: As your inspection revealed all of the solid waste has been removed and properly disposed from this area and "No Further Action is Required." A DEC Construction and Demolition (C&D) Debris Tracking Document (manifest) for the disposal of 20 cubic yards of metal taken to Thompson Sanitation for recycling is on file at the facility.

The waste tires from this area were placed in a dumpster located at the maintenance shop. The wood debris was collected and stacked at The Chalet landfill area where accumulated wood is burned under the facility's a burn permit.

Additional solid waste was discovered across the street, behind, and on the side of the old horse barns. This area was also cleaned and the waste disposed of. Some large steel beams were also discovered in the woods behind the barns. Some of the steel has been reused by the facility and the remaining steel will be reused in the future by the facility.

2. **Chalet Landfill Area:** Continual cleanup of this area is on going. Logs from this area have been removed and burned under the facility's burn permit. Tires have been removed along with many empty plastic and metal 30 and 55-gallon drums. Removals have been made from the open face of the landfill to remove protruding metal, wood and other solid waste. Additional removals are still required. When all of the surface debris has been satisfactorily removed the area will be capped with two feet of clean soil. Some of the other listed landfill areas, because of their locations, take priority over the final cleanup of this area.

3. **Kiamesha Creek Landfill:** Substantial cleanup of this area has been performed. All of the metal scattered and dumped in the wooded area has been removed. The old trickling filter bed located south of the landfill area has been removed. The gravel used in the filter is being recycled and used as drainage and roadbed materials throughout the facility. Leaves and brush collected from various areas is brought to an area the near the old trickling filter and either burned under the facility burn permit and or composted to be used as mulch on the property. It is our opinion that "No further Work is Required" in this area.

4. **Golf Maintenance Yard Landfill:** The surface tires, metal and miscellaneous debris has been removed. Tires have also been removed and disposed from the streambed. The face of the slope still requires some work. This is one of our priority areas and in-house personnel will continue to make removals. The wood pallets will be removed and burned under the facility's burn permit.

5. **Main Parking Lot Landfill:** Surface clean up of the main parking lot, along with the removal of all solid waste from the streambed, has been performed. The old empty steel tanks located at the southern end of the landfill area have been recently pulled out of the wooded area, cut up and placed in dumpsters for disposal. Some additional

cleanup is still pending on the sloping open face of the northern end of the landfill. This open face will be capped with clean fill and the future plan for this entire area is to be a new parking lot paved with impervious materials.

6. **Breezy Corners Cottages**: The removal of the solid waste from the abandoned swimming pool has been completed. The pool has been filled in with exempt masonry and clean fill. The surface debris behind the pool in the wooded area has been substantially completed. A small amount of metal still remains to be removed and when removed, "No Further Action will be Required."

7. **Casino Dump**: The surface debris from the face of the landfill has been substantially completed. The loading of the waste into the dumpster for disposal still remains to be completed. The removal of the solid waste from the abandoned swimming pool still remains to be completed. After the waste has been removed the swimming pool will be filled with exempt masonry and clean soil.

8. **Chicken Coop (Thompsonville Road Dump)**: The clean up of this area is substantially complete. The old chicken coop building has been demolished and removed. The contents of the building have been removed and disposed of. The concrete floor of the old building remains. A few pieces of metal debris still remain behind the old building as well as some miscellaneous debris in the wooded area near the entrance of the landfill area. Wood stumps have been removed and the area is substantially clean. As requested, a test pit will be made in the removed stump area to determine the extent and type of solid waste which was placed in the stump area. The results of the test pit excavation will be reported in a follow-up report.

Previous reports summarize some of the other cleanup work performed on areas where illegal dumping was found on the property.

A site map showing the location of each of the above landfill areas is included as part of this report. A land surveyor prepared a separate detailed map for each of the landfill areas.

In your letter dated January 8, 2002 you requested a summary of any analytical data performed to date. No soil or water sampling has been performed to date. The cleanup work being performed on the various landfill areas has not indicated that any hazardous waste dumping and the drums removed were all empty with no visible signs of staining near the drums. No sampling or testing was required.

During the first and second quarter of this year continual cleanup efforts will be made to complete the minor cleanup work at the Gas Station, Breezy Corners Cottages, Casino and Chicken Coop Landfill areas. It is hopeful that all of these areas will be satisfactorily cleaned and a "No Further Action Required" designation can be made by the Department.

As was indicated to you at your last site inspection the Phase I Environmental Remediation Work for the main complex buildings was started but has been temporarily suspended. The work included in the contract included, but not limited to, the removal of all Asbestos Containing Materials (ACM), the PCB light bulbs and ballasts, the unused cleaning materials classified as hazardous materials from the main complex of buildings. It also includes the removal and disposal of the Underground Storage Tanks (USTs) along with the associated contaminated soil as a result of the leaking USTs from the old gas station site. The completion date of this Phase I Environmental Work has not been finalized but it is hopeful that the work will progress shortly and be completed by the middle of next year.

As you can see from this report and my previous reports, continued progress has been made in the removal of previously environmental violations. The implementation of a Solid Waste Management Plan (which controls the solid waste disposal practices for the facility) the installation of "NO DUMPING" signs and the chaining off of areas to discourage illegal dumping allows us to see progress in the reduction of previous improper waste disposal practices. Our ultimate goal is a facility in full environmental compliance.

As always, please do not hesitate to contact me if you have any questions.

Sincerely,

John Manfredi, C.E.

Attachments

cc: L. Cappelli, Cappelli Enterprises, Inc.
H. Zabatta, Concord Associates LLP
L. Tallarini, Concord Associates, LLP

APPENDIX C

Quality Assurance Project Plan

**QUALITY ASSURANCE
PROJECT PLAN**

**THE CONCORD HOTEL & RESORT SITE
Concord Road, Kiamesha Lake
Thompson, NY 12751**

OCTOBER 2004

Prepared for:

**Concord Associates, LP
115 Stevens Ave
Valhalla, NY 10595**

Prepared By:

**JM Associates, Inc.
225 Railroad Ave
Bedford Hills, NY 10507**

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1.0 INTRODUCTION	1
1.1 Project Description and Objective	1
1.2 Site Description	1
1.3 Data Quality Objectives	1
2.0 PROJECT ORGANIZATION	3
2.1 Environmental Project Manager	3
2.2 Project Quality Assurance Officer	3
2.3 Health and Safety Officer	3
2.4 Subcontractors	3
2.5 Site Volunteer's Project Manager	4
2.6 NYSDEC Project Manager	4
3.0 QUALITY ASSURANCE OBJECTIVES	5
3.1 Data Requirements	5
3.2 Level of Quality Control	5
3.2.1 Precision	5
3.2.2 Accuracy	6
3.2.3 Representativeness	6
3.2.4 Completeness	6
3.2.5 Comparability	7
3.2.6 Sensitivity	7
3.3 Quality Control Samples	7
4.0 SAMPLING PROCEDURES	8
4.1 Sample Collection	8
4.2 Sample Custody	8
4.3 Equipment Decontamination	9
4.4 Documentation	9
4.5 Calibration	9
5.0 ANALYTICAL PROCEDURES	10
6.0 DATA REDUCTION, REVIEW AND REPORTING	11
7.0 INTERNAL QUALITY CONTROL	12

<u>SECTION</u>	<u>PAGE</u>
7.1 Laboratory Quality Control	12
7.2 Field Quality Control	12
7.2.1 Trip Blank	12
7.2.2 Rinsate Blank (Equipment Blank)	12
7.2.3 Field Blank	12
7.2.4 Temperature Blank	13
7.2.5 Duplicates	13
7.3 Data Assessment Procedures	13
8.0 PERFORMANCE AND SYSTEM AUDITS	14
9.0 PREVENTATIVE MAINTENANCE	15
10.0 CORRECTIVE ACTION	16
11.0 QA/QC REPORTS	17

TABLES

Table 1	Data Quality Objectives
Table 2	Quantitation limits and SCGS
Table 3	Quality Control Samples
Table 4	Sample Preservation, Storage and Holding Times

APPENDICES

Appendix A	York Laboratory Qualifications
Appendix B	Resume for DUSR

1.0 INTRODUCTION

JM Associates has prepared a Quality Assurance Project Plan (QAPP) for the Remedial Investigation (RI) and Interim Remedial Measures (IRM) that will be conducted at the Concord Hotel & Resort Site located on Concord Road, Kiamesha Lake, Thompson, New York ("the Site") under the New York State Brownfield Cleanup Program (BCP). The QAPP presents the project description, project organization, data quality objectives, and data management procedures for implementing investigation activities at the site. The QAPP also identifies the specific quality control (QC) checks and quality assurance (QA) auditing processes to be undertaken during field operations at the site.

1.1 Project Description and Objective

Site background information is discussed in the RI/IRM Work Plan. The project consists of remediating the site for the development of the site into a hotel/retail space complex. The objective of the IRM activities is to excavate historically leaking underground storage tanks (USTs) at the site and surrounding contaminated soil, to properly dispose of remaining on site chemicals and to complete the removal of asbestos containing material (ACM) in areas of the Main Hotel Complex. The objective of the RI is to determine the extent of the International Golf Course Dump Site, to conduct soil sampling in septic system locations and to determine if on site contamination has impacted Kiamesha Creek and/or groundwater at the site. If groundwater has been impacted, the extent of the contamination will also be determined. Once the RI is complete, remedial alternatives for solid waste disposal and groundwater, if impacted, will be evaluated.

1.2 Site Description

The Site is located on Concord Road, Kiamesha Lake, Town of Thompson New York and occupies approximately 378 acres of the total 1,729 acre property. The site consists of three main areas; Zones 1, 2 and 3. Zone 1 consists of areas in the northwestern portion of the property and includes the Main Hotel Complex, the Main Parking Area Dump Site, the Gas Station and the International Golf Club House and Maintenance Building. The total area of Zone 1 is approximately 203 acres. Zone 2 consists of areas in the south/southeastern central portion of the site and includes the Monster Club House, the Chalet House and Chalet Dump Site and the Golf Maintenance Building and Golf Maintenance Dump Site. The total area of Zone 2 is approximately 170 acres. Zone 3 consists of the International Golf Course Dump Site, located in the northern central portion of the site, north of Zone 2. The total area of Zone 3 is approximately 5 acres.

1.3 Data Quality Objectives

The data collected during the IRM and RI will be utilized to provide information to satisfy the following Data Quality Objectives (DQO):

- Determine the extent of soil contamination at the site and excavate contaminated areas to levels that are below NYSDEC Recommended Soil Cleanup Objectives

(RSCO) as defined by NYSDEC Technical and Administrative Guidance Memorandum #4046 (TAGM 4046).

- Determine if Kiamesha Creek is being affected.
- Determine the extent of groundwater contamination based on NYSDEC Groundwater Quality Standards as per New York State Codes, Rules and Regulations (NYCRR) Part 703.

DQOs are specified based on the intent of the data use and are defined with respect to the type, number and location of samples that will be collected, and the quality assurance levels associated with the respective analysis. Table 1 summarized specific samples to be collected as part of the RI and IRM.

2.0 PROJECT ORGANIZATION

This section describes the project organization and the project team that has been assigned to complete the RI and IRM. The responsibilities of each of the project positions are outlined below. Multiple project duties may be assigned to one team member.

2.1 Environmental Project Manager (Project Manager)

The Environmental Project Manager (PM) is responsible for the overall technical and logistical aspects of the project and for implementation of the RI/IRM Work Plan. The PM is responsible for assuring that project staff completes their objectives in accordance with the work plan and the project schedule. In addition, the PM is responsible for reviewing and assessing the performance of subcontractors. The PM serves as the main point of contact for the Volunteer's Project Manager and the project team. The PM is responsible for maintaining project files and for project budget and schedule tracking. The PM is also responsible for contact with government agencies. The PM for this project is Mr. John Manfredi, of JM Associates, Inc.

2.2 Project Quality Assurance Officer

The Quality Assurance Officer (QAO) is responsible for conducting periodic field and sampling audits, interfacing with the analytical laboratory to make requests and resolve problems, interfacing with the data validator and for reviewing or developing a project specific data usability summary report (DUSR). The QAO will be responsible for ongoing surveillance of project activities, for ensuring conformance to this Quality Assurance Project Plan (QAPP), and for evaluating the effectiveness of its requirements. The QAO has access to any personnel or subcontractors, as necessary, to resolve technical problems and take corrective action as appropriate and has the authority to recommend that work be stopped when that work appears to jeopardize quality. The QAO will be available to respond to immediate QA/QC problems. The QAO reports directly to the PM. The QAO for this project is John Manfredi of JM Associates.

2.3 Health and Safety Officer

The Health and Safety Officer (HSO) is responsible for implementation of site-specific health and safety requirements and emergency contingency response as presented in the Health and Safety Plan (HASP). They are responsible for hazard communication information, oversight of training employees in safe operating procedures and advising the PM on any matters which involve the health and safety of personnel completing the investigation field work. The HSO for this project is Joe Mazzurco of IMF Safety Services, Inc.

2.4 Subcontractors

Several subcontractors will be used throughout the course of the RI and IRM. The subcontractors anticipated to be used are as follows:

Soil Boring Advancement and Well Installation: General Borings, CT

Site Surveying: York Laboratory, CT
Laboratory Analysis:

Data Usability Review: Carole A. Corrado-Tomlins, NY.

2.5 Volunteer's Project Manager

The Volunteer's Project Manager will interface directly with the PM to ensure compliance with the Work Plan and overall regulatory compliance. They will inform the PM of the schedule for the overall development project and coordinate with the PM as necessary. The Volunteer's Project Manager is Henry Zabatta of Concord Associates, LP. The Volunteer's Project Manager is ultimately responsible for compliance with the Work Plan and timely completion of work and compliance with submittal requirements.

2.6 NYSDEC Project Manager

The NYSDEC Project Manager will interface directly with the Volunteer's Project Manager and the PM. The NYSDEC Project Manager is the central contact for all regulatory agencies involved in the project, including the New York State Department of Health (NYSDOH). The NYSDEC's Project Manager will monitor the project and ensure that it is being implemented to the NYSDEC's satisfaction. All submittals and correspondence from the EPM or the Volunteer's Project Manager will be directed to the NYSDEC Project Manager. The NYSDEC PM for this project is Andrew Lent of the NYSDEC Region 3 Tarrytown office.

3.0 QUALITY ASSURANCE OBJECTIVES

The QA objective is to develop and implement procedures for sampling and analytical testing that will provide data of known quality that is consistent with the intended use of the information. This section identifies the objectives by describing the use of the data, specifying the applicable field checks, and defining the acceptable criteria for data quality.

3.1 Data Requirements

The laboratory quantitation limits to be used are in accordance with NYSDEC Analytical Services Protocols (ASP). A list of the compounds being analyzed for and their respective quantitation limits is provided in Table 2. In certain instances, the laboratory cannot achieve the quantitation limits. Often this occurs because there are high concentrations of the target analyte, or an interfering compound are present, necessitating sample dilution, or often, resulting in an interference that requires an elevated quantitation limit. The laboratory indicates these instances with footnotes.

3.2 Level of Quality Control

The field sampling team will use different types of QA/QC samples to ensure and document the integrity of the sampling procedures and laboratory handling procedures. A summary of quality assurance mechanisms is provided in Table 3. The measured data will also be evaluated through a Data Usability Summary Report (DUSR). In order to achieve the project DQOs, specific data quality requirements such as Precision, Accuracy, Representativeness, Completeness, Comparability and Sensitivity are required. These requirements are discussed below.

3.2.1 Precision

Precision is defined as the measure of agreement among repeated measurements of the same property under identical or substantially similar conditions. Sampling precision will be measured by the collection of duplicate samples taken during the sampling to demonstrate reproducible analytical data. Precision is reported as the relative percent difference (RPD) between two samples. The RPD is calculated as follows:

$$RPD = \frac{(x_1 - x_2)}{\left[\frac{(x_1 + x_2)}{2} \right]} \times 100$$

where:

RPD = relative percent difference
 x_1 = first sample value
 x_2 = second sample value (duplicate)

Laboratory duplicates and field duplicates will be used to evaluate precision. The laboratory duplicate RPDs provide an indication of analytical precision while field duplicate RPDs provide an indication of overall field precision. Frequency limits for laboratory precision are included in the associated analytical methods. Field duplicate samples will be collected at a frequency of one per twenty samples collected per matrix. Laboratory precision will be evaluated using Matrix Spike and Matrix Spike Duplicates.

3.2.2 Accuracy

Accuracy is defined as a measure of bias or of the overall agreement of a measurement to a known value. The difference is usually expressed as either a percent recovery or as a percent bias. Accuracy includes both precision and recovery and is expressed as percent recovery (% REC). The Matrix Spike (MS) sample is used to determine the percent recovery (% REC) which is calculated as follows:

$$\%REC = \frac{(SSR - SR)}{SA} \times 100$$

where:

SSR = spiked sample results

SR = sample results

SA = amount of spike added

The quality control areas that generate accuracy information include system monitoring (surrogate compound) recovery, matrix spike and matrix spike duplicates and matrix spike blanks and laboratory control samples.

Sampling accuracy is assessed by the use of a field blank. The field blank will help in quantifying the possibility of the introduction of a contaminant by either problems in the collection or handling of the samples. One field blank will be collected per sampling event.

3.2.3 Representativeness

Representativeness is the degree to which data accurately and precisely represents selected characteristics of the environmental area from which it was obtained. The representativeness of samples is assured by adherence to sampling procedures described in the RI/IRM Work Plan. The objectives for representativeness are to minimize the effects of bias from improper sampling and handling. Equipment blanks and rinsate blanks will be collected as a measure of representativeness.

3.2.4 Completeness

Completeness is a measure of the amount of valid data needed to be obtained from a measurement system as compared to the amount of data expected from the measurement

system. Completeness is defined as the percentage of all results that are not affected by failing QC qualifiers, and should be between 70 and 100% of all analyses performed. Sufficient duplicates and backup samples will be collected to assure a high return of valid data for the samples collected.

The objective of completeness in laboratory reporting is to provide a thorough data support package. The laboratory data package provides documentation of sample analysis and results in the form of summaries, QC data, and raw analytical data. The laboratory will be required to submit data packages that follow NYSDEC ASP reporting format.

3.2.5 Comparability

Comparability is a qualitative term that expresses the measure of confidence that one data set can be compared to another data set from a different phase or program. The methodologies used for the collection and analysis of samples as documented in the QAPP are expected to provide comparable data. Standardized methods of sample collection, holding times and preservation will be used as per NYSDEC ASP protocols.

3.2.6 Sensitivity

The sensitivity objectives for this plan require that data generated by the analytical laboratory achieve quantitation levels low enough to meet the required detection limits specified by NYSDEC ASP and to meet all site-specific standards, criteria and guidance values (SGCs) established for this project. All the appropriate quantitation limits and SGCs are presented in Table 2.

3.3 Quality Control Samples

Quality Control samples are collected to meet the QC objective of providing data of known and acceptable quality. QC check samples to be analyzed and evaluated include field blank samples, spike samples and duplicate samples. QC samples are summarized in Table 3.

4.0 SAMPLING PROCEDURES

Samples will be collected in accordance with the appropriate sampling method. Samples will be collected in the appropriate containers and in accordance with the appropriate preservation, storage and holding times as outlined in Table 4.

4.1 Sample Collection

When collecting samples, a new jar will be used for each sample. Disposable sampling equipment will be used for each sample or equipment will be decontaminated between sampling locations. Each sample will be collected in the appropriate sample jar as provided by the laboratory. Containers will be inspected prior to use to ensure their integrity. When using instruments to measure field parameters, the meter will be calibrated each day prior to use. Proper personal protective equipment (PPE) will be used for sampling. Gloves used for sample collection will be disposable and a new pair used for collection of each sample.

4.2 Sample Custody

Proper chain-of-custody procedures will be followed. Custody procedures involve proper sample identification, chain-of-custody forms, proper sample storage, and proper packaging and shipping procedures.

Sample containers will be labeled with the following information:

1. Project name and address
2. Sample identification (sample number and ID)
3. Name of person collecting sample
4. Date and time of collection
5. Preservation, if applicable
6. Type of sample and analyses to be performed
7. Initials of sampler, or signature

At the time of sampling, the person sampling will properly fill out the chain-of-custody form. Once sampling is complete, the sampler will properly package the samples for shipping, or deliver the samples directly to the laboratory. In either case, all samples will be received by the laboratory within 24 hours of sample collection. Laboratory personnel will then assume custody of the samples.

Once the laboratory assumes custody of the samples, they will be checked for label identification and accuracy of chain-of-custody forms. The laboratory is NYSDOH-certified and will follow proper sample custody procedures.

4.3 Equipment Decontamination

Before sampling activities begin, a decontamination area will be established, if necessary. If dedicated, disposable sampling equipment is used, a decontamination area will not be necessary. If decontamination is necessary, sampling equipment will be decontaminated by a wash and scrub with low phosphate detergent, a tap water rinse followed by a thorough rinse with de-ionized water, and then allowed to air dry. Disposable equipment, including PPE, will be collected in plastic bags and placed in a designated storage area in preparation for proper disposal.

4.4 Documentation

Field personnel will document all necessary information in field notebooks. The date and time of field activities will be clearly marked and observations as to the activities performed that day will be made. Each entry will be signed and dated by the person making the entry. Information to be documented at the time of sampling includes:

- Name of project and site address
- Date and time
- Weather
- Name and contact information of sampler
- Names of other personnel on site
- Sample ID and sample matrix
- Sample location (mark on site map with proper sample ID)
- Type of sample (composite, grab, duplicate, blank)
- Depth of sample
- Field observations
- Field measurements
- Purge information (for groundwater sampling)
- Calibration of field instrumentation
- Method of sample shipping or delivery
- Circumstances or observations pertinent to the sampling

4.5 Calibration

Calibration procedures performed by the laboratory will be in accordance with the particular sampling method being performed and in accordance with standard laboratory procedures. Field calibration will be performed each day in the field in accordance with the manufacturer's instructions regarding the specific field instrument being used. Calibration information will be documented in the field notebook at the time of calibration. Information to be documented includes the calibrator's name, the standards used for calibration and the source of the standard (manufacturer's instructions), the date and time of calibration, the name of the instrument and model number, and any corrective actions taken.

5.0 ANALYTICAL PROCEDURES

Analytical procedures to be used are from the United States Environmental Protection Agency's SW-846 Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods. The Specific methods to be used are outlined in Table 1.

6.0 DATA REDUCTION, REVIEW AND REPORTING

The process of data reduction, review and reporting ensures that the final data accurately reflects site conditions. Data reduction performed by the laboratory will adhere to ASP data reduction procedures. The laboratory to be used for this project is York Laboratories of Stratford, CT. The qualifications of York Laboratory are attached as Appendix A. All data is reviewed prior to use in the reports. Field data is reviewed to ensure accuracy of sampling procedures including sample collection, instrument calibration, and proper chain-of-custody procedures. Sampling is also reviewed to ensure that proper QC samples were collected at the proper frequency. Laboratory data is reviewed by the lab to ensure compliance with sampling protocol including proper holding times, sample preservation, proper detection limits, etc.

Reporting in the field is completed in bound field notebooks. Laboratory reports will conform to NYSDEC ASP Category A data deliverable packages. A Data Usability Summary Report (DUSR) will be prepared in accordance with NYSDEC "Guidance for Developing a Data Usability Summary Report". The DUSR will be prepared by a qualified third party and will be submitted with the final report. The DUSR will determine whether the final results can be used as reported, with limitations or cannot be used at all.

The DUSR will be prepared by Carole A. Corrado-Tomlins of The Data Quality Indicator & Associates, Inc. Ms. Corrado-Tomlins' resume is attached as Appendix B.

7.0 INTERNAL QUALITY CONTROL

Internal quality control procedures detect potential problems at the source and, if necessary, trace the pathways to identify potential locations for introduction of contamination. QC checks are used to monitor project activities to determine whether QA objectives are being met.

7.1 Laboratory Quality Control

All analytical procedures and QA/QC protocols will be followed as per EPA methods and the Laboratory's Internal Procedures. The QC criteria are specific to each approved analytical methods and will be followed accordingly.

7.2 Field Quality Control

Field QC procedures monitor the data quality as it is affected by field procedures. Field QC samples consist of blanks and duplicates. The sample types and frequency are summarized below.

7.2.1 Trip Blank

A trip blank consists of reagent water prepared by the laboratory and sealed in the appropriate sampling container. Trip blanks are placed in the sample cooler prior to sample collection and remain unopened until the samples are returned to the laboratory for analysis. This sample focuses on external sources of contamination and sampling container quality. For each trip to the laboratory, one trip blank will be completed. Trip blanks will be included as part of each sampling event for VOCs and will be analyzed on an as needed basis.

7.2.2 Rinsate Blank (Equipment Blank)

Rinsate blanks, or equipment blanks, may be collected for each type of equipment used each day a decontamination event is carried out. The rinsate blank is collected by pouring de-ionized water over the decontaminated sampling equipment to determine the possibility of cross-contaminations. Rinsate blanks will be collected when decontamination occurs and will be analyzed on an as needed basis.

7.2.3 Field Blank

Some of the required blanks will consist of routine field blanks, which are collected by pouring the de-ionized water directly from the source into the sample container.

7.2.4 Temperature Blank

Each cooler will contain a temperature blank, which the laboratory will use to confirm that the samples are chilled to 4°C. Temperature blanks will be included with each cooler of samples shipped or delivered to the laboratory.

7.2.5 Duplicates

Blind duplicates are grab samples collected to monitor overall precision. One duplicate will be collected and submitted per twenty (20) samples collected, or one (1) sample per sampling event, whichever is greater.

7.3 Data Assessment Procedures

The field and laboratory data will be assessed for precision, accuracy, representativeness, comparability and completeness using the field and lab QC samples.

8.0 PERFORMANCE AND SYSTEM AUDITS

Performance and system audits will be performed on a periodic basis to ensure that the field activities are implemented in accordance with the approved RI/IRM Work Plan and in accordance with good work practices.

Internal laboratory audits are carried out periodically. Results of internal audits will be reviewed by the QAO. The laboratory is also audited as part of the various certification programs in which it participates. The laboratory will maintain proper certifications for all sub-categories of solid and hazardous waste.

Field audits are conducted periodically by the PM. The PM monitors subcontractors and field personnel to ensure appropriate procedures are being utilized.

9.0 PREVENTATIVE MAINTENANCE

J.M. Associates personnel will check all field equipment to make sure that it is in good working order prior to field sampling activities (cleaned, charged, calibrated correctly). The calibration and documentation procedures discussed in previous sections will also be followed. The maintenance of equipment is tracked and routine maintenance procedures are followed. J.M. Associates will ensure that subcontractors inspect their equipment and ensure it is in proper working order.

10.0 CORRECTIVE ACTION

The QA/QC program enables problems with the data or field procedures to be identified, controlled, and corrected. Any person identifying an unacceptable condition will bring the problem to the attention of the QAO and PM. The occurrence will be documented in the field log as well as any corrective action taken.

Deviations or problems identified by the laboratory will be documented in the data package. Corrective action may be taken and will also be documented. Corrective actions may include re-sampling, reanalysis of samples, or modifying the project procedures.

11.0 QA/QC REPORTS

Communication is an important aspect of a QA/QC Program and is integral to implementation of this QAPP. Reports will be prepared as needed by the QAO for submittal to the PM and the Volunteer's Project Manager. These reports will include a periodic assessment of the precision, accuracy and completeness of the sampling, results of audits, corrective actions taken, QA/QC problems noted and resolutions to problems encountered and recommendations to outstanding issues.

Laboratory noncompliance reports will be filed with the laboratory project manager. The reports will include accuracy and precision data, quality problems and the status of corrective actions implemented. QA/QC problems encountered will be discussed between laboratory management and QA personnel and appropriate corrective action measures will be implemented.

Table 1
Data Quality Objectives
Samples to be Collected

Media	Location	Type	Frequency	Analysis	Analytical Method	Other sampling	Objective
Soil	Sidewall of excavation	Composite	1 per 30 linear feet	VOCs	EPA 8021	PID, visual inspection	To confirm excavation of petroleum contaminated soil associated with USTs
				SVOCs	EPA 8270		
				VOCs	EPA 8021		
	Bottom of excavation	Composite	1 per 900 square feet	VOCs	EPA 8021	PID, visual inspection	To confirm excavation of petroleum contaminated soil associated with USTs
				SVOCs	EPA 8270		
				VOCs	EPA 8021		
Soil	Septic Fields	Composite	3 samples	VOCs	EPA 8021	PID, visual inspection	To determine if contamination exists in septic fields
				SVOCs	EPA 8270		
Surface Water	Kiamasha Creek	Grab	4 samples	VOCs	EPA 8021		To determine if the Creek has been impacted by septic discharge or solid waste disposal
				SVOCs	EPA 8270		
				Metals	EPA 6010		
Sediment	Kiamasha Creek	Grab	At least 6	VOCs	EPA 8021		To determine if the Creek has been impacted by septic discharge or solid waste disposal
				SVOCs	EPA 8270		
				Metals	EPA 6010		
Groundwater	Throughout Site	Grab		VOCs	EPA 8021		To determine extent of groundwater contamination
				SVOCs	EPA 8270		
				Metals (selected samples)	EPA 6010		

Table 2
Quantitation Limits and SCGs

Parameter	Soil Quantitation Limit ppb	Groundwater Quantitation Limit ppb	SCGs* Soil (ppm) / Groundwater (ppb)
1,2,4-Trimethylbenzene	5	1	10 / 5
1,3,5-Trimethylbenzene	5	1	3.3 / 5
Benzene	5	1	0.06 / 1
Ethylbenzene	5	1	5.5 / 5
Isopropylbenzene	5	1	2.3 / 5
Naphthalene	5	1	13 / 10
n-Butylbenzene	5	1	10 / 5
n-Propylbenzene	5	1	3.7 / 5
o-Xylene	10	2	2.3 / 5
p & m Xylenes	10	2	2.3 / 5
p-Isopropyltoluene	5	1	10 / 5
sec-Butylbenzene	5	1	10 / 5
tert-Butylbenzene	5	1	10 / 5
Toluene	5	1	1.2 / 5
Total Xylenes	10	2	2.3 / 5
Acenaphthene	330	1	50 / 20
Anthracene	330	1	50 / 50
Benzo(a)anthracene	330	1	0.224 / 0.002
Benzo(a)pyrene	330	1	0.061 / ND
Benzo(b)fluoranthene	330	1	0.220 / 0.002
Benzo(g,h,i)perylene	330	1	50 / --
Benzo(k)fluoranthrene	330	1	0.220 / 0.002
Chrysene	330	1	0.4 / 0.002
Dibenz(a,h)anthracene	330	1	0.0143 / --

Fluoranthene	330	1	50 / 50
Fluorene	330	1	50 / 50
Indeno(1,2,3-cd)pyrene	330	1	3.2 / 0.002
Naphthalene	330	1	13 / 10
Phenanthrene	330	1	50 / 50
Pyrene	330	1	50 / 50

*SCGs for soil are in accordance with NYSDEC TAGM 4046 and for groundwater are in accordance with NYCRR Part 703

Table 3
Quality Control Samples

Media	Field QC Samples				Laboratory QC Samples			
	Field Duplicate	Field Blank	Trip Blank	Rinsate Blank	Reagent Blank	Matrix Spike	Matrix Spike Duplicate	
Soil/Sediment	5% (1 per 20 samples)	5% (1 per 20 samples)	1/day or shipment (whichever greater)	As necessary	1 per analysis batch	1 per analysis batch	5% or 1 per analysis batch	
Groundwater/Surface Water	5% (1 per 20 samples)	5% (1 per 20 samples)	1/day or shipment (whichever greater)	As necessary	1 per analysis batch	1 per analysis batch	5% or 1 per analysis batch	

Table 4
Sample Preservation, Storage and Holding Times

Media	Parameter	Container	Preservative	Maximum Holding Time
Soil/Sediment	VOCs	Glass, Teflon lined septum cap	4 deg C	7 days
	SVOCs	4 oz glass jar with Teflon lined cap	4 deg C	10 days after VTSR to extraction; 40 days for analysis
Groundwater/Surface Water	VOCs	(2) 40 ml vials with teflon lined septum cap	4 deg C	7 days
	SVOCs	1-liter glass amber jar with Teflon lined cap	4 deg C	5 days after VTSR to extraction; 40 days for analysis

APPENDIX A

York Laboratory Qualifications

I. Introduction

YORK
ANALYTICAL LABORATORIES, INC.

I. Introduction

York's charter is to provide superior service for a wide range of analysis needs to consulting engineers, industry and government, in support of regulated activities under the applicable environmental regulations



York Analytical Laboratories, Inc. is a full service independent analytical laboratory providing analyses of water, wastewater, soil, solid waste, hazardous waste and air in support of environmental needs.

A. Background of the Firm

York Analytical Laboratories, Inc. (YORK), is an independent, privately owned analytical laboratory. Our charter is to provide superior service for a wide range of analysis needs in support of regulated activities under the applicable environmental regulations including Underground Storage Tank programs, Resource Conservation and Recovery Act, The Clean Water Act, CERCLA/SARA, TSCA, Clean Air Act, and specific Land Transfer requirements (ECRA, Super Lien, etc.). As one of the pioneers in the air pollution measurement field, our former sister company, York Services Corporation (YSC) was one of the first full service air quality firms in the country. During the late 1960's and early 1970's YSC developed numerous methodologies for the sampling and analysis of air and emissions from a number of different industrial sources. Additionally, we were one of first commercial laboratories to be involved in groundwater, solid waste, hazardous waste, soils, and air. These environmental laboratory analysis operations, which were an outgrowth of our air quality monitoring studies, were incorporated as York Analytical Laboratories, Inc. in 1990.

B. Staffing and Facilities

York's key management personnel each have over twenty years of experience in environmental analysis. This extensive experience includes all aspects of sampling and analysis. All of our staff have earned graduate and/or undergraduate degrees in various related disciplines including chemistry, biology, engineering and environmental sciences. This team of experienced professionals is equipped with the multi-disciplinary expertise, to provide a high level of support to our clients. Our staff provides technical support to assist clients with Quality Assurance Project Plans, definition of proper methodologies and data quality objectives, and data interpretation. These value-added services are a point of differentiation from other analytical laboratories, we routinely offer as an investment in our client relationships.

Our new Stratford, Connecticut laboratory and offices, includes 8,500 sq. ft. of working laboratory area with an additional 3,500 sq. ft. available for future expansion. The laboratory facilities are equipped with modern state-of-the-art instrumentation and equipment to address the analysis of all environmental matrices. Our laboratory facility is designed to reduce the potential for cross contamination. Separate laboratory environments are provided for volatiles, sample preparation, and sample control to minimize cross-contamination potential. The instrumentation laboratories are segregated by discipline (organics analysis, sample preparation, wet chemistry and atomic spectroscopy)

YORK

ANALYTICAL LABORATORIES, INC.

York's expert staff provides technical support to assist our clients with Quality Assurance Project Plans, definition of proper methodologies and data quality objectives, and data interpretation. These value-added services are a point of differentiation, from other laboratories, that we routinely offer as an investment in our relationships with our clients.

and are provided with separate recirculating air conditioning systems to reduce cross-contamination from common laboratory solvents (methylene chloride, acetone, hexane and toluene) used in sample extractions. The laboratory maintains comprehensive licenses in various states including New York, Connecticut, New Jersey, Pennsylvania and Rhode Island.

C. Services

York provides analysis for all environmental matrices in support of the environmental regulations under the following guidelines or regulations:

- Resource Conservation and Recovery Act (RCRA)
- Clean Water Act (CWA)
- CERCLA/SARA (Superfund)
- Clean Air Act (CAA)
- OSHA/NIOSH
- Land Transfer Regulations
- NYSDEC STARS/UST and T.A.G.M. programs

Key instrumentation and equipment in support of the methods to address analyses for these regulations include:

- Gas Chromatography/Mass Spectrometry
- Gas Chromatography
- Furnace and Flame Atomic Absorption
- Inductively Coupled Plasma
- Infrared Spectrophotometry
- Ion Chromatography
- Full wet chemistry and microbiology laboratories

The foundation for the quality of information and data generated by our laboratory is the company's Quality Assurance Program which is implemented through comprehensive Standard Operating Procedures. These procedures ensure that the client's data quality objectives are both fully understood and delivered, on a timely basis.

Data Validation and Technical Support Services

York, also provides independent data validation and technical support services. These services which are independent from York's traditional laboratory services focus on performing professional services in the areas of analytical data validation and review and interpretation of analytical data related to environmental investigations (i.e. Site and/or Remedial investigations).

We define service as "providing quality data within the time frame committed with superior technical support at a fair price."

Data validation and QA/QC issues associated with technical support are performed by highly qualified personnel certified by the USEPA for data validation. Additionally, members of our staff have had experience in both laboratory analysis and field sampling which provides in depth understanding of work plan development including:

- Analytical requirements
- Project Specific data quality objectives
- State and Federal Data Validation Guidelines

D. Key Clients

York serves engineering consulting firms, major municipalities, utilities and industry, without geographical limitations, including:

Consulting Engineers/Remediation Firms

- IT Corporation/PMS Construction/NYCDDC
- Lro-Kassner/NYCDDC
- Eder Associates/Gannett-Fleming
- Clean Harbors
- Lehrer, McGovern, Bovis
- Malcolm Pirnie, Inc.
- Metcalf & Eddy, Inc.
- Ira D. Conklin
- Fleet Environmental
- Roy F. Weston
- Lenard Engineering
- Leggette Brashears and Graham
- Conestoga-Rovers
- Handex Environmental
- Fanning Phillips & Molnar
- TRC Environmental
- Waste Management

Municipalities

- New York City Department of Environmental Protection
- Connecticut Department of Environmental Protection
- Connecticut Department of Transportation
- Hartford Metropolitan District, Connecticut
- New York City Department of Design and Construction

Utilities

- Central Hudson Gas and Electric Company
- Consolidated Edison, New York
- Niagra Mohawk Power Corporation, New York

Industry

- Connecticut-American Water Company
- Clairol, Inc.
- Cytec, Inc.
- Crompton Manufacturing Corp. (Uniroyal Chemical)
- General Motors
- IBM
- Metro- North Railroad
- Long Island Railroad

E. Summary

We pride ourselves on our level of service to our client. We define service as “providing quality data within the time frame committed with superior technical support at a fair price.”

The balance of this document provides brief insight into our ability to provide superior service by describing our capabilities, specific project experience, staff equipment and quality assurance practices.

II. Services, Facilities and Experience

YORK
ANALYTICAL LABORATORIES, INC.

II. Services, Facilities and Experience

With over 30 years of dedicated service to the environmental consulting industry, YAL can provide unparalleled experience to meet your analytical needs.

York Analytical Laboratories, Inc. (YORK), is an independent, privately owned analytical laboratory which provides superior service for a wide range of analysis needs in support of regulated activities under the applicable environmental regulations.

A. Services

York's combination of extensive experience and modern instrumentation provides the ability to support a wide range of analyses. Our in-house capabilities address all the analyses in support of programs under the following guidelines or regulations:

- Resource Conservation and Recovery Act
- Clean Water Act
- CERCLA/SARA (Superfund)
- Clean Air Act
- OSHA/NIOSH
- Land Transfer Regulations
- NYSDEC STARS/UST/TAGM programs

1. Resource Conservation and Recovery Act (RCRA)

York provides analysis of groundwater, soils, solid waste and hazardous waste and air in support of RCRA requirements. These analyses most often include determination of potential contaminants in the categories of target volatile organics, semi-volatile (Base/Neutral/Acid extractable) organics, pesticides, PCBs, herbicides, metals, cyanide, sulfide, ignitability, corrosivity, reactivity, and total petroleum hydrocarbons.

Analyses are conducted in accordance with EPA mandated procedures described in the methods manual designated as "SW-846." York maintains these procedures on our computer database through ChemSoft, Inc. Who provides automatic updating of methods as changes are released by EPA.

The analytical methods most commonly employed in our laboratory include direct analysis of the sample or TCLP extraction followed by methods 601/602, 8021 or 8260 for volatiles using Gas Chromatography and Gas Chromatography/Mass Spectrometry (GC/MS); methods 625 or 8270 for base/neutral/acid extractables (GC/MS); methods 8081 and 8082 for pesticides/PCB (GC); method 8151 for herbicides (GC) and the 6000 and 7000 series for metals (ICP and/or Furnace/Flame Atomic Absorption).

2. Clean Water Act (CWA)

Under the CWA York provides analyses supporting the effluent guidelines of the National Pollutant Discharge Elimination System (NPDES or SPDES) and the Safe Drinking Water Act (SDWA). Analyses offered include Volatiles, BNAs, Pesticides, PCBs, Trace Metals and conventional parameters such as BOD₅, COD and other wet chemistry parameters. Analyses are performed in accordance with the EPA methods described in the Federal Register (EPA 600 Series, 500 series and others) and Standard Methods for the Examination of Water and Wastewater, 19th edition.

Under the NPDES programs (40 CFR122), Volatiles are determined by GC/MS according to EPA method 624; BNAs are determined by GC/MS using method 625, Pesticides/PCBs are determined by method 608, and other parameters are determined in accordance with the EPA Chemical Analysis of Water and Wastes or Standard Methods.

For SDWA support, York provides routine analyses of water quality parameters including microbiological analyses (coliforms), Certificate of Occupancy parameters and determination of other regulated parameters in accordance with the EPA methodologies.

3. CERCLA/SARA (Superfund)

York can provide analysis in support of projects under these programs. We are fully versed with current EPA Contract Laboratory Program protocols for organics and inorganics. We are staffed to provide the hard copy deliverables on an as-required basis for the Target Compound List (TCL) and Target Analyte List (TAL) organics and inorganics respectively.

4. Clean Air Act (CAA)

York's long history of providing air quality monitoring services allows us to offer a significant expertise in this area. Analysis in support of the CAA and ambient air monitoring programs include full capabilities for sampling and analysis for:

- Velocity, moisture, particulates, CO, CO₂, Sox, Nox, volatile organics, semivolatiles, heavy metals, total hydrocarbons and HCL using EPA Methods 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 (and related continuous emissions monitoring methods) 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23 (sampling), 24, 25, 25A, 26 & 29
- Sampling and analysis for organics and inorganics in support of BIF regulations for the burning of hazardous wastes in industrial furnaces and boilers

YORK

- Sampling and analysis of ambient and process air for organics using VOST sampling methodology with GC/MS analysis
- Sampling and analysis for ambient air target and non-target volatile organics utilizing EPA Methods TO-14A and TO-15 SUMMA passivated canisters with analysis by GC/MS techniques
- Odor studies utilizing multi-disciplinary approaches

In addition to regulated airborne contaminants, York also provides the following services:

- Odor identification using GC/MS techniques
- Indoor Air Quality studies in commercial and residential facilities

An area of specialization at York involves characterization and quantitation of target and non-target volatile organics employing SUMMA passivated canisters using critical orifice sampling techniques. York can provide sampling of ambient air for parts per trillion levels of volatiles using GC/MS/SIM techniques. In addition, for ambient air, York can provide volatiles determination in land-fill gas, geoprobe samples, and process gas for volatile constituents.

5. OSHA/NIOSH

York provides sampling and analysis for workplace atmospheres for most common organics and inorganics used in industrial environments. Sampling is conducted routinely using personal sampling pumps and analysis of sampling media using gravimetric, GC, AA and spectrophotometric techniques with NIOSH methods.

6. Land Transfer Regulations

York provides full analytical support to meet our client's needs for the various state regulations governing commercial land transfers such as Super Lien (CT), and ECRA (NJ), etc. Analysis of groundwater, soil, building materials, storage tanks (USTs and ASTs) and air are performed in accordance with EPA SW-846 protocols where applicable. Typical analyses provided include Volatiles, PCB, Metals, and TPH can be customized to meet the history of a particular site as determined by Phase I investigations.

York is thoroughly versed in the data deliverable requirements for the various states under their particular programs.

7. NYSDEC STARS/SPOTS Program

York has extensive experience with the NYSDEC Petroleum Contamination Guidance Documents known as the STARS Memorandum and SPOTS Memorandum. York routinely conducts analyses to determine whether groundwater or soil under these guidance documents are hazardous and/or petroleum contaminated. York applies state-of-the-art GC/MS instrumentation to achieve the lower detection limit required for the target compounds listed in these memoranda. York also provides related data packages for NYSDEC ASP A and ASP B formats to support these data.

B. Facilities

York is a full service laboratory, located at 120 Research Drive, Stratford, CT. This highly accessible location is within a two hour drive from most points of service to effectively service our clients in the northern New Jersey, New York, Connecticut, Massachusetts and Rhode Island areas.

York maintains a 12,000 sq. ft. Office and laboratory facility at its Stratford, CT location. Of this total, 8,500 sq. ft. is dedicated to laboratory activities. The layout of the laboratory is shown at the end of this Section as Figure 2.1. Separate recirculating air conditioning systems are in place in the various laboratories to minimize cross-contamination between the various analysis disciplines.

York also maintains its own machine shop for various applications and to expedite fabrication of specialized sampling equipment.

1. Analytical Equipment

York maintains all of the analytical instrumentation and support equipment to provide analysis in support of our client's needs. A substantial inventory of stock chemicals, gases, commercially purchased standards, glassware and the like is also available.

York utilizes a Windows 2000 Server network with a Microsoft SQL Server 7.0-based Laboratory Information Management System (LIMS) to provide for sample log-in, sample tracking, data and results entry, and final laboratory report generation.

Our instrumentation laboratories are equipped with state-of-the-art analysis systems including the most prominent equipment as follows:

- Gas Chromatography/Mass Spectrometry/Data Systems
Hewlett Packard 5790, 5971, 5972 Systems-Windows Chemstations
- Gas Chromatographs
Hewlett Packard 5890-Chemstation Systems
Perkin Elmer Auto System GC with TURBOCHROM
- Atomic Absorption Spectrophotometers
Perkin Elmer 1100, 4100ZL Systems
- Inductively Coupled Plasma Spectrometers
Perkin Elmer Optima 3000XL (Axial)
- Ion Chromatograph
Dionex 120 with AS40 autosampler
- Infrared Spectrophotometer
- Total Organic Carbon Analyzer
- Computerized gas mass flow controller dilution systems

In addition to instrumentation, our laboratories maintain numerous ancillary sample preparation equipment including TCLP extraction systems, including zero-head space extractors, fume hoods and analytical balances. Table 2.1 at the end of this Section contains a detailed listing of instrumentation and ancillary equipment.

2. Certifications/Licenses

York is currently certified to perform analyses in support of environmental programs in the following states:

- State of Connecticut License No. PH-0723
- State of New York NELAP/ELAP No. 10854
- State of New Jersey No. CT-401
- State of Rhode Island No. 93
- State of Pennsylvania No. 68-3123

Also, by virtue of the January 24, 2001 initiation of the NELAP (National Environmental Laboratory Approval Program), York is also reciprocally licensed in 8 other NELAC accrediting authority states (CA, FL, NH, IL, KS, LA, OR, UT).

Our licenses support analysis of air, water, wastewater, and solid and hazardous waste for:

- Volatiles
- Semi-volatiles (BNA)
- Pesticides/PCBs/Herbicides
- Metals
- Conventional parameters (including Biological)

YORK

3. Quality Assurance Program

York provides analytical laboratory services that conform to the needs of our clients and satisfies regulatory requirements.

To meet this standard of service, York has developed a Quality Assurance Program which defines our day to day operations in the Laboratory through the execution of comprehensive Standard Operating Procedures. This program is fully documented, endorsed by company management, and available for review.

Analytical data is used for many purposes including: compliance with regulatory requirements, determination of the presence, concentration and movement of potentially hazardous materials in the environment, potential effects on determination of protection required for individuals, and possible actions necessary for the disposal or treatment of hazardous materials. In all cases, data for any application must be of known quality.

It is the purpose of the York Quality Assurance Program to provide data of known quality which conforms to the requirements of specific protocols. To achieve this objective, a QA program is in place which controls procedures for:

- Preservation of samples
- Receipt and handling of samples
- Preparation and analysis of samples
- Analytical equipment maintenance
- Data rejection/acceptance/verification
- Data reporting

The broad objectives of the York QA Program are achieved by implementation of the following key program elements:

1. Maintain an effective, ongoing quality control program which measures and verifies laboratory performance
2. Meet data requirements for accuracy, precision, recovery and completeness through strict adherence to SOPs which reflect approved methodologies.
3. Recognize and provide corrective actions for any factor that affect data quality.
4. Maintain complete records of sample submittal, client communications, laboratory performance, and completed analyses and support data to provide data quality verification.

The specific related actions are detailed in the York QA Manual and related Standard Operating Procedures.

Other related Quality Assurance practices at York include participation in various state laboratory performance evaluation sample analyses and site inspections, various client site inspections, the use of external controls where available, and participation in the EPA WP and WS performance evaluation audits.



C. Experience

As stated previously, York has had significant experience in all aspects of environmental analysis. Our experience has developed a successful client mix comprised of industry, remediation firms, consulting engineers, and governmental agencies.

Listed below is a cross section of our client base, noting some recent projects, which illustrates our capabilities to handle multi-discipline projects dealing with simple to complex matrices.

1. **Metro North Commuter Railroad** - Full analytical support for SPDES permits, groundwater remediation systems, RIFS programs, and emergency response support.
2. **Marin Environmental** - Full support analyses for Brownfields Redevelopment projects for Stop & Shop and Rite-Aid
3. **New York City DEP/Associated Engineers** - Multi-year ambient air study involving sampling and analysis of approx. 1,000 samples for airborne particulate (PM10), metals, sulfate, and volatile organics using SUMMA canisters-TO-14
4. **Cytec Industries** - Developed a direct aqueous injection GC/MS/SIM Method for the determination of methyl carbamate in river water to determine plume of contamination down to a 5 ppb lower limit detection.
5. **Black & Veatch/IBM** - In conduction with Black & Veatch, York performed analyses of groundwater and industrial effluents throughout a major manufacturing facility. Analyses included volatiles, semi-volatiles, metals and TOC.
6. **SEA Consultants/U.S. Postal Service** - Project involved analytical support for major U.S. Postal Service waste characterization program in the northeastern part of the country. Program involved numerous TCLP analyses for volatiles, semi-volatiles, pesticides/herbicides and metals along with physical characteristics.
7. **Lehrer McGovern Bovis/Thacker Engineering J.V./New York City Department of General Services** - Project involves analytical support for a major underground storage tank decommissioning program in the five boroughs of NYC. Analysis includes volatiles, semi-volatiles, metals, TCLP parameters, and geoprobe gas analysis. All analytical work done with NYSDEC ASP Category A and B deliverables.
8. **IT Corp./PMS Construction-New York City Dept. Of Design and Construction** - Conducted numerous analyses in support of multi-

YORK

year/ multi-New York City borough petroleum-impacted sites.
Required ASP-B deliverables.

9. **Environmental Concepts, Inc./Consolidated Edison** - Analytical support for comprehensive facility UST program in all New York City locations.
10. **Rockland County, New York** - Conducted odor study involving compound identification using GC/MS techniques.
11. **BMS/Clairol, Inc.** - Weekly analysis of wastewater treatment plant effluent for conventional parameters.
12. **Roy F. Weston Corp.** - Analysis of numerous Summa Canister whole air samples in the environs of a remediation project for TO-14 constituents. Project involved NYSDEC ASP B-like deliverables packages.
13. **Edgeboro Disposal, Inc., New Jersey** - Comprehensive sampling and analysis program to characterize raw landfill gas for volatiles, semi-volatiles, pesticides and PCB's. PCB methods involved EPA M680 (SIM).
14. **State of Connecticut DEP** - Master Services Agreement to provide on-call laboratory services for State facilities and agencies.
15. **State of Connecticut DOT** - Master Services Agreement to provide on-call laboratory support services for DOT
16. **Malcolm-Pirnie, Inc.** - Analysis of ground water, soil and building materials for volatiles, PCBs and metals at a major Bridgeport, CT chemical facility. Project required EPA Level III deliverables.
17. **General Motors Delco Chassis Div.** - Routine analysis of wastewater, waste oil and storm water for 1.2 million S.F. facility.
18. **Fort Drum, NY/Malcolm Pirnie** - Task order contract for analysis support for U.S Army facility. Project involved analysis of wastes, soil and groundwater with ASP B deliverables.
19. **Metcalf & Eddy/Swiss Bank** - York provided hundreds of analyses of soil and water in support of major land transfer project. Analyses involved 4 hour turn-around for QA/QC deliverables.
20. **Numerous Consulting/Engineering Firms** - Analysis of landfill monitoring wells samples and surface waters for regulated parameters in support of Superfund activities as well as routine state requirements (i.e. NYCRR Part 360)

SCALE 1" = 10'

YORK ANALYTICAL LABS
120 RESEARCH DRIVE STRATFORD, CT 02/2004

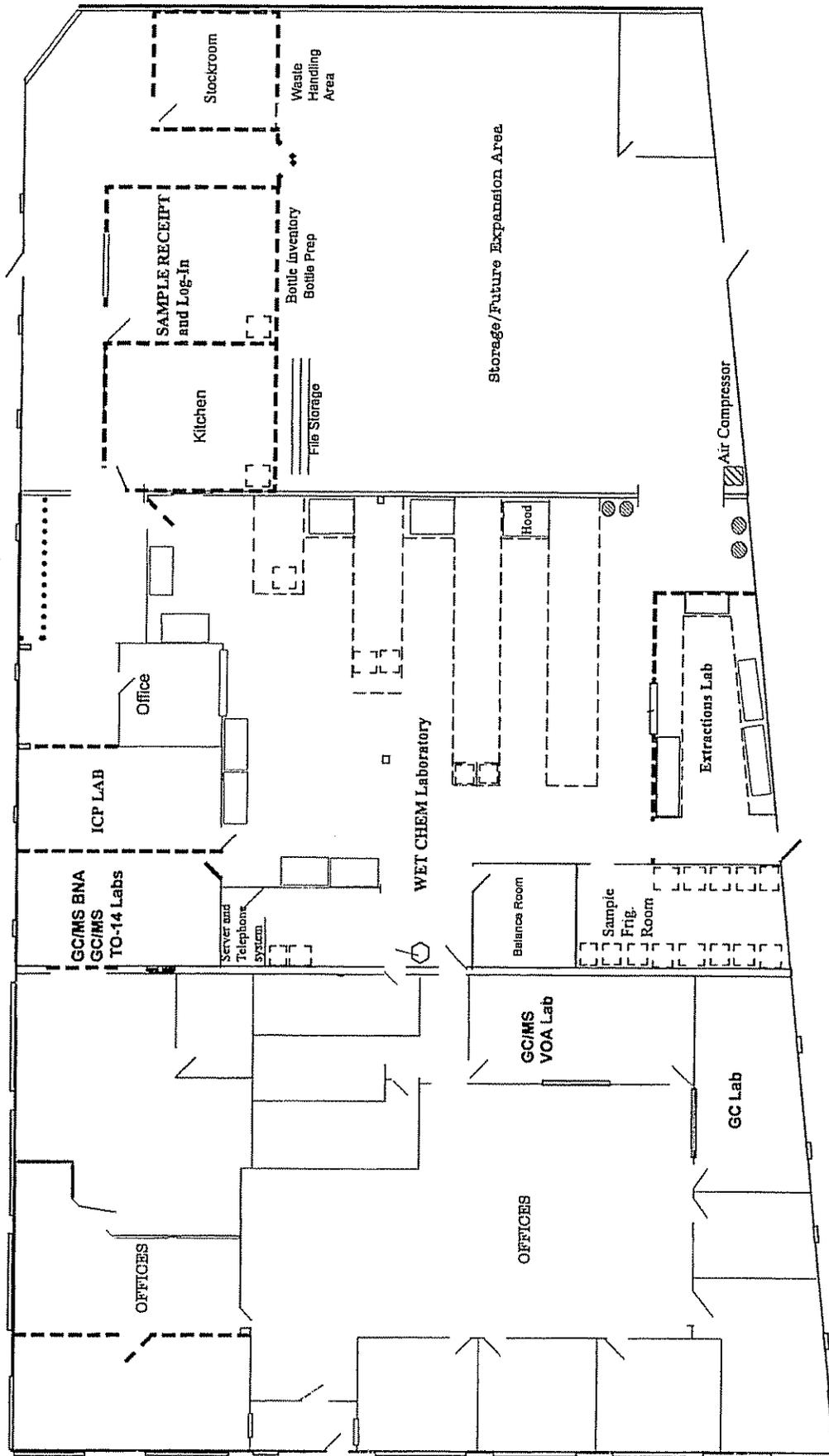


Figure 2-1

Table 2-1

Equipment & Instrumentation	Quantity
Atomic Absorption Hollow Cathode Lamps (Buck & PE)	29
Atomic Absorption System (Perkin Elmer PE 1100, B AAS)	1
Atomic Absorption System (Perkin Elmer PE 1100)	1
Atomic Absorption System, FAA (Perkin Elmer PE 4100, Zeeman GFAA)	1
Autoclave (National Autoclave)	1
Autoclave (National Steril-Quuik 1975)	1
Autoclave, 1 CF (Sybron/Barnstead, C-2260)	1
Autosampler for O.I. System (MPM-16)	1
Autosampler Heater System for O.I. System (MHC-16)	1
Autosampler for VOCs Tekmar LSC2000/2016 ALS	2
Autosampler for VOCs ARCHON/Tekmar LSC-3000	1
Balances, Analytical (Mettlers AE100 H45), Balance (Mettler AT 200)	3
Balance, Analytical (Mettler H-51)	1
Balance, Analytical (S/P 120, ASP, Inc.)	1
Balance, Analytical, Air Pollution (Mettler H-15)	1
Balance, Top Loading (ASP Z-3000, ASP, Inc.)	1
Balance, Top Loading (Mettler PM-4600)	1
Balance, Triple Beam (Ohaus)	1
Barometer (Airguide Model 211B)	1
Centrifuge, Clinical (IEC)	1
Chart Recorder, 10" (Linear 1200)	1
Class S Weights, 10 mg to 100 g (Troemner, Inc.)	1
Clean-up System-Florisil/Alumina- 12 Position (Supelco, Inc.)	1
Cold Vapor Mercury/Hydride System (Buck Scientific, Inc.)	1
Computer (Digital 2001 Computer, Monitor, Keyboard)	1
Computer (Digital Dec Station 3IGSX Computer, Monitor and Keyboard)	3
Computers (Pentium systems)	25
Conductance Meter, Field/Laboratory Model (YSI)	1
Conductivity Meter (YSI)	1

<i>Equipment & Instrumentation</i>	<i>Quantity</i>
Coolers, 2 qt. (Rubbermaid)	10
Coolers, 5 qt. (Igloo)	20
Coolers, 30 qt. (Coleman)	50
Data Station System (Varian CDS 401 #CDS402-1341)	1
Dec Station (Digital 316 SX)	1
Dessicator, Stainless Steel, 1 CF (Boekel)	2
Dessicator, Stainless Steel, 3 CF (Boekel)	1
Diazomethane generator, Wheaton/Aldrich DIAZALD KIT	1
Dispensing Pipet, 1.0 mL (Eppendorf, Inc.)	1
Dispensing Pipet, 5 L-100 L (Eppendorf, Inc.)	1
Distillation System, Ammonia (Wheaton)	2
Draeger Bellows Pump	1
Extraction Apparatus, Liquid-Liquid (Supelco, Inc.)	1
Extractors, Zero Headspace	8
Eye Wash Station, Portable (Bel-Art, Inc.)	1
Eyewash System (Speakman Company)	1
Flash Point Apparatus (Pensky-Martin, Closed Cup)	1
Funnel Rack, Wooden, 12 Position (MacAlaster Bicknell)	2
Furnace (Thermolyne Type 1500)	1
Furnace, Muffle Furnace, 1.5 CF (Gardsmen)	1
Gas Chromatograph (HP 5890 ECD,FID ALS7673,HP ChemSta.)	1
Gas Chromatograph (HP 5890 dual ECD dual ALS7673,HP ChemSta.)	1
Gas Chromatograph (HP 5890II,G.S.V.FPD,TCD)	1
Gas Chromatograph (Perkin Elmer PE 1000 HallPID Detectors)	1
Gas Chromatograph (Perkin Elmer PE 8410 FID,GPI100 Printer)	1
Gas Chromatograph (Perkin Elmer PE 8500 GC SN 041426006068)	1
Gas Chromatograph, Portable (AID621,FID)	1
Gas Chromatograph/Mass Spectrometer/Data System (HP 5890 II/5971 &5972/ Chem Station)	4
Gas Chromatograph/Mass Spectrometer/Data System (HP 5890 II/5970/w/ ALS 7673)	2
Gas Concentration System/Interface TO-14/15-ENTECH 7000	1
Gas Dilution System (EnviroNics Model 2000)	1
Gas Leak Detector (GM 21-250)-Helium detector	1
Gas Regulators, Brass (Airco, Inc.)	10
Gas Regulators, SS (Airco,Inc.)	7
Gel Permeation Chromatograph -OI AP-1000 18 sample autosystem-GPC	1
Glass Desiccator	4
Heater (Lab-Line Multi Boil Heater No. 2090)	1
Hot Plate (Corning PC-100 1 SF)	6
Hot Plate (Thermolyne Type 2200)	1
Hot Plate/Stirrer (Cimarec 3, Thermolyne)	1

YORK

<i>Equipment & Instrumentation</i>	<i>Quantity</i>
Hot Plate/Stirrer (Corning PC-351)	1
Hot Plate/Stirrer (Nuova II, Sybron/Nalge)	1
Hot Plate/Stirrer (Thermolyne Cimarec 2)	1
Hot Plate/Stirrer (Thermolyne Cimarec 3)	1
Incubator (Lab-line No. 3554-17)	2
Incubator, 20C, BOD (VWR 2005)	1
Incubator, Electric (Hotpack 28912)	1
Incubator, Low Temp., 2 CF (Blue M)	1
Inductively Coupled Plasma (OES-PE-Optima 3000XL-Axial)	1
Ion Chromatograph Dionex 120 with AS40 ALS-PeakNet 6 software	1
Laboratory Hoods (Labconco, others)	9
LIMS System (Labworks Windows NT/98/2000 LIMS 25 User NT Server)	1
Microbial Air Sampler, 2 Stage (Anderson, Inc.)	1
Microscope (Olympus CH-2)	1
Microscope, Stereoscope (STEREOZOOM-3, B& L)	1
Oven, 1 CF (Blue M)	1
Oven, 3 CF (Baxter S/P Tempecon)	1
Oven, 5 CF (Blue M)	1
Oven, CEM Microwave (MDS-2000)	1
Oven, Radiant Heat (Lab-Line Imperial II)	1
Oxygen Meter/BOD Probe (VWR 122372)	1
pH/ISE Meter, Portable (Orion Serial)	1
pH Meter (Corning Model 10)	1
pH Meter (Orion EA 940)	1
pH Meter/Specific Ion Meter (Orion SA-720)	1
Photocopier (Cannon NP4835S)	2
Printer (HP Laserjet 2100, 2 MB RAM)	4
Printer (HP Laserjet IV, 2 MB RAM)	4
Printer (HP LaserJet 4000N)	4
Printer (Okidata Microline 320)	1
Printer, Color Inkjet (Epson Stylus 900)	1
Printer, Laser 1200 dpi Resolution (Lexmark Optra R+)	1
Pump, Liquid, Peristaltic, 4 gpm (Cole-Parmer)	1
Pump, Vacuum (GE)	1
Pump, Vacuum (GE)	1
Pumps, Personal Sampling (SKC & Gilian)	6
Purge & Trap (Tekmar ALS 2016)	1
Purge & Trap (Tekmar LCS 2000)	1
Purge & Trap autosampler systems-Archon 51 position samplers	3
Purge & Trap systems-Tekmar 3000	3
Reflux/Distillation System	5

<i>Equipment & Instrumentation</i>	<i>Quantity</i>
Refrigeration Freezer (Kenmore)	1
Refrigerator (Sanyo)	1
Refrigerator (Summit)	1
Refrigerator (VWR Scientific)	1
Refrigerator (Welbilt 1.5 C.F.)	3
Refrigerator (Westinghouse)	1
Refrigerator, 10 CF (Scars)	1
Refrigerator, 14 CF (Gibson)	2
Refrigerator, Flammable Materials Storage (GCA Corp. Precision 813)	1
Refrigerator(Sanyo,1.5 C.F.)	2
Sample Concentrator (Nutech Model 8533-TO-14/VOST)	1
Sample Concentrator (O.I 4460A)	1
Sample Concentrator (Supelco, Inc. Mini-VAP-6)	1
Sample Concentrator (Zymak Turbo VAP II ZW8001)	1
Sample Concentrator (Zymark Tubro VAP II ZW8001)	1
Sample Concentrator (Zymark Turbo VAP II SN 04051)	1
Sonic Cleaning System (Branson 1200)	1

<i>Equipment & Instrumentation</i>	<i>Quantity</i>
Sonic Disruptor (Tekmar)	3
Sonic Disruptor & Sound Enclosure (Heat Systems, Inc.)	3
Sonic Disruptor Sound Chamber	3
Soxhlet Extraction Apparatus, 3 Bay w/Setups (Electro, Inc.)	1
Specific Ion Electrode, Chloride (Orion)	1
Specific Ion Electrode, Chlorine (Orion)	1
Specific Ion Electrode, Flouride (Orion)	1
Spectrophotometer (Bausch & Lomb Spectronic 20)	1
Spectrophotometer, Visible (Milton-Roy, SPEC-20)	1
Steam Bath (Boekel)	1
Steam Washer (Labconco)	1
Stirrer, Gang, 6 Position (Phipps & Bird)	1
Storage Cabinet (Se-Cur-All)	2
Storage Cabinet, Solvent, Safety (Justrite, Inc.)	2
TCLP Extraction Pressure Filtration System (Millipore)	2
TCLP Extraction System (Millipore, Inc.)	4
TCLP Rotator, 12 Position (Assoc. Design & Mfg 12)	1
TCLP Spinner (Millipore)	2
TCLP-ZHE Volatile Extraction System	12
Thermometers, NBS(NIST)Traceable (ASP, Inc.)	2
Thermometers, Various Ranges (ASP, Inc.)	10
Total Organic Carbon Analyzer (ALS- Shimadzu)	1
TPH-Oil-in-Water Analyzer (Buck Scientific HC-404)	1
Turbidity Meter (Lamotte Model 2008)	1
Vortex - Genie SI)	1
Water Bath (25-100C, ASP, Inc.)	1
Water Bath for Incubator (Millipore)	1
Water Purification System (MILLI-Q, Millipore, Inc.)	1
Water Sampling System, Automatic/Compositing (ISCO, Inc.)	1

III. Key Personnel Resumes

YORK
ANALYTICAL LABORATORIES, INC.

III. Key Personnel Resumes

Robert Q. Bradley

Managing Director

Mr. Bradley has over 25 years experience as an analytical chemist, and in the management of laboratory operations. He is fully versed with all current methods of analysis of water, wastewater, solid and hazardous waste and air using classical as well as instrumental techniques.

As Managing Director of York Analytical Laboratories, Inc., Mr Bradley is responsible for all operations of the lab. His extensive experience as both an analytical chemist, and in the management of laboratory facilities provides a combination of technical knowledge and managerial insight that is unequaled in the industry. His specialized expertise includes:

- Laboratory Management
- Analytical Chemistry
- Data Evaluation and Validation
- Environmental Chemistry
- Air Analysis

Mr. Bradley is fully versed with all current methods of analysis of water, wastewater, solid and hazardous waste and air using classical as well as instrumental techniques. He has extensive instrumental experience in the areas of Gas Chromatography, Gas Chromatography/Mass Spectrometry, Infrared Spectrophotometry, Atomic Spectroscopy and wet chemistry techniques.

Mr. Bradley also has had extensive experience involving hazardous waste assessments according to RCRA and CERCLA guidelines. He has spearheaded mobile laboratory programs at major New England landfills where hundreds of drums of hazardous waste were assessed.

He has had extensive experience in the sampling and analysis of airborne emissions from municipal and hazardous waste landfills. This experience is centered around sampling and analysis for target and non-target volatile and semi-volatile organics, as well as target trace metals.

He has had extensive experience in the analysis techniques related to industrial hygiene and ambient air studies including NIOSH, EPA, APHA, and other methods. He also has had significant experience in the sampling and analysis of water, wastewater, and particulate and gaseous emissions employing ASME, EPA, NYSDEC, EPA CLP and other methodologies.

Mr. Bradley has also been instrumental in the development of gas chromatographic/mass spectrometry methods for the evaluation of organic contaminants in the process waste streams of various industries. These developments include rapid screening methods, methods for removal of circumvention of potential interferences, and novel approaches to the quantification and identification of organic compounds. His other developments include gas chromatographic techniques for the sample analysis of sulfur gases from refineries, Kraft paper mills, and coke oven gas systems; procedure for sampling and analysis in the fiber glass industry; development of ion-specific filter medium determining the character of ambient particulate in proximity with stationary sources; development of gas chromatography procedures for quantifying gasoline contamination of surface waters; development of qualitative procedures for the determination of gasoline brand and fuel oil types when found in well supplies and aquifers.

YORK

He has had experience in the evaluation of many products including hazardous waste adsorbents; water purification devices; air filtration media and plastics

Mr Bradley is experienced in the supervision of technical and sales staff providing the analytical services required for environmental analyses. He has analyzed and interpreted data and prepared reports for various industrial and government clients. He is experienced in the evaluation, selection, and cost control of analytical procedures developed and used in the laboratory, the establishment and maintenance of quality control/quality assurance programs for analytical methods and the training of personnel in the performance of analytical procedures. He has also developed, specified and implemented various LIMS products for analysis and process control laboratories.

Education

- B.S. Chemistry Georgetown University, Washington, D.C.
- M.S. Chemistry (additional course work) Georgetown University, Washington, D.C.
- Additional Course Work

Professional Affiliations

- American Chemical Society
- American Water Works Association
- Association of Official Analytical Chemists
- American Management Association
- American Society for Testing and Materials
- Association of Consulting Chemists
- Environmental Assessment Association
- Spill Control Association of America

Selected Publications

New Approach to the Synthesis of 2-aryl Substituted Aziridinium Salts and Reactivity Studies, given at the American Chemical Society Meeting, 1972, New York by D.R. Crist, Georgetown University, Washington, D.C.

R.Q. Bradley, The Chemistry of Nitrogen and Sulfur Oxides, 1977, York Research Corporation, In-house paper.

R.Q. Bradley, A Routine Gas Chromatographic Method for the Determination of Gasoline in Water in the parts per billion (ppb) Range, York Research Corporation, In-house paper.

R.Q. Bradley, R.S. Kearton, Oil and Gas Spill Source Identification, The Petroleum Marketer Magazine, September-October, 1977.

R.Q. Bradley, Dynamic Headspace Hydrocarbon Concentration versus "Real" Gasoline Concentration in Water, York Research/Exxon Co., U.S.A. proprietary report, 1976.

R.Q. Bradley, D.A. Sommerer, Magnesia FGD Process Testing on a Coal-fired Power Plant, Environmental Protection Technology Series, EPA-600/2-77-165, August 1977.

R.Q. Bradley, Analytical Techniques for the Characterization of Raw and Treated Coke Oven Gas, In-house manual, January, 1979.

R. Q. Bradley, Strategies for the Sampling & Analysis of Volatile Organics in Air, Connecticut's Environment, March 1995

YORK

III. Key Personnel Resumes

Philip A, Murphy, III

Laboratory Operations Manager / QA/QC Officer

Mr. Murphy has over 15 years experience in environmental analysis. He has extensive experience in the analysis of wastewater for microbiological, metals and general wet chemistry parameters.

As Operations Manager at York, Mr. Murphy is responsible for the day-to-day operations of the laboratory. His specialized expertise includes:

- Laboratory Operations Management
- Drinking Water Analysis
- Inorganics Analysis (Metals, Classic Chemistry)
- Microbiological Analysis
- Air Analysis using applicable Protocols
- Indoor Air Quality Studies
- QA/QC Implementation

Mr. Murphy has over fifteen years experience in environmental analysis. He has extensive experience in the analysis of wastewater for microbiological, metals and general wet chemistry parameters. He has conducted numerous indoor air quality evaluations, sampling and analyzing for fungi and molds, volatile organic compounds and inorganic parameters in industrial, commercial and residential environments.

Mr. Murphy also has extensive experience with USEPA Standard Method analyses in support of NPDES, SPDES, RCRA, CWA, SWDA and CAA Programs. His experience includes wet chemistry, physical and microbiological procedures, as well as graphite furnace, flame atomic absorption and gas chromatography.

Mr. Murphy is also a certified Laboratory Director for public health applications in the State of Connecticut, and has expertise in sample handling and chain-of-custody procedures.

Education

- B.S./Aquatic Biology University of Connecticut
- M.S./Environmental Biology University of Bridgeport, Connecticut

Professional Affiliations

- American Microbiological Society
- American Chemical Society
- Trout Unlimited, Mianus, C (Served as President, Secretary, Stream Action Committee Chair and on the Board of Directors)

YORK

III. Key Personnel Resumes

Richard H. August

Senior Chemist/Manager - Client Services

Mr. August has over 18 years of environmental laboratory experience with all current methods of analysis for water, wastewater, solid, hazardous waste and air, as well as experience as a Laboratory Manager with large Massachusetts based company. He has extensive experience with methods development and documentation in the areas of Gas Chromatography, Gas Chromatography/Mass Spectrometry, infrared, Spectrophotometry and wet chemistry techniques.

Education

Mr. August has over eighteen years of environmental laboratory experience. He has extensive experience with all current methods of analysis for water, wastewater, solid, hazardous waste and air. Having had five years of experience as a Laboratory Manager with large Massachusetts based company, Mr. August has extensive experience with methods development and documentation in the areas of Gas Chromatography, Gas Chromatography/Mass Spectrometry, infrared, Spectrophotometry and wet chemistry techniques. He also has had experience in analytical methods (NIOSH, OSHA, EPA) associated with Indoor Air Quality and Industrial Hygiene studies. His areas of specialization include:

- Environmental Regulations (EPA, RCRA, STARS, SPOTS, UST)
- Client Service and Laboratory Analysis for Volatiles and Semi-Volatiles
- OSHA/NIOSH Analysis
- QA/QC Programs

Mr. August has also been involved with the development, implementation and maintenance of laboratory Quality Assurance/Quality control programs.

Mr. August has had extensive experience in Hazardous Waste Assessments in accordance with RCRA and CERCLA, and has been involved with analysis and classification of hundreds of drums of unknown waste.

At YAL, Mr. August is responsible for client services. His responsibilities include sales and marketing of laboratory services as well as business development. He provides technical support to clients for specific compliance purposes, specific analysis strategies, guidance on appropriate analytical methods and helps to ensure that all data quality objectives are met. He is also involved with the organics analysis, analysis and interpretation of data as well as the preparation of technical reports for various industrial and governmental clients.

- B.S./Biology, Southern Connecticut State University
- Continuing Graduate Studies, Environmental Science Program, University of New Haven, New Haven, CT

III. Key Personnel Resumes

Johanna Pozzi-Woodfield

Group Leader - Gas Chromatography

Ms. Pozzi has over 15 years experience in environmental laboratory analysis with a specialized expertise in Organics Analysis, Gas Chromatography/Mass Spectrometry and Gas Chromatography Methods

Ms. Pozzi has over fifteen years of experience in environmental laboratory analysis. Previously, she was Manager of Organics Analyses for an environmental laboratory. Her responsibilities included the overall supervision of the Organics Department for the analysis of water, wastewater, soil, sediment and oil. In addition, she held full responsibility for the in-house Quality Control Program.

Ms. Pozzi has extensive experience in the analyses of organics in accordance with SW-846 Methods, 8010/8015/8020/8021, 8240, 8260, 8270, 8151, 8015M and 8081. She is also familiar with troubleshooting analytical systems.

Prior to her environmental laboratory experience, she was a Quality Control Supervisor in the Specialty Chemical and Plating industries.

At York, Ms. Pozzi is responsible for all organics analyses with special emphasis on Gas Chromatography methods. These methods are applied to all environmental matrices, including air.

Her instrumental experience includes use of gas chromatography utilizing many detectors including: electron capture, flame photometric, nitrogen/phosphorous, flame ionization and thermal conductivity.

Education

- B.S./Chemistry, University of New Haven

III. Key Personnel Resumes

John R. Gale

Assistant Laboratory Operations Manager /
Safety & Health Officer

Mr. Gale has over 20 years experience in the analysis of water, wastewater, solid and hazardous waste and specialized expertise in volatiles analysis (water, soil, air) by GC/MS, wet chemistry analysis and OSHA regulations.

Mr. Gale has had over 20 years of experience in the analysis of water, wastewater, solid and hazardous waste for conventional pollutants in accordance with Standard Methods, EPA Methods and SW-846 Methods.

He is also highly versed in all OSHA and laboratory safety guidelines.

He has an extensive background in the preparation and analysis of varied matrices for inorganic species and purgeable organic compounds, extractable base-neutral and acid organic compounds, pesticides and PCB's according to EPA Methods. He is thoroughly versed in the clean-up of pesticide/PCB extracts utilizing column chromatography methods. Mr. Gale also has extensive experience in extraction techniques - liquid/liquid continuous extractions and sonic disruption extractions. Mr. Gale is also experienced with analyses of samples for volatiles and semi-volatiles by GC/MS using USEPA Contract Lab Program Protocols and is involved with routine maintenance and troubleshooting of the GC/MS systems and Gas Chromatographs.

His experience also includes the analysis of petroleum products and fossil fuels by ASTM and ASME methods including bomb calorimetry and elemental analysis.

At York Mr. Gale is responsible for all inorganics analysis and sample preparation and extraction staff in the laboratory.

Education

- A.S./Chemistry Sacred Heart University, Bridgeport, CT

Occupational Certifications

- 40 Hour HAZMAT OSHA Certified

YORK

III. Key Personnel Resumes

Michael Woodfield

Group Leader, Metals Preparation and Analysis

Mr. Woodfield has over 10 years experience in laboratory analysis with specialized expertise in Zeeman Atomic Absorption, Inductively Coupled Plasma (Axial & Radial), Flame Atomic Absorption and Organics Analysis.

Mr. Woodfield has over ten years of experience in environmental laboratory analysis. Previously, Mr. Woodfield was involved in inorganics analysis using common spectroscopic methods. He also has performed organics analyses including Gas Chromatography and Gas Chromatography/Mass Spectrometry. He is fully versed in all the related SW-846 analysis.

Mr. Woodfield also has extensive experience in metals analysis utilizing flame atomic absorption(AA), Zeeman graphite furnace AA and Inductively Coupled Plasma (ICP)

He also has extensive experience in sampling of groundwater and effluents relative to CTDEP requirements. Mr. Woodfield is also experienced with all wet chemistry procedures typically utilized in the industry.

At York Mr. Woodfield is currently responsible for all analyses of trace metals utilizing ICP, GFAA, FAA and Mercury. He has extensive experience in all related QA/QC procedures. In addition, he is responsible for QA/QC and client interface as a secondary role.

Education

- B S /Chemistry, Paul Smith's College, Paul Smith's, NY

YORK

III. Key Personnel Resumes

Johanna Pozzi-Woodfield

Group Leader - Gas Chromatography

Ms. Pozzi has over 10 years experience in environmental laboratory analysis with a specialized expertise in Organics Analysis, Gas Chromatography/Mass Spectrometry and Gas Chromatography Methods

Ms. Pozzi has over ten years of experience in environmental laboratory analysis. Previously, she was Manager of Organics Analyses for an environmental laboratory. Her responsibilities included the overall supervision of the Organics Department for the analysis of water, wastewater, soil, sediment and oil. In addition, she held full responsibility for the in-house Quality Control Program.

Ms. Pozzi has extensive experience in the analyses of organics in accordance with SW-846 Methods, 8010/8015/8020, 8240, 8260, 8150, 8015M and 8080. She is also familiar with troubleshooting analytical systems.

Prior to her environmental laboratory experience, she was a Quality Control Supervisor in the Specialty Chemical and Plating industries.

At York, Ms. Pozzi is responsible for all organics analyses with special emphasis on Gas Chromatography methods. These methods are applied to all environmental matrices, including air.

Her instrumental experience includes use of gas chromatography utilizing many detectors including: electron capture, flame photometric, nitrogen/phosphorous, flame ionization and thermal conductivity.

Education

- B S /Chemistry, University of New Haven

YORK

III. Key Personnel Resumes

Nezar Mejalli

Senior Systems Engineer/LIMS Administrator/MIS Professional

Mr. Mejalli has over 5 years experience in computer hardware and software applications with special emphasis on environmental laboratory software and network/work station systems

Mr. Mejalli has over five years of experience in the environmental industry serving in various capacities including air quality engineering and computer systems design, build and training

As an environmental engineer at York, his role involved the following

- 1 Designed and automated a Continuous Emissions Monitoring Network for ambient air encompassing Manhattan's North River Water Pollution Control Facility, utilizing a total of eight different data sites within the plant and in the surrounding community
- 2 Designed and automated a prototype Air Quality Monitoring Station for hydrogen sulfide and implemented into the existing Continuous Emissions Monitoring Network
- 3 Authored numerous monthly reports, quarterly reports and annual reports with respect to the data generated by the monitoring system
- 4 Directly responsible to the New York City Department of Environmental Protection Agency and the New York State Department of Environmental Conservation for the upkeep of the Monitoring Network, and the validity of data
- 5 Engineered vital components to monitor for Dioxins throughout the State of Connecticut via semi-volatile organic compounds (SVOC) samplers
- 6 Directly responsible for field samples, data collection and data validity.
- 7 Directly responsible for the maintenance of Air Quality Monitoring Stations
- 8 Operated and maintained numerous samplers for inhalable particulate (PM₁₀), semi-volatile organic compounds (SVOC) and volatile organic compounds (VOC).

As Network/Computer Administrator he was

- 9 Directly responsible for troubleshooting, maintaining and safeguarding Pentium based PC desktop workstations and the Pentium based network server
- 10 Directly responsible for the troubleshooting and maintenance of all the computers in the companies

In his present role as Senior Systems Engineer he has full MIS responsibility and has

- Designed and implemented 4 twenty-five user Novell Network and Windows NT 4 into Sister Company to optimize data evaluation, report generation and overall company production
- Managed a one hundred thousand-dollar budget for the implementation of the Novell and Windows NT Networks

Education

B.S./Electrical Engineering, Manhattan College, Riverdale, NY

YORK

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Antonia C. Novello, M.D., M.P.H., Dr.P.H.



Expires 12:01 AM April 01, 2005
Issued April 01, 2004
Revised June 08, 2004

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. ROBERT Q. BRADLEY
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD CT 06615 United States

NY Lab Id No: 10854
EPA Lab Code: CT00106

is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards for the category
ENVIRONMENTAL ANALYSES POTABLE WATER
All approved analytes are listed below:

Drinking Water Metals I		Drinking Water Non-Metals	
Arsenic, Total	EPA 200.7	Cyanide	EPA 335.4
Barium, Total	EPA 200.7	Fluoride, Total	EPA 300.0
Cadmium, Total	EPA 200.7	Hydrogen Ion (pH)	EPA 150.1
Chromium, Total	EPA 200.7	Nitrate (as N)	EPA 300.0
Copper, Total	EPA 200.7	Solids, Total Dissolved	SM 18-20 2540C
Iron, Total	EPA 200.7		
Lead, Total	SM 18-19 3113B	Drinking Water Trihalomethanes	
Manganese, Total	EPA 200.7	Bromodichloromethane	EPA 524.2
Mercury, Total	EPA 245.1	Bromoform	EPA 524.2
Selenium, Total	SM 18-19 3114B	Chloroform	EPA 524.2
Silver, Total	EPA 200.7	Dibromochloromethane	EPA 524.2
Zinc, Total	EPA 200.7		
		Volatile Aromatics	
Drinking Water Metals II		1,2,3-Trichlorobenzene	EPA 524.2
Antimony, Total	ASTM D3697-92	1,2,4-Trichlorobenzene	EPA 524.2
Beryllium, Total	EPA 200.7	1,2,4-Trimethylbenzene	EPA 524.2
Nickel, Total	EPA 200.7	1,2-Dichlorobenzene	EPA 524.2
Thallium, Total	EPA 200.8	1,3,5-Trimethylbenzene	EPA 524.2
		1,3-Dichlorobenzene	EPA 524.2
Drinking Water Miscellaneous		1,4-Dichlorobenzene	EPA 524.2
Methyl tert-butyl ether	EPA 524.2	2-Chlorotoluene	EPA 524.2
		4-Chlorotoluene	EPA 524.2
Drinking Water Non-Metals		Benzene	EPA 524.2
Color	SM 18-20 2120B	Bromobenzene	EPA 524.2
Corrosivity	SM 18-19 2330		

Serial No.: 23619

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificates have a raised seal. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify laboratory's accreditation status.



NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Antonia C. Novello, M.D., M.P.H., Dr.P.H.



Expires 12:01 AM April 01, 2005
Issued April 01, 2004
Revised June 08, 2004

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. ROBERT Q. BRADLEY
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD CT 06615 United States

NY Lab Id No 10854
EPA Lab Code CT00106

is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards for the category
ENVIRONMENTAL ANALYSES POTABLE WATER

All approved analytes are listed below:

Volatile Aromatics

Chlorobenzene	EPA 524.2
Ethyl benzene	EPA 524.2
Hexachlorobutadiene	EPA 524.2
Isopropylbenzene	EPA 524.2
n-Butylbenzene	EPA 524.2
n-Propylbenzene	EPA 524.2
o-Xylene	EPA 524.2
p-Isopropyltoluene (P-Cymene)	EPA 524.2
sec-Butylbenzene	EPA 524.2
Styrene	EPA 524.2
tert-Butylbenzene	EPA 524.2
Toluene	EPA 524.2

Volatile Halocarbons

1,3-Dichloropropane	EPA 524.2
Bromochloromethane	EPA 524.2
Bromomethane	EPA 524.2
Carbon tetrachloride	EPA 524.2
Chloroethane	EPA 524.2
Chloromethane	EPA 524.2
cis-1,2-Dichloroethene	EPA 524.2
cis-1,3-Dichloropropene	EPA 524.2
Dibromomethane	EPA 524.2
Dichlorodifluoromethane	EPA 524.2
Methylene chloride	EPA 524.2
Tetrachloroethene	EPA 524.2
trans-1,2-Dichloroethene	EPA 524.2
trans-1,3-Dichloropropene	EPA 524.2
Trichloroethene	EPA 524.2
Trichlorofluoromethane	EPA 524.2
Vinyl chloride	EPA 524.2

Volatile Halocarbons

1,1,1,2-Tetrachloroethane	EPA 524.2
1,1,1-Trichloroethane	EPA 524.2
1,1,2,2-Tetrachloroethane	EPA 524.2
1,1,2-Trichloroethane	EPA 524.2
1,1-Dichloroethane	EPA 524.2
1,1-Dichloroethene	EPA 524.2
1,1-Dichloropropene	EPA 524.2
1,2,3-Trichloropropane	EPA 524.2
1,2-Dichloroethane	EPA 524.2
1,2-Dichloropropane	EPA 524.2

Serial No.: 23619

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificates have a raised seal. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify laboratory's accreditation status.



NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Antonia C. Novello, M.D., M.P.H., Dr.P.H.



Expires 12:01 AM April 01, 2005
Issued April 01, 2004
Revised June 08, 2004

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. ROBERT Q. BRADLEY
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD CT 06615 United States

NY Lab Id No: 10854
EPA Lab Code: CT00106

is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards for the category
ENVIRONMENTAL ANALYSES NON POTABLE WATER
All approved analytes are listed below:

Benzidines		Chlorinated Hydrocarbon Pesticides	
3,3 -Dichlorobenzidine	EPA 625 SW-846 8270C	Endosulfan I	EPA 608 SW-846 8081A
Benzidine	EPA 625 SW-846 8270C	Endosulfan II	EPA 608 SW-846 8081A
Chlorinated Hydrocarbon Pesticides		Endosulfan sulfate	EPA 608 SW-846 8081A
4,4 -DDE	EPA 608 SW-846 8081A	Endrin	EPA 608 SW-846 8081A
4,4 -DDT	EPA 608 SW-846 8081A	Endrin aldehyde	EPA 608 SW-846 8081A
4,4-DDD	EPA 608 SW-846 8081A	Heptachlor	EPA 608 SW-846 8081A
Aldrin	EPA 608 SW-846 8081A	Heptachlor epoxide	EPA 608 SW-846 8081A
alpha-BHC	EPA 608 SW-846 8081A	Lindane	EPA 608 SW-846 8081A
beta-BHC	EPA 608 SW-846 8081A	Toxaphene	EPA 608 SW-846 8081A
Chlordane Total	EPA 608 SW-846 8081A	Chlorinated Hydrocarbons	
delta-BHC	EPA 608 SW-846 8081A	1,2,4-Trichlorobenzene	EPA 625 SW-846 8260B
Dieldrin	EPA 608 SW-846 8081A	2-Chloronaphthalene	SW-846 8270C EPA 625

Serial No.: 23620

Property of the New York State Department of Health Valid only at the address shown Must be conspicuously posted Valid certificates have a raised seal Continued accreditation depends on successful ongoing participation in the Program Consumers are urged to call (518) 485-5570 to verify laboratory's accreditation status



NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Antonia C. Novello, M.D., M.P.H., Dr.P.H



Expires 12:01 AM April 01, 2005
Issued April 01, 2004
Revised June 08, 2004

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. ROBERT Q. BRADLEY
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD CT 06615 United States

NY Lab Id No: 10854
EPA Lab Code: CT00106

is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards for the category
ENVIRONMENTAL ANALYSES NON POTABLE WATER
All approved analytes are listed below:

Chlorinated Hydrocarbons		Demand	
2-Chloronaphthalene	SW-846 8270C	Biochemical Oxygen Demand	EPA 405 1
Hexachlorobenzene	EPA 625	Haloethers	
	SW-846 8270C	4-Bromophenylphenyl ether	EPA 625
Hexachlorobutadiene	EPA 625		SW-846 8270C
	SW-846 8260B	4-Chlorophenylphenyl ether	EPA 625
	SW-846 8270C		SW-846 8270C
Hexachlorocyclopentadiene	EPA 625	Bis (2-chloroisopropyl) ether	EPA 625
	SW-846 8270C		SW-846 8270C
Hexachloroethane	EPA 625	Bis(2-chloroethoxy)methane	EPA 625
	SW-846 8270C		SW-846 8270C
Chlorophenoxy Acid Pesticides		Bis(2-chloroethyl)ether	EPA 625
2,4,5-T	EPA 1978, p 115		SW-846 8270C
	SM 18-20 6640B	Nitroaromatics and Isophorone	
	SW-846 8151A	2,4-Dinitrotoluene	EPA 625
2,4,5-TP (Silvex)	EPA 1978, p 115		SW-846 8270C
	SM 18-20 6640B	2,6-Dinitrotoluene	EPA 625
	SW-846 8151A		SW-846 8270C
2,4-D	EPA 1978, p 115	Isophorone	EPA 625
	SM 18-20 6640B		SW-846 8270C
	SW-846 8151A	Nitrobenzene	EPA 625
Dicamba	EPA 1978, p 115		SW-846 8270C
	SW-846 8151A		

Serial No.: 23620

Property of the New York State Department of Health Valid only at the address shown Must be conspicuously posted Valid certificates have a raised seal Continued accreditation depends on successful ongoing participation in the Program Consumers are urged to call (518) 465-5570 to verify laboratory's accreditation status



NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Antonia C Novello, M.D., M.P.H., Dr.P.H.



Expires 12:01 AM April 01, 2005
Issued April 01, 2004
Revised June 08, 2004

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. ROBERT Q. BRADLEY
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD CT 06615 United States

NY Lab Id No. 10854
EPA Lab Code CT00106

is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards for the category
ENVIRONMENTAL ANALYSES NON POTABLE WATER

All approved analytes are listed below:

Nitrosoamines		Polychlorinated Biphenyls	
N-Nitrosodi-n-propylamine	EPA 625 SW-846 8270C	PCB-1016	EPA 608 SW-846 8082
N-Nitrosodiphenylamine	EPA 625 SW-846 8270C	PCB-1221	EPA 608 SW-846 8082
		PCB-1232	EPA 608 SW-846 8082
Nutrient		PCB-1242	EPA 608 SW-846 8082
Ammonia (as N)	EPA 350.3	PCB-1248	EPA 608 SW-846 8082
Nitrate (as N)	EPA 300.0		
Nitrite (as N)	EPA 300.0		
Phosphorus, Total	EPA 365.2		
Phthalate Esters		Polynuclear Aromatics	
Benzyl butyl phthalate	EPA 625 SW-846 8270C	Acenaphthene	EPA 625 SW-846 8270C
Bis(2-ethylhexyl) phthalate	EPA 625 SW-846 8270C	Acenaphthylene	EPA 625 SW-846 8270C
Diethyl phthalate	EPA 625 SW-846 8270C	Anthracene	EPA 625 SW-846 8270C
Dimethyl phthalate	EPA 625 SW-846 8270C	Benzo(a)anthracene	EPA 625 SW-846 8270C
Di-n-butyl phthalate	EPA 625 SW-846 8270C	Benzo(a)pyrene	EPA 625 SW-846 8270C
Di-n-octyl phthalate	EPA 625 SW-846 8270C	Benzo(b)fluoranthene	EPA 625 SW-846 8270C

Serial No.: 23620

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificates have a raised seal. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify laboratory's accreditation status.



NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Antonia C. Novello, M.D., M.P.H., Dr.P.H.



Expires 12:01 AM April 01, 2005

Issued April 01, 2004

Revised June 08, 2004

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. ROBERT Q. BRADLEY
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD CT 06615 United States

NY Lab Id No: 10854
EPA Lab Code: CT00106

is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards for the category

ENVIRONMENTAL ANALYSES NON POTABLE WATER

All approved analytes are listed below:

Polynuclear Aromatics		Priority Pollutant Phenols	
Benzo(ghi)perylene	EPA 625 SW-846 8270C	2,4,6-Trichlorophenol	EPA 625 SW-846 8270C
Benzo(k)fluoranthene	EPA 625 SW-846 8270C	2,4-Dichlorophenol	EPA 625 SW-846 8270C
Chrysene	EPA 625 SW-846 8270C	2,4-Dimethylphenol	EPA 625 SW-846 8270C
Dibenzo(a,h)anthracene	EPA 625 SW-846 8270C	2,4-Dinitrophenol	EPA 625 SW-846 8270C
Fluoranthene	EPA 625 SW-846 8270C	2-Chlorophenol	EPA 625 SW-846 8270C
Fluorene	EPA 625 SW-846 8270C	2-Methyl-4,6-dinitrophenol	EPA 625 SW-846 8270C
Indeno(1,2,3-cd)pyrene	EPA 625 SW-846 8270C	2-Nitrophenol	EPA 625 SW-846 8270C
Naphthalene	EPA 625 SW-846 8270C	4-Chloro-3-methylphenol	EPA 625 SW-846 8270C
Phenanthrene	EPA 625 SW-846 8270C	4-Nitrophenol	EPA 625 SW-846 8270C
Pyrene	EPA 625 SW-846 8270C	Pentachlorophenol	EPA 625 SW-846 8270C
Priority Pollutant Phenols		Phenol	EPA 625 SW-846 8270C
2,4,5-Trichlorophenol	EPA 625 SW-846 8270C		

Serial No.: 23620

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificates have a raised seal. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify laboratory's accreditation status.



NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Antonia C. Novello, M.D., M.P.H., Dr.P.H.



Expires 12:01 AM April 01, 2005
Issued April 01, 2004
Revised June 08, 2004

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. ROBERT Q. BRADLEY
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD CT 06615 United States

NY Lab Id No 10854
EPA Lab Code CT00106

is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards for the category
ENVIRONMENTAL ANALYSES NON POTABLE WATER
All approved analytes are listed below:

Purgeable Aromatics		Purgeable Halocarbons	
1,2-Dichlorobenzene	EPA 624 SW-846 8260B SW-846 8270C	1,1,2,2-Tetrachloroethane	SW-846 8260B
1,3-Dichlorobenzene	EPA 624 SW-846 8260B SW-846 8270C	1,1,2-Trichloroethane	EPA 624 SW-846 8260B
1,4-Dichlorobenzene	EPA 624 SW-846 8260B SW-846 8270C	1,1-Dichloroethane	EPA 624 SW-846 8260B
Benzene	EPA 624 SW-846 8260B	1,1-Dichloroethene	EPA 624 SW-846 8260B
Chlorobenzene	EPA 624 SW-846 8260B	1,2-Dichloroethane	EPA 624 SW-846 8260B
Ethyl benzene	EPA 624 SW-846 8260B	1,2-Dichloropropane	EPA 624 SW-846 8260B
Toluene	EPA 624 SW-846 8260B	2-Chloroethylvinyl ether	SW-846 8260B
Total Xylenes	EPA 624 SW-846 8260B	Bromodichloromethane	EPA 624 SW-846 8260B
		Bromoform	EPA 624 SW-846 8260B
		Bromomethane	EPA 624
		Carbon tetrachloride	EPA 624 SW-846 8260B
		Chloroethane	EPA 624 SW-846 8260B
		Chloroform	EPA 624 SW-846 8260B

Serial No.: 23620

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificates have a raised seal. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify laboratory's accreditation status.



NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Antonia C. Novello, M.D., M.P.H., Dr.P.H.



Expires 12:01 AM April 01, 2005
Issued April 01, 2004
Revised June 08, 2004

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. ROBERT Q. BRADLEY
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD CT 06615 United States

NY Lab Id No. 10854
EPA Lab Code CT00106

is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards for the category
ENVIRONMENTAL ANALYSES NON POTABLE WATER
All approved analytes are listed below.

Purgeable Halocarbons		TCLP Additional Compounds	
Chloromethane	EPA 624 SW-846 8260B	Cresol	SW-846 8270C
cis-1.3-Dichloropropene	EPA 624 SW-846 8260B	Methylethyl ketone (2-butanone)	SW-846 8260B
Dibromochloromethane	EPA 624 SW-846 8260B	Pyridine	SW-846 8270C
Dichlorodifluoromethane	EPA 624 SW-846 8260B	Wastewater Metals I	
Methylene chloride	EPA 624 SW-846 8260B	Barium, Total	EPA 200 7 SW-846 3005A SW-846 3010A SW-846 6010B
Tetrachloroethene	EPA 624 SW-846 8260B	Cadmium, Total	EPA 200 7 SW-846 3005A SW-846 3010A SW-846 3020-A SW-846 6010B
trans-1.2-Dichloroethene	EPA 624 SW-846 8260B	Chromium, Total	EPA 200 7 SW-846 3005A SW-846 3010A SW-846 3020-A SW-846 6010B
trans-1.3-Dichloropropene	EPA 624 SW-846 8260B	Copper, Total	EPA 200 7 SW-846 3005A SW-846 3010A SW-846 6010B
Trichloroethene	EPA 624 SW-846 8260B	Iron, Total	EPA 200 7 SW-846 3005A SW-846 3010A SW-846 6010B
Trichlorofluoromethane	SW-846 8260B		
Vinyl chloride	EPA 624 SW-846 8260B		
Residue			
Solids, Total Suspended	EPA 160 2		

Serial No.: 23620

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificates have a raised seal. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify laboratory's accreditation status.



NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Antonia C. Novello, M.D., M.P.H., Dr.P.H.



Expires 12:01 AM April 01, 2005
Issued April 01, 2004
Revised June 08, 2004

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. ROBERT Q. BRADLEY
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD CT 06615 United States

NY Lab Id No 10854
EPA Lab Code CT00106

is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards for the category
ENVIRONMENTAL ANALYSES NON POTABLE WATER
All approved analytes are listed below:

Wastewater Metals I

Iron, Total	SW-846 3010A
	SW-846 6010B
Lead, Total	EPA 200.7
	SW-846 3005A
	SW-846 3010A
	SW-846 3020-A
	SW-846 6010B
Magnesium, Total	EPA 200.7
	SW-846 3005A
	SW-846 3010A
	SW-846 6010B
Manganese, Total	EPA 200.7
	SW-846 3005A
	SW-846 3010A
	SW-846 6010B
Nickel, Total	EPA 200.7
	SW-846 3005A
	SW-846 3010A
	SW-846 3020-A
	SW-846 6010B
Silver, Total	EPA 200.7
	SW-846 3005A
	SW-846 6010B

Wastewater Metals II

Aluminum, Total	EPA 200.7
	SW-846 3005A
	SW-846 3010A
	SW-846 6010B
Antimony, Total	EPA 200.7
	SW-846 3005A
	SW-846 6010B
Arsenic, Total	EPA 200.7
	SW-846 3005A
	SW-846 3010A
	SW-846 6010B
Beryllium, Total	EPA 200.7
	SW-846 3005A
	SW-846 3010A
	SW-846 3020-A
	SW-846 6010B
Chromium VI	EPA 218.4
	SM 18-19 3111C
	SW-846 7190
Mercury, Total	EPA 245.1
	EPA 245.2
	SW-846 7470A
Selenium, Total	EPA 200.7

Serial No.: 23620

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificates have a raised seal. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (516) 485-5570 to verify laboratory's accreditation status.



NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Antonia C. Novello, M.D., M.P.H., Dr.P.H.



Expires 12:01 AM April 01, 2005
Issued April 01, 2004
Revised June 08, 2004

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR ROBERT Q. BRADLEY
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD CT 06615 United States

NY Lab Id No: 10854
EPA Lab Code CT00106

*is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards for the category
ENVIRONMENTAL ANALYSES NON POTABLE WATER
All approved analytes are listed below*

Wastewater Metals II

Selenium, Total	SW-846 3005A
	SW-846 3010A
	SW-846 6010B
Vanadium, Total	EPA 200 7
	SW-846 3005A
	SW-846 3010A
	SW-846 3020-A
	SW-846 6010B
Zinc, Total	EPA 200 7
	SW-846 3005A
	SW-846 3010A
	SW-846 6010B

Wastewater Miscellaneous

Cyanide, Total	EPA 335 2
Oil & Grease Total Recoverable	EPA 413 1
Surfactant (MBAS)	SM 18-20 5540 C

Wastewater Metals III

Molybdenum, Total	EPA 200 7
	SW-846 3005A
	SW-846 3020-A
	SW-846 6010B
Thallium, Total	EPA 200 7
	SW-846 3005A
	SW-846 3010A
	SW-846 3020-A
	SW-846 6010B

Serial No.: 23620

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificates have a raised seal. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify laboratory's accreditation status.



NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Antonia C. Novello, M.d , M.p h . Dr.p.h.



Expires 12:01 AM April 01, 2005
Issued April 01, 2004

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. ROBERT Q. BRADLEY
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD CT 06615 United States

NY Lab Id No: 10854
EPA Lab Code: CT00106

is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards for the category
ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Characteristic Testing

Corrosivity	SW-846 1110
E.P Toxicity	SW-846 1310
Ignitability	SW-846 1010
Reactivity	SW-846 Ch7. Sec. 7.3
TCLP	SW-846 1311

Chlorinated Hydrocarbon Pesticides

4,4 -DDE	SW-846 8081A
4,4 -DDT	SW-846 8081A
4,4-DDD	SW-846 8081A
Aldrin	SW-846 8081A
alpha-BHC	SW-846 8081A
beta-BHC	SW-846 8081A
Chlordane Total	SW-846 8081A
delta-BHC	SW-846 8081A
Dieldrin	SW-846 8081A
Endosulfan I	SW-846 8081A
Endosulfan II	SW-846 8081A
Endosulfan sulfate	SW-846 8081A
Endrin	SW-846 8081A
Endrin aldehyde	SW-846 8081A
Heptachlor	SW-846 8081A
Heptachlor epoxide	SW-846 8081A
Lindane	SW-846 8081A

Chlorinated Hydrocarbon Pesticides

Methoxychlor SW-846 8081A

Chlorinated Hydrocarbons

1,2,4-Trichlorobenzene	SW-846 8270C
2-Chloronaphthalene	SW-846 8270C
Hexachlorobenzene	SW-846 8270C
Hexachlorobutadiene	SW-846 8270C
Hexachlorocyclopentadiene	SW-846 8270C
Hexachloroethane	SW-846 8270C

Chlorophenoxy Acid Pesticides

2,4,5-T	SW-846 8151A
2,4,5-TP (Silvex)	SW-846 8151A
2,4-D	SW-846 8151A
Dicamba	SW-846 8151A

Haloethers

Bis (2-chloroisopropyl) ether	SW-846 8270C
Bis(2-chloroethoxy)methane	SW-846 8270C

Metals I

Barium. Total	SW-846 6010B
Cadmium. Total	SW-846 6010B
Chromium. Total	SW-846 6010B
Lead. Total	SW-846 6010B

Serial No.: 22495

Property of the New York State Department of Health. Valid only at the address shown.
Must be conspicuously posted. Valid certificates have a raised seal and may be
verified by calling (518) 485-5570

DOH-3317 (3/97)

Page 1 of 4



NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Antonia C. Novello, M.d., M.p.h., Dr.p.h.



Expires 12:01 AM April 01, 2005
Issued April 01, 2004

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. ROBERT Q. BRADLEY
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD CT 06615 United States

NY Lab Id No: 10854
EPA Lab Code: CT00106

is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards for the category
ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Metals I		Polychlorinated Biphenyls	
Nickel, Total	SW-846 6010B	PCB-1016	SW-846 8082
Silver, Total	SW-846 6010B		SW-846 8270C
Metals II		PCB-1221	SW-846 8082
Antimony, Total	SW-846 6010B	PCB-1232	SW-846 8082
Arsenic, Total	SW-846 6010B		SW-846 8270C
Selenium, Total	SW-846 6010B	PCB-1242	SW-846 8082
Miscellaneous			SW-846 8270C
Hydrogen Ion (pH)	SW-846 9040B	PCB-1248	SW-846 8082
	SW-846 9045C		SW-846 8270C
Nitroaromatics and Isophorone		PCB-1254	SW-846 8082
2,4-Dinitrotoluene	SW-846 8270C		SW-846 8270C
2,6-Dinitrotoluene	SW-846 8270C	PCB-1260	SW-846 8082
Isophorone	SW-846 8270C		SW-846 8270C
Nitrobenzene	SW-846 8270C	Polynuclear Aromatic Hydrocarbons	
Phthalate Esters		Acenaphthene	SW-846 8270C
Benzyl butyl phthalate	SW-846 8270C	Acenaphthylene	SW-846 8270C
Bis(2-ethylhexyl) phthalate	SW-846 8270C	Anthracene	SW-846 8270C
Diethyl phthalate	SW-846 8270C	Benzo(a)anthracene	SW-846 8270C
Di-n-butyl phthalate	SW-846 8270C	Benzo(a)pyrene	SW-846 8270C
Di-n-octyl phthalate	SW-846 8270C	Benzo(b)fluoranthene	SW-846 8270C
		Benzo(ghi)perylene	SW-846 8270C
		Chrysene	SW-846 8270C
		Dibenzo(a,h)anthracene	SW-846 8270C

Serial No.: 22495

Property of the New York State Department of Health Valid only at the address shown
Must be conspicuously posted. Valid certificates have a raised seal and may be
verified by calling (516) 485-5570

DOH-3317 (3/97)

Page 2 of 4



NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Antonia C. Novello, M d , M p h , Dr.p h



Expires 12:01 AM April 01, 2005
Issued April 01, 2004

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. ROBERT Q. BRADLEY
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD CT 06615 United States

NY Lab Id No: 10854
EPA Lab Code: CT00106

is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards for the category
ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Polynuclear Aromatic Hydrocarbons

Fluoranthene	SW-846 8270C
Fluorene	SW-846 8270C
Indeno(1,2,3-cd)pyrene	SW-846 8270C
Naphthalene	SW-846 8270C
Phenanthrene	SW-846 8270C
Pyrene	SW-846 8270C

Priority Pollutant Phenols

2,4,6-Trichlorophenol	SW-846 8270C
2,4-Dichlorophenol	SW-846 8270C
2,4-Dimethylphenol	SW-846 8270C
2,4-Dinitrophenol	SW-846 8270C
2-Chlorophenol	SW-846 8270C
2-Methyl-4,6-dinitrophenol	SW-846 8270C
2-Nitrophenol	SW-846 8270C
4-Chloro-3-methylphenol	SW-846 8270C
4-Nitrophenol	SW-846 8270C
Pentachlorophenol	SW-846 8270C
Phenol	SW-846 8270C

Purgeable Aromatics

1,2-Dichlorobenzene	SW-846 8021B
	SW-846 8260B
1,3-Dichlorobenzene	SW-846 8021B

Purgeable Aromatics

1,3-Dichlorobenzene	SW-846 8260B
1,4-Dichlorobenzene	SW-846 8021B
	SW-846 8260B
Benzene	SW-846 8021B
	SW-846 8260B
Chlorobenzene	SW-846 8021B
	SW-846 8260B
Ethyl benzene	SW-846 8021B
	SW-846 8260B
Toluene	SW-846 8021B
	SW-846 8260B

Purgeable Halocarbons

1,1,1-Trichloroethane	SW-846 8021B
	SW-846 8260B
1,1,2,2-Tetrachloroethane	SW-846 8021B
	SW-846 8260B
1,1,2-Trichloroethane	SW-846 8021B
	SW-846 8260B
1,1-Dichloroethane	SW-846 8021B
	SW-846 8260B
1,1-Dichloroethene	SW-846 8021B
	SW-846 8260B
1,2-Dichloroethane	SW-846 8021B

Serial No : 22495

Property of the New York State Department of Health Valid only at the address shown
Must be conspicuously posted. Valid certificates have a raised seal and may be
verified by calling (518) 485-5570

DOH-3317 (3/97)

Page 3 of 4



NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Antonia C. Novello, M.d., M.p.h., Dr.p.h



Expires 12:01 AM April 01, 2005
Issued April 01, 2004

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. ROBERT Q. BRADLEY
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD CT 06615 United States

NY Lab Id No: 10854
EPA Lab Code: CT00106

is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards for the category
ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE

All approved analytes are listed below:

Purgeable Halocarbons		Purgeable Halocarbons	
1,2-Dichloroethane	SW-846 8260B	Dichlorodifluoromethane	SW-846 8021B
1,2-Dichloropropane	SW-846 8021B		SW-846 8260B
	SW-846 8260B	Methylene chloride	SW-846 8021B
2-Chloroethylvinyl ether	SW-846 8021B		SW-846 8260B
	SW-846 8260B	Tetrachloroethene	SW-846 8021B
Bromodichloromethane	SW-846 8021B		SW-846 8260B
	SW-846 8260B	trans-1,3-Dichloropropene	SW-846 8021B
Bromoform	SW-846 8021B		SW-846 8260B
	SW-846 8260B	Trichloroethene	SW-846 8021B
Bromomethane	SW-846 8021B		SW-846 8260B
	SW-846 8260B	Trichlorofluoromethane	SW-846 8021B
Carbon tetrachloride	SW-846 8021B		SW-846 8260B
	SW-846 8260B	Vinyl chloride	SW-846 8021B
Chloroethane	SW-846 8021B		SW-846 8260B
	SW-846 8260B		
Chloroform	SW-846 8021B		
	SW-846 8260B		
Chloromethane	SW-846 8021B		
	SW-846 8260B		
cis-1,3-Dichloropropene	SW-846 8021B		
	SW-846 8260B		
Dibromochloromethane	SW-846 8021B		
	SW-846 8260B		

Serial No.: 22495

Property of the New York State Department of Health Valid only at the address shown
Must be conspicuously posted. Valid certificates have a raised seal and may be
verified by calling (518) 485-5570

DOH-3317 (3/97)

Page 4 of 4



NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Antonia C Novello, M.d , M.p.h. , Dr.p h



Expires 12:01 AM April 01, 2005
Issued April 01, 2004

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. ROBERT Q. BRADLEY
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD CT 06615 United States

NY Lab Id No: 10854
EPA Lab Code: CT00106

*is hereby APPROVED as an Environmental Laboratory for the category
ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved subcategories and/or analytes are listed below:*

Chlorinated Hydrocarbon Pesticides

Toxaphene SW-846 8081A

Metals II

Chromium VI SW-846 7196A

Mercury, Total SW-846 7471A

Miscellaneous

Cyanide, Total SW-846 9010B

Serial No.: 22496

Property of the New York State Department of Health Valid only at the address shown.
Must be conspicuously posted. Valid certificates have a raised seal and may be
verified by calling (518) 485-5570

DOH-3317 (3/97)

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Antonia C. Novello, M d , M p h , Dr.p h



Expires 12:01 AM April 01, 2005
Issued April 01, 2004

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. ROBERT Q. BRADLEY
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD CT 06615 United States

NY Lab Id No: 10854
EPA Lab Code: CT00106

is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards for the category
ENVIRONMENTAL ANALYSES AIR AND EMISSIONS
All approved analytes are listed below:

Chlorinated Hydrocarbons		Polychlorinated Biphenyls	
1,2,4-Trichlorobenzene	40 CFR PART 60 1984 METH 18	PCB-1016	EPA. 1980
Hexachlorobutadiene	40 CFR PART 60 1984 METH 18		NYS DOH 311-1
Hexachloroethane	40 CFR PART 60 1984 METH 18	PCB-1221	EPA. 1980
			NYS DOH 311-1
Metals I			
Lead, Total	ASTM D3559-90A	PCB-1232	EPA. 1980
	ASTM D3559-90B		NYS DOH 311-1
	EPA 239 1	PCB-1242	EPA. 1980
	SM 15 303B		NYS DOH 311-1
		PCB-1248	EPA. 1980
Metals II			NYS DOH 311-1
Beryllium, Total	40 CFR 61 1984 METH 104	PCB-1254	EPA. 1980
Mercury, Total	40 CFR 61 METH. 101		NYS DOH 311-1
	EPA 245 1	PCB-1260	EPA. 1980
	EPA 245 2		NYS DOH 311-1
	NYS DOH APC-16		
	SM 16 303F	Polynuclear Aromatics	
		Benzo(a)pyrene	40 CFR PART 50 1984 APP B
Miscellaneous Air		Naphthalene	40 CFR PART 60 1984 METH 18
Nitrogen Oxide	40 CFR 60 METH 7		
	40 CFR 60 METH 7A	Purgeable Aromatics	
Particulates	40 CFR 60 APP A METH 5	1,2-Dichlorobenzene	40 CFR PART 60 1984 METH 18
	40 CFR PART 50 1985 APP B	1,4-Dichlorobenzene	40 CFR PART 60 1984 METH 18
Sulfur Dioxide	40 CFR 60 METH 6	Benzene	40 CFR PART 60 1984 METH 18
			EPA TO-14A

Serial No.: 22497

Property of the New York State Department of Health Valid only at the address shown
Must be conspicuously posted. Valid certificates have a raised seal and may be
verified by calling (518) 485-5570

DOH-3317 (3/97)

Page 1 of 2



NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Antonia C. Novello, M.d., M.p.h., Dr.p.h.



Expires 12:01 AM April 01, 2005
Issued April 01, 2004

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. ROBERT Q. BRADLEY
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD CT 06615 United States

NY Lab Id No: 10854
EPA Lab Code: CT00106

is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards for the category
ENVIRONMENTAL ANALYSES AIR AND EMISSIONS
All approved analytes are listed below.

Purgeable Aromatics

Chlorobenzene	40 CFR PART 60 1984 METH 18
Ethyl benzene	40 CFR PART 60 1984 METH 18 EPA TO-14A
Toluene	40 CFR PART 60 1984 METH 18
Total Xylenes	EPA TO-14A

Purgeable Halocarbons

1,1,2,2-Tetrachloroethane	40 CFR PART 60 1984 METH 18
1,1-Dichloroethane	40 CFR PART 60 1984 METH 18
1,1-Dichloroethene	40 CFR PART 60 1984 METH 18
1,2-Dichloroethane	40 CFR PART 60 1984 METH 18
1,2-Dichloropropane	40 CFR PART 60 1984 METH 18
Carbon tetrachloride	40 CFR PART 60 1984 METH 18 EPA TO-14A
Chloroform	40 CFR PART 60 1984 METH 18 EPA TO-14A
Methylene chloride	40 CFR PART 60 1984 METH 18
Tetrachloroethene	40 CFR PART 60 1984 METH 18 EPA TO-14A
Vinyl chloride	40 CFR. PART 61 1984 APP B METH 1

Serial No.: 22497

Property of the New York State Department of Health Valid only at the address shown
Must be conspicuously posted. Valid certificates have a raised seal and may be
verified by calling (518) 465-5570

DOH-3317 (3/97)

Page 2 of 2



APPENDIX B

Resume for DUSR

AREAS OF EXPERIENCE/EXPERTISE

Interpretation of laboratory analytical data, analytical method design/evaluation, sampling techniques and design, project quality assurance/quality control, laboratory auditing, data validation/integrity/usability, and laboratory program management

EDUCATION

BS (Biology/Ecology) 1986; State University of New York at Plattsburgh
AA (Chemistry) 1986; State University of New York at Plattsburgh
AA (Environmental Science) 1986; State University of New York at Plattsburgh
AA (Coral Reef Productivity); 1985/1986 State University of New York, Overseas Program in Oceanography – San Salvador, Bahamas

CERTIFICATIONS/REGISTRATIONS

USEPA Data Quality Objectives (February 1997)
USEPA Integrating Quality Assurance into Project Development (March 1998)
USEPA Orientation to Quality Assurance (February 1997)
EPA Region II Inorganic Data Validation (March 1995)
EPA Region II Organic Data Validation (October 1994)
OSHA 40-Hour Hazardous Waste Operations Safety Training
OSHA 8-Hour Supervisor Training
New York State Emergency Medical Technician (#137223)
Standard First Aid and CPR
PADI Open Water Diver (#87233839)
Hewlett Packard GC/MS Training (July 1993)
Restek's Capillary Chromatography Seminar (September 1992)
Hewlett Packard GC/MS and other hyphenated techniques (January 1991)

MEMBERSHIPS/POSITIONS

Poughkeepsie Area Chamber of Commerce
Dutchess County Legislature: Board of Directors - Resource Recovery Agency Board

PROFESSIONAL SOCIETIES

American Society for Quality (member)

Courses Completed:

Basic Skills Used in Auditing
Internal Auditing Basics
Auditing Fundamentals I
Auditing Fundamentals II
Process Auditing Techniques

CONFERENCES

“Fecal Coliform Collection and Data Interpretation”: Presented at the Mississippi Water Environment Association, Jackson, MS (June 2002).

PUBLICATIONS

“How to Hire an Environmental Testing Laboratory”: Featured in *The Environmental Manager's Compliance Advisor* (Issue EM 559, January 21, 2002).

“Drinking Water Labs Face Stricter Regs- Recommendations to Improve Operations and QA/QC”: Featured in *The Environmental Manager's Compliance Advisor* (Issue EM 566, May 6, 2002).

GENERAL EXPERIENCE

Environmental Laboratory

Performed laboratory analyses in Inorganic and Organic parameters, including classical chemistry, metals, volatiles, semivolatiles, pesticides, herbicides, and PCB analyses. Additionally, served in management and Quality Assurance Officer roles within laboratories.

A/E Engineering-Consulting

Performed the following: data validation and usability reports for State and Federal Programs, expert reports for purposes of litigation, on-site project specific laboratory audits, field sampling collection, and project design to meet discharge permit requirements, quality assurance manager, and company Data Quality Assurance expert.

DETAILED EXPERIENCE

2002 to Date

The Data Quality Indicator & Associates, Inc.

- **Hudson River PCBs Site.** Assisted in the preparation of the Quality Assurance Project Plan for the Design Support Sediment Sampling and Analysis Oversight. Assisted MPI, EPA, and USACE with the following: document review of laboratory specific extraction/analysis SOPs for PCB homolog analysis; performed three separate on-site audits of the government oversight laboratory; and performed data validation of over 250 split sediment samples analyzed via EPA Method 680 using data validation guidelines developed by General Electric.
- **Mississippi Department of Environmental Quality.** Contracted to evaluate Bacteriological data generated from sampling conducted at Targeted Pathogen TMDL Locations in the Pearl River and South Independent Stream Basins (Non-Contact Recreational Season – Nov-Dec 2000). Data assessment consisted of precision measurements and statistical examination of fecal coliform data.
- **Mississippi Department of Environmental Quality.** Contracted to evaluate Bacteriological data generated from sampling conducted at Targeted Pathogen TMDL Locations in the Pearl River and South Independent

DETAILED EXPERIENCE (Continued)

- Stream Basins (Contact Recreational Season – Sept-Oct 2001). Data assessment consisted of precision measurements and statistical examination of fecal coliform data.
- **Mississippi Department of Environmental Quality.** Contracted to evaluate Bacteriological data generated from sampling conducted at Targeted Pathogen TMDL Locations in the Yazoo River Basin (Contact Recreational Season – Sept-Oct 2001). Data assessment consisted of precision measurements and statistical examination of fecal coliform data.
- **Mississippi Department of Environmental Quality.** Contracted to evaluate Bacteriological data generated from sampling conducted at Targeted Pathogen TMDL Locations in the Pearl River and South Independent Stream Basins (Non-Contact Recreational Season – Nov-Dec 2001). Data assessment consisted of precision measurements and statistical examination of fecal coliform data.
- **Mississippi Department of Environmental Quality.** Contracted to evaluate Bacteriological data generated from sampling conducted at Targeted Pathogen TMDL Locations in the Yazoo River Basin (Non-Contact Recreational Season – Nov-Dec 2001) Data assessment consisted of precision measurements and statistical examination of fecal coliform data.
- **Mississippi Department of Environmental Quality.** Contracted to evaluate Bacteriological data generated from sampling conducted at Targeted Pathogen TMDL Locations in the Pascagoula, Pearl, Tombigbee, Big Black, Tennessee and Northern Independent Stream Basins (Non-Contact Recreational Season – Nov 2001-Feb 2002). Data assessment consisted of precision measurements and statistical examination of fecal coliform data.
- **Philips Lighting Company:** Contracted by Hampton-Clarke to review approximately 250 arsenic, lead, and mercury data to determine the health risk evaluation and environmental impacts. Data validation performed in accordance with EPA Region III - Innovative Approaches to Data Validation finalized June 1995.
- **Former Metal Finishing Corporation Site (Toa Baja, Puerto Rico):** Contracted to review total metals data in soil and groundwater to determine the health risk evaluation and environmental impacts.
- **Quality Electroplating Corporation Site (Toa Baja, Puerto Rico):** Contracted to review total metals, semivolatiles, and pesticide/PCB data in soil and groundwater samples to determine the health risk evaluation and environmental impacts.
- **City of Sacramento:** Contracted to assist in the preparation of a technical memorandum to investigate potential sources of cyanide contamination at WWTP within the City of Sacramento County, Ca.
- **New Rochelle:** Contracted to review classical chemistry and organic analysis on a quarterly basis to monitor environmental conditions in groundwater samples due to contaminated from Underground Storage Tanks.

DETAILED EXPERIENCE

1995 to 2002

Malcolm Pirnie, Inc.

- **Former Olathe Naval Air Station (NAS) Site Investigation (FUDS):** Responsible for data validation of more than 60,000 data records resulting from a site investigation of 32 areas of concern. Matrices sampled included soil, water (surface and groundwater), concrete, and sediment; analyses included volatiles, semivolatiles, metals, pesticides, PCBs, herbicides, total recoverable petroleum hydrocarbons, and water quality parameters. Duties included coordinating efforts of other data validators and writing/compiling final data validation reports for submittal to the client. Also developed a separate Quality Control Summary Report (QCSR) as part of data validation efforts. Validation was performed in accordance with National Functional Guidelines and qualifiers applied were those established by EPA Region VII.
- **Data Validation on Services at Aberdeen Proving Ground MD:** Responsible for technical review of third-party Contract Laboratory Protocol (CLP) data validation of analytical data from remedial investigations. Results from soil, sediment, surface water, and groundwater sampling were analyzed for metals, phosphorus, volatiles, semivolatiles, pesticides, PCBs, explosives, sulfur compounds, thiodiglycol, radiologicals, and IMPA/MPA. The validation was performed according to the U.S. EPA National Functional Guidelines with Region III modifications. More than 200 samples from four areas of concern were validated.
- **Quality Assurance Program Plan (QAPP) for Environmental Investigations at Fort Drum NY:** Task manager responsible for preparation and implementation of an installation-wide QAPP for all investigations expected to be performed at the Fort Drum military installation by all architect-engineers working at the site. The QAPP covers sampling of soil, sediment, surface water, groundwater, air, and dust, and analysis for metals, phosphorus, petroleum hydrocarbons, volatiles, semivolatiles, pesticides, herbicides, and dioxins.
- **Sampling and Analysis Services at Fort Drum NY:** Responsible for data validation of analytical data from sampling of soil, groundwater, sediment, pure product, dust, and paint chips. Data validation performed in accordance with U.S. EPA National Functional Guidelines with Region II modifications and adapted to New York State analytical protocols and SW-846 methodologies.
- **Laboratory Audits:** Responsible for auditing the technical capabilities and regulatory status of numerous Corps-validated analytical laboratories used for projects with the Kansas City, Baltimore, Philadelphia, and New York Districts of the Corps.
- **Quality Assurance Program Plan (QAPP) for Environmental Investigations at the Defense Personnel Support Center, Philadelphia PA:** Site Chemist responsible for preparation and implementation of a facility-wide QAPP for all investigations expected to be performed at the facility by all architect-engineers working at the site. The QAPP covers sampling of soil, sediment, surface water, groundwater, air, and dust/bulk for DDX analysis.
- **Merritt Smith Consulting:** Served as on-site consultant to evaluate laboratory facilities located in San Francisco Wastewater Treatment Plants; prepared a technical set of QA guidelines for labs to follow.

DETAILED EXPERIENCE (Continued)

- **Envirosource:** Performed a number of litigation support services for a hazardous waste landfill's lawsuit with the local government. Activities included review of laboratory files for accuracy of reporting and analysis, performing field studies on groundwater collected on-site to demonstrate that the presence of radiological parameters was associated with sediments and not the aqueous fraction of the sample, assisted in preparing and reviewing expert reports for the defendant, reviewed and commented on reports prepared by the plaintiff.
- **Naval Facilities Engineering Command, Northern Division:** Performed an Environmental Baseline Survey for the Prison Complex, which included data validation and evaluation of data associated with sampling events conducted to evaluate potential storage, release, or disposal of hazardous substances or petroleum products in or around the subject property.
- **Naval Facilities Engineering Command, Northern Division:** Performed an Environmental Baseline Survey for the Prison Complex, which included a survey covering all buildings associated with activities related to the prison complex area.
- **North East Ohio Regional Sewer District – Southerly WWTP:** As part of a long-term cyanide monitoring protocol of the plant influent and effluent, served as site chemist to evaluate and address cyanide analytical methods and concentrations. Developed and oversaw standard operating procedures for two different cyanide methods (EPA 1677 and SM 4500).
- **Quality Assurance Project Plan (QAPJP) for Fried Industries Superfund Site, New Jersey:** Site Chemist responsible for preparation and implementation of an work plans, which covered sampling of soil, sediment, surface water, groundwater, air, and dust/bulk.
- **Puerto Rico Aqueduct and Sewer Authority – Ocean Outfall for the Ponce Regional Wastewater Treatment Plant:** Quality Assurance Manager for all activities conducted as part of the 301(h) waiver decision developed to monitor the impact of the approved discharge on the marine biota. Responsible for the following: field and laboratory audits, oversight of field sample collection techniques, data validation, evaluation, and usability of biological and laboratory analytical data, review of subcontract agreements for all laboratory subcontractors on this project, and monitoring of overall quality of the project activities.
- **USACE, Baltimore District: Fort Drum RCRA Closure Building T-4819:** Served as site chemist for a RCRA plan closure of interim-permitted hazardous waste storage building. Performed data validation on floor rinsate, surface soil, and wipe samples (volatiles, semivolatiles, pesticides, PCBs, and metals) and provided usability summary of the data for the building closure.
- **New York City Department of Environmental Protection: Odor Control Design Evaluation for the Manhattan & Bronx Grit Chambers of the Wards Island Water Pollution Control Plant / Bronx NY.** Performed data validation, evaluation, and usability analysis of laboratory-generated data analyses submitted from sample collection of hydrogen sulfide (H₂S) emissions study for off-site grit chamber facilities serving the plant. The data were used to develop H₂S emissions estimates from various unit processes for use in developing building ventilation/odor control scenarios, and to evaluate potential off-site impacts using ambient air modeling. In addition, performed an on-site visit to laboratory facility to resolve laboratory data issues.

DETAILED EXPERIENCE (Continued)

- **New York City Department of Environmental Protection: VOC & Odor Emissions Studies at Dewatering Facilities / New York NY.** Performed data validation, evaluation, and usability analysis of laboratory-generated data analyses submitted from sample collection of odor control systems at Wards Island, Tallman Island, and Jamaica Water Pollution Control Plants. Building and process air entering and exiting the wet scrubbers and activated carbon vessels were analyzed for hydrogen sulfide, odorous organic compounds, VOCs, and ammonia. The efficiency and performance of the odor control systems were evaluated on the basis of the analytical data. In addition, performed an on-site visit to laboratory facility to resolve laboratory data issues.
- **New York City Department of Environmental Protection: Engine Emissions Studies / New York NY.** Performed data validation, evaluation, and usability analysis of on-site and off-site laboratory-generated data analyses submitted from sample collection of engine testing program at the Tallman Island and Coney Island Water Pollution Control Plants. Data analyses consisted of methods performed to determine the emissions of criteria pollutants and VOCs from internal combustion engines burning digester gas, natural gas, and diesel fuels. Testing results were used in Title V permitting development.
- **New York City Department of Environmental Protection: Kensico Flow Control Modifications – Aerator No. 2 (Delaware Aerator) / Town of Mt. Pleasant NY.** Prepared a Sampling and Analytical Plan (SAP) describing field tasks required to complete the Supply and Discharge Conduit assessment located at Aerator No. 2, Kensico, New York. The SAP outlined field activities, laboratory analyses, and control and disposal of contaminated materials.
- **NYC Transit Authority: Kingsbridge – Phase II.** Conducted a Phase II investigation of a vehicle storage lot to be acquired by NYC Transit. Prepared a Field Work Plan, over-sighted the direct push contractor, collected subsurface soil and groundwater samples, and validated analytical data. Assisted with preparation of findings report that summarized field observations and compared detected contaminant concentrations to state regulatory standards.
- **Puerto Rico Aqueduct and Sewer Authority: Title V Services for 14 Facilities / PR.** Performed data validation, evaluation, and usability analysis of laboratory generated data analyses submitted from sample collection of 12 wastewater treatment plants, 2 water treatment plants, and 2 maintenance facilities owned by the Authority. The data were used to evaluate the applicability of Title V regulations to each facility (major and nonmajor source status). In addition, performed an on-site visit to laboratory facility in San Juan, PR to resolve laboratory data issues.
- **Mississippi Department of Environmental Quality.** Responsible for evaluating Bacteriological data generated from sampling conducted at Targeted Pathogen TMDL Locations in the Pearl River and South Independent Stream Basins. Data assessment consisted of precision measurements and statistical examination of fecal coliform data.
- **USACE, Baltimore District: Remedial Investigation at the Skaneateles Weekend Training Site for the 77th Regional Support Command:** Served as site chemist performing laboratory coordination, site sampling, and data validation for activities related to historical release from gasoline underground storage tanks.

DETAILED EXPERIENCE (Continued)

- **USACE, Baltimore District: Remedial Investigation/Remedial Design, Hancock Field Army Complex:** Coordinated and assisted with soil, surface water, and groundwater field investigations. Performed data validation and data usability reports, and, prepared final investigation reports.
- **USACE, Baltimore District: Sampling and Analysis at Fort Drum:** Responsible for data validation of analytical data from sampling of soil, groundwater, sediment, pure product, dust, and paint chips. Data validation was performed in accordance with USEPA National Functional Guidelines with Region II modifications and adapted to NYS analytical protocols and SW-846 methodologies.
- **USACE, Fort Worth District: Fort Wingate Depot: Soil Background Investigation:** Served as site chemist for an investigation of background concentrations of 30 constituents in the surface soil at a 22,000-acre former munitions storage facility. Prepared Chemical Data Acquisition Plan, performed data validation of over 100 samples (total metals, total phosphorus, nitrate/nitrite, total kjeldahl nitrogen, ammonia-nitrogen, sulfate, and pH), and prepared the Quality Control Summary Report of that investigation. In addition, provided support regarding usability of the data to the USACE statistician.
- **USACE, Fort Worth District: Lone Star Army Ammunition Plant, G and O Pond Units – Affected Property Assessment:** Served as site chemist for a RCRA facility investigation to further characterize the G and O Pond Units. Prepared Chemical Data Acquisition Plan, performed data validation of over 200 samples (total recoverable metals, total metals, SPLP metals, cyanide, hexavalent chromium, TOC, TOX, phenols, explosives, volatiles, semivolatiles, nitrate, nitrite, sulfate, and chloride), and prepared the Quality Control Summary Report of that investigation.
- **USACE, Kansas City District: Brewster Wellfield Superfund Site: Groundwater Treatment and Design:** Performed a bench-scale study of viable treatability technology for groundwater softening. The study included the use of raw groundwater from the site in order to set up the bench-scale process. Rigorous sampling was conducted and field kits were used to assess design parameters.
- **USACE, Kansas City District: Sampling and Analysis at Fort Drum:** Project leader for a responsive sampling and analysis services project. The work consisted of: Proposal preparation for numerous sampling assignments; Coordination of field sampling personnel and analytical laboratory; Collection of samples for evaluation under RCRA and New York State guidelines for hazardous waste; and Analysis of chemical data and report preparation.
- **USACE, Omaha District: Former Glasgow Air Force Base: Remedial Investigation:** Evaluated analytical data collected during remedial activities at 16 former tank sites to evaluate the aerial and vertical extent of contaminated soils and groundwater, resulting from past use of the underground and aboveground storage tanks at the former tank locations. Performed data validation and usability summaries and prepared a Quality Control Summary Report for the USACE.
- **USEPA, Region 2: Franklin Burns Superfund Site:** During the RI/FS, evaluated dioxin-furan groundwater data

DETAILED EXPERIENCE (Continued)

- **USEPA, Region 2: White Chemical Corporation Superfund Site:** During the RI/FS, evaluated dioxin-furan data.
- **USEPA, Region 2: ARCS Preremedial Program:** Compilation of the information/data gathered into a site inspection prioritization (SIP) report for submittal to the USEPA. A recommendation was provided based on existing data stating whether the site needed further investigation.
- **USEPA, Region 2: ARCS Preremedial Program:** Performance of sampling activities which included the collection of surface soil samples to determine the absence or presence of contamination on-site.
- **USEPA, Syosset Landfill TMA Investigation:** On this controversial project, evaluated data to identify whether trimellitic anhydride (TMA) was being emitted from the Syosset Landfill, a former Superfund Site, and poisoning local residents. Worked with the EPA and OSHA to develop a modified protocol which could detect TMA at low levels. Assisted in the report preparation process.
- **City Of White Plains: Drum Investigation Activities:** Responsible for the following: define data quality objectives, procurement of certified laboratory, drum sampling, data validation and usability of analytical data, and preparation of final Report of Findings including recommendations to the NYSDEC.
- **City Of White Plains: Drum Removal Activities:** Removal of over 45 hazardous and non-hazardous drums. As task leader, responsible for the following: define data quality objectives, procurement of certified laboratory, prepared specifications for drum removal and soil removal activities, provided oversight of all field activities, pre and post excavation sampling, data validation and usability of analytical data, and preparation of final Report of Findings to the NYSDEC.
- **Central Contra Costa Sanitary District (CCCSD): Cyanide Assessment:** Served as chemist to evaluate and address cyanide analytical methods and concentrations within CCCSD's WWTP.
- **Cytec Industries: NPDES Permit Issues:** Evaluated usability of analytical laboratory data in accordance with the methods performed.
- **Stone & Webster Environmental Technology and Services: FUSRAP Maywood Superfund Site, PDI Work Plan: Preliminary Design Investigation Work Plan:** Twenty-four commercial and government properties, which potentially contained deposits of radioactive residues and/or hazardous chemicals in surface and subsurface soil. The PDI plan was developed to identify all data gaps and summarize the field activities necessary to acquire the additional information necessary to complete the remedial design action for each property. Site-specific information, including civil/property surveys, foundation designs, underground utilities, safety and logistical issues were examined. Radiological, chemical, geotechnical, and design gaps were identified. Properties were grouped into clusters and maps were prepared. To fill data gaps, specific methods and quantities of predesign data collection activities were developed for each cluster. Performed an RPD comparison study measuring reproducibility between the on-site and offsite laboratory data.
- **New York City Department of Environmental Protection: Newtown Creek Water Pollution Control Plant Upgrade: Aquifer Pumping Tests:** Evaluated data collected from a series of aquifer pumping tests which were conducted at the former Exxon, Mobil, and Williamburg Steel sites.

DETAILED EXPERIENCE (Continued)

- **USACE, Kansas City District: Fried Industries Superfund Site – Remedial Design Investigation and Conceptual Design:** Evaluated soil and groundwater data collected from areas of concern.

1994

EA Engineering, Science, and Technology

As Scientist II:

- **USACE, Baltimore District, Fort Drum NY (Gasoline Alley):** Responsible for preparation of Chemical Data Acquisition Plan in accordance with the USCOE's technical guidelines
- **USACE, Kansas City District, Ellsworth Air Force Base NE:** Responsible for validating organic, inorganic, and miscellaneous analyses using the National Functional Guidelines for Organic and Inorganic Data Review.
- **USACE, Baltimore District, Fort Drum NY:** As field chemist, provided support during on-site investigation. Responsible for on-site laboratory setup, maintenance and troubleshooting, sample analysis, sample reporting, and data review and interpretation.
- **Idaho National Environmental Laboratory:** Responsible for preparing in-house data validation guidelines for polychlorinated dibenzo-p-dioxin (PCDD) and dibenzofuran (PCDF) analyses.

1990-1993

Pace, Inc.

- **As Gas Chromatography/Mass Spectrometry (GC/MS) Supervisor:** Provided technical training and support in areas of troubleshooting, data review, and spectral interpretation.
- **As GC/MS Volatile/Semivolatile Analyst:** Performed a wide spectrum of volatile and semivolatile analyses using state-of-the-art analytical instrumentation.

November 1987-March 1990

Nanco Environmental Services, Inc.

- **As Metals Analyst:** Performed analysis of heavy metals for diverse sample types including drinking water, groundwater, core samples, and soil samples.

June-November 1987

Institute of Ecosystem Studies
The New York Botanical Garden

- **As Research Assistant I:** Responsible for inorganic analysis of on-going acid rain study conducted on the Hubbard Brook Ecosystem samples using a wide range of analytical equipment.

APPENDIX D
Health and Safety Plan

**HEALTH AND SAFETY
PLAN**

**THE CONCORD HOTEL & RESORT SITE
Concord Road, Kiamesha Lake
Thompson, NY 12751**

OCTOBER 2004

Prepared for:

**Concord Associates, LP
115 Stevens Ave
Valhalla, NY 10595**

Prepared By:

**JM Associates, Inc.
225 Railroad Ave
Bedford Hills, NY 10507**

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1.0 INTRODUCTION	1
2.0 SITE DESCRIPTION	1
3.0 WORK OBJECTIVES	2
3.1 Work Activities	2
4.0 PERSONNEL	2
4.1 Health and Safety Officer (HSO)	2
4.2 Project Manager	3
4.3 Subcontractors	3
4.4 Visitors	3
4.5 Training	3
5.0 SITE CONTROL	3
6.0 EMERGENCY INFORMATION	4
7.0 HAZARD EVALUATION	5
7.1 Physical Hazards	5
7.2 Chemical Hazards	5
7.3 Health Risk Analysis	5
7.4 Task Risk Analysis	5
7.5 Traffic Hazards	6
8.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)	6
9.0 AIR MONITORING	7
10.0 DECONTAMINATION	7
11.0 INCIDENT REPORTING	7
12.0 EMERGENCY RESPONSE	8
12.1 Evacuation and Emergency Response	8
12.2 Spills	8

<u>SECTION</u>	<u>PAGE</u>
13.0 COMMUNITY HEALTH AND SAFETY PLAN (CHASP)	8
13.1 Community Air Monitoring Plan (CAMP)	9
13.1.1 VOC Monitoring	9
13.1.2 Particulate Monitoring	10

FIGURES

Figure 1	Site Location Map
Figure 2	Areas of Concern

APPENDICES

Appendix A	Incident Report Form
Appendix B	Air Monitoring Log
Appendix C	Acknowledgement of HASP

1.0 INTRODUCTION

JM Associates has prepared this Site-Specific Health & Safety Plan (HASP) for the Remedial Investigation (RI) and Interim Remedial Measures (IRM) that will be conducted at the 221 Main Street Site located at Concord Road, Kiamesha Lake, Thompson, New York ("the Site") under the New York State Brownfield Cleanup Program (BCP). This HASP has been prepared in accordance with the industry standards of the Federal Occupational Safety and Health Administration (OSHA) as outlined in Title 20 of the Code of Federal Regulations, Parts 1910 and 1926 (20 CFR 1910 and 20 CFR 1926). The HASP is designed to establish site-specific health and safety procedures that will be followed during Site activities in order to minimize exposure of site workers and the community to physical and chemical hazards that may be present at the Site. The HASP will be adhered to by all personnel involved in the investigation. Procedures followed in this HASP are implemented to ensure that workers on the Site as well as people working near the site and the surrounding community are protected from exposures to site contaminants.

2.0 SITE DESCRIPTION

Site background information is discussed in the RI/IRM Work Plan. The site is located in the Town of Thompson, Sullivan County, New York as shown on Figure 1, and is occupied by an inactive hotel complex with associated facilities including a swimming pool, tennis courts and two active golf courses. The Site consists of three main areas; Zones 1, 2 and 3. Zone 1 consists of areas in the northwestern portion of the property and includes the Main Hotel Complex, the Main Parking Area Dump Site, the Gas Station and the International Golf Club House and Maintenance Building. The total area of Zone 1 is approximately 203 acres. Zone 2 consists of areas in the south/southeastern central portion of the site and includes the Monster Club House, the Chalet House and Chalet Dump Site and the Golf Maintenance Building and Golf Maintenance Dump Site. The total area of Zone 2 is approximately 170 acres. Zone 3 consists of the International Golf Course Dump Site, located in the northern central portion of the site, north of Zone 2. The total area of Zone 3 is approximately 5 acres. The three areas of the Site are shown on Figure 2.

Soil at the Site is impacted by petroleum products due to historically leaking underground storage tanks (USTs). Four solid waste dump sites exist throughout the Site and groundwater impact is unknown. The Site occupies approximately 378 acres of the total 1,729 acre property. The Site is located in a rural area and is surrounded by residential properties. A small shopping center, retail and food establishments are also located in the vicinity of the Site. Kiamesha Lake, a Class A water body, is located adjacent to the Site to the west, as shown on Figure 1. Kiamesha Creek and its tributaries flow through the Site. As outlined in the Phase II Report completed by Environmental Compliance Services, Inc. (ECSI), dated September 1998, the Leisure Time Water Company, a drinking water supply bottler, is located on the southwestern banks of Kiamesha Lake. Also noted in the Phase II is the existence of Kiamesha Artesian Spring Water Co. located at the northeast portion of the Lake. The Kiamesha Artesian Spring Water Co.

provides potable water to nearby Village and Town residents and businesses, including the Concord facilities.

3.0 WORK OBJECTIVE

The objective of the work being performed at the Site is to remove underground storage tanks and associated contaminated soil, to remove chemicals stored on site. To remove asbestos containing material (ACM), to evaluate the extent of solid waste disposal in Zone 3, to determine impacts to Kiamesha Creek and to determine if groundwater has been impacted. The objectives of the work will be completed in two phases. The first phase is an IRM to remove the USTs and associated contaminated soil, to remove chemicals stored on site and to remove ACM in certain areas of the Main Hotel Complex. The second phase is a RI to determine the extent of solid waste disposal in Zone 3, to determine if Kiamesha Creek has been impacted and to determine if groundwater has been impacted.

3.1 Work Activities

Specific work activities to be performed include:

- Excavation of USTs and contaminated soil;
- Confirmatory soil sampling;
- Test Pit Investigation;
- Surface water and sediment sampling;
- Monitoring well installation;
- Groundwater sampling.

Safety procedures required for each of the activities to be performed are described in subsequent sections of this HASP.

4.0 PERSONNEL

Personnel at the Site include a project manager, a Health and Safety Officer (HSO), and subcontractors. Visitors may also be on the Site at various times.

4.1 Health and Safety Officer (HSO)

The Health and Safety Officer (HSO) is responsible for coordination of health and safety procedures and is responsible for compliance with the HASP. The HSO will ensure that all site personnel and visitors read and sign the HASP. All safety concerns should be referred to the HSO. The HSO will make any necessary modifications to the HASP should site conditions change. The HSO will communicate daily with the Project Manager. The HSO for this project is Joe Mazzuco of IMF Safety Services, Inc.

4.2 Project Manager

The Project Manager (PM) is responsible for the overall coordination of work at the Site. All subcontractors and other personnel report to the Project Manager. The Project Manager is required to read and sign the HASP and to adhere to HASP procedures. The Project Manager communicates daily with the HSO. The Project Manager for this project is John Manfredi of JM Associates.

4.3 Subcontractors

J.M. Associates requires that all site contractors work under their own site-specific health and safety plans. J.M. Associates is not responsible for the health and safety of the site contractors. The site contractors will, however, be required to read and sign this site-specific HASP and agree to comply with the procedures outlined in this HASP.

4.4 Visitors

All visitors will be required to sign and read this HASP and agree to follow the procedures outlined in this HASP. Site visitors will not be allowed in designated areas of the Site where work in contaminated areas is being performed as outlined in this HASP.

4.5 Training

Training is required of all employees working in the exclusion and contamination reduction zones. The training requirements are as follows:

- 8 hour awareness class
- Three days of supervised field experience
- HASP training

Documentation of the required training for workers is kept in company files in the J.M. Associates main office.

5.0 SITE CONTROL

Prior to the start of field activities, the HSO will be responsible for the designation of the exclusion zone, contamination reduction zone and support zone when intrusive activities are being completed.

The exclusion zone will be defined as the immediate work area and the area within ten feet of the work area. The exclusion zone is the area where the greatest potential hazard exists. **Only authorized workers with the required training are allowed in this zone.**

A contamination reduction zone will be defined by the HSO daily. This zone will be located outside of the exclusion zone, and upwind of the exclusion zone whenever

possible. The contamination reduction zone will be used for the storage of equipment and personnel decontamination.

The support zone will be defined as an outermost area outside the contamination reduction zone. The support zone is a clean area where administrative and support employees remain and where communications are held. Normal work clothes are allowed in this zone. The support zone will be located upwind from high hazard areas as appropriate.

6.0 EMERGENCY INFORMATION

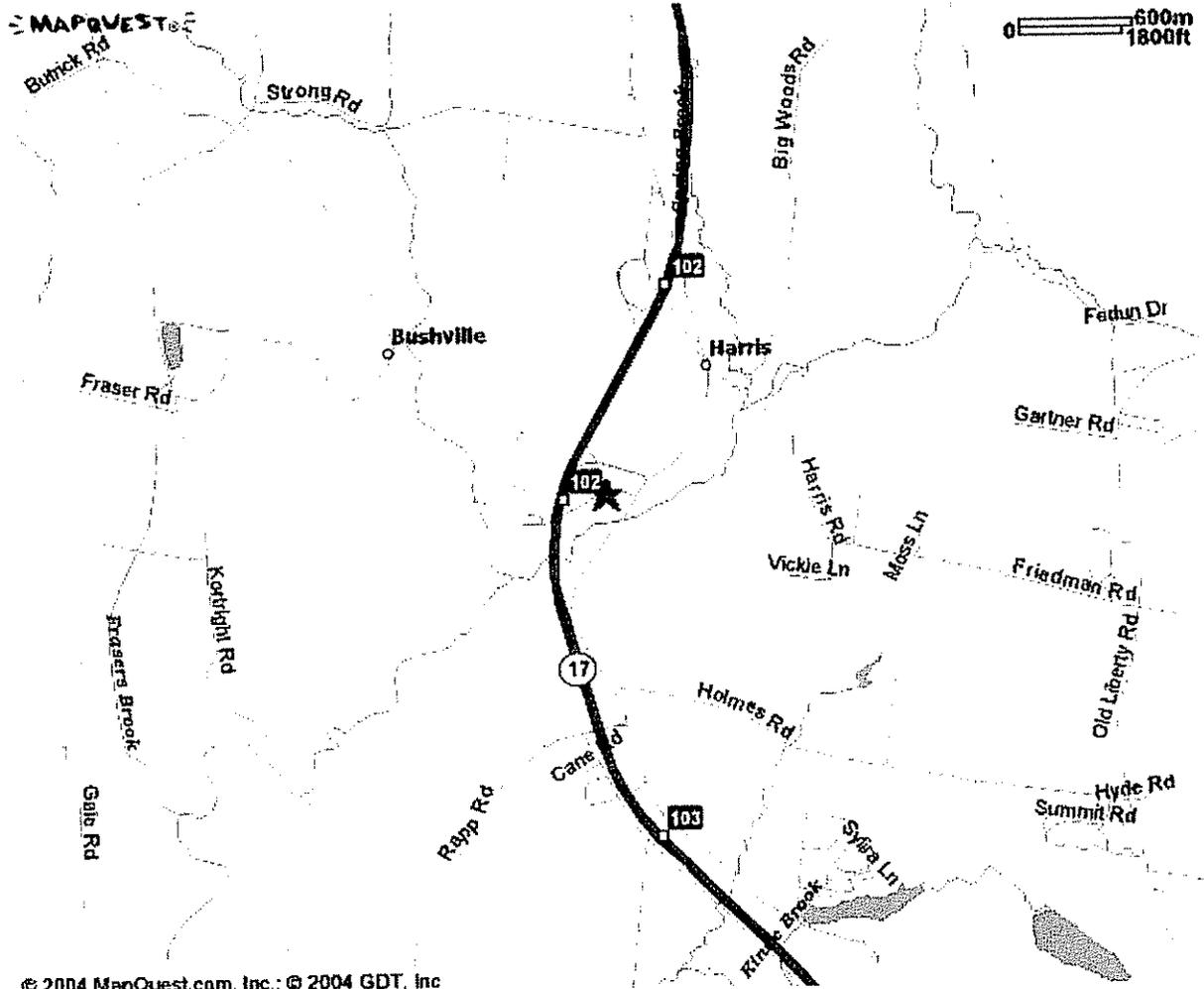
A map of the Site and designated work zones are included as Figures 1 and 2.

Site Address:	Concord Road Thompson, NY 12571
Health and Safety Officer (HSO):	Joe Mazzuco
General Emergency:	911
Police Department:	Non-emergency: (845) 794-4422 Emergency 911
Fire Department:	Non-emergency: (845) 794-6330 Emergency 911
Ambulance:	Non-emergency: (845) 794-6330 Emergency 911
Hospital:	Catskill Regional Medical 68 Harris Bushville Rd, Harris, NY (845) 794-3300

Directions to Hospital (see attached Map): 5 Miles
From Concord Road going SOUTH, take a LEFT onto Route 42. Merge onto NY-17W. Take the exit- exit number 102- toward HARRIS/BUSHVILLE. Turn RIGHT onto OLD NY-17/CR-174. Turn RIGHT onto HARRIS BUSHVILLE RD/CR-75. End at 68 Harris Bushville Rd Harris NY.

Poison Control Center:	911
J.M. Associates Information:	225 Railroad Ave Bedford Hills, NY 10507 (914) 241-3795
Signal for Emergency:	Warning Shout

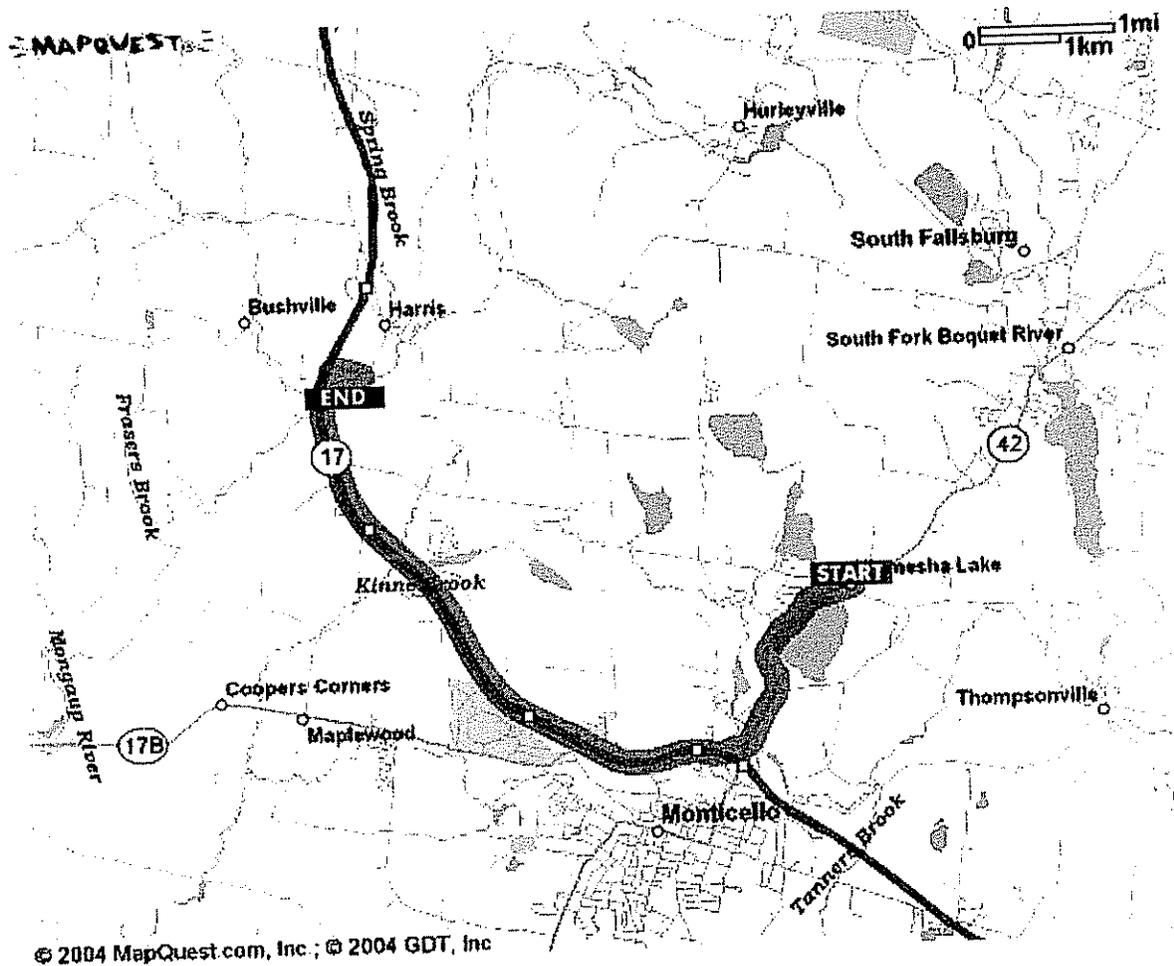
MAP OF HOSPITAL LOCATION
Catskill Regional Medical
68 Harris Bushville Rd, Harris, NY
(845) 794-3300



© 2004 MapQuest.com, Inc.; © 2004 GDT, Inc

DIRECTIONS TO HOSPITAL

From Concord Road going SOUTH, take a LEFT onto Route 42. Merge onto NY-17W. Take the exit- exit number 102- toward HARRIS/BUSHVILLE. Turn RIGHT onto OLD NY-17/CR-174. Turn RIGHT onto HARRIS BUSHVILLE RD/CR-75. End at 68 Harris Bushville Rd Harris NY



Point of Meeting for Emergency: J.M. Associates Project Vehicle
 Communication: Cell Phones, Verbal Communication

7.0 HAZARD EVALUATION

The potential physical and chemical hazards for this project have been evaluated. Existing information including past experience and past sampling results were used in the evaluation process.

7.1 Physical Hazards

Physical hazards for this project include electrical exposure, mechanical exposure, fire/explosion, noise exposure and heat or cold stress. Precautions will be taken to avoid physical hazards and include general safe working practices and proper personal protective equipment. Heat stress and cold stress can be avoided by dressing appropriately and taking necessary work breaks.

7.2 Chemical Hazards

The chemical hazards for this site include contact with contaminated soil and groundwater and with chemicals being stored on site. The chemicals known to be associated with the site are petroleum products. Chemicals to be introduced to the site include those from sampling activities, including sample preservatives, and from fuel and oil associated with on-site vehicles. Possible exposures to chemical hazards include dermal contact, inhalation and ingestion.

7.3 Health Risk Analysis

OSHA Permissible Exposure Limits (PELs) for the main contaminants of concern at the Site are outlined in Table 1 below.

Compound	NIOSH PEL (ppm)	OSHA PEL (ppm)	NIOSH PEL (STEL) (ppm)
Toluene	100	200	150
Xylene	100	100	150

7.4 Task Risk Analysis

A summary of the tasks planned for this project and their associated potential hazards are listed in table 2 below. The protective measures anticipated for each hazard are also outlined.

Task	Hazard	Preventative Measure
Excavation, drilling, installation of monitoring wells	<ul style="list-style-type: none"> • Heavy equipment • Dermal and inhalation exposure to contaminants • Contact with underground utilities • Excavations 	Level D with Levels C upgrade if ambient air VOC concentrations measured with a PID exceed 100 ppm. Do not enter excavations.
Soil, groundwater, surface water and sediment sampling	<ul style="list-style-type: none"> • Exposure to contaminants 	Level D

7.5 Traffic Hazards

Traffic at the Site will be limited to necessary construction vehicles. Designated parking areas will be established and personal vehicles will be limited to the designated parking areas. Traffic will be monitored and additional safety measures and traffic control measures will be implemented as needed.

8.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

Personal Protective Equipment (PPE) will be utilized by on-site personnel. It is anticipated that Level D will be sufficient at all times during construction. The levels of PPE are outlined in Table 3 below, along with the conditions under which they will be utilized.

Level of PPE	Application
Level D Work uniform: <ul style="list-style-type: none"> • Long sleeve shirt and pants or coveralls • Hard Hat • Safety Glasses • Steel-toe work boots • Hearing protection (as required) 	PID ≤ 100 ppm over 15 minute duration PID ≤ 200 ppm under 15 minute duration (Levels monitored above background levels)
Level C Respirator: <ul style="list-style-type: none"> • Full-face air purifying respirator with VOC cartridges and dust pre-filters Work Uniform: <ul style="list-style-type: none"> • Chemical resistant suit – Tyvek or equivalent 	PID > 100 ppm (or 250 ppm as above) PID < 750 ppm over 15 minute duration (Levels monitored above background levels)

<ul style="list-style-type: none"> • Hard Hat • Safety Glasses • Steel-toe work boots with chemical resistant boot covers • Chemical resistant gloves • Hearing protection (as required) <p>Procedures:</p> <ul style="list-style-type: none"> • Buddy System • Two-way radios 	
---	--

If conditions exceed Level C, work is stopped and emergency evacuation procedures followed.

9.0 AIR MONITORING

The RI and IRM activities will be completed outdoors, and will therefore be well-ventilated. Air monitoring will be completed in the exclusion zones to establish action levels for worker respiratory protection and to determine when upgraded PPE is necessary. Direct reading instruments will be used for initial and periodic air monitoring. All air monitoring equipment will be calibrated each day and will be inspected to ensure they are in good working condition. Table 4 below summarizes the air monitoring to be performed at the Site. Additional air monitoring is outlined in Section 13.1.

Instrument	Frequency	Action Level	Action
Photoionization Detector (PID)	When readings are detected	150 ppm (above background)	Upgrade PPE as indicated in Table 3 above.

10.0 DECONTAMINATION

It is not expected that PPE will require decontamination. Disposable gloves and sampling equipment will be used and containerized in drums for proper disposal. If Level C PPE is required, disposal boot covers, Tyvek suits, safety glasses, gloves and duct tape will be used. To decontaminate, the disposable materials will be drummed for proper testing and disposal. If necessary, heavy construction equipment will be decontaminated by steam-cleaning and washing with water spray prior to leaving the contamination reduction zone. All waste water would be containerized, tested and properly disposed of.

11.0 INCIDENT REPORTING

All injuries and incidences must be reported to the HSO. The HSO will take appropriate action to prevent further exposure or injury. Following an incident, an incident report will be completed. An example of the incident report is included in Appendix A. The

HSO will investigate the event and take corrective action as needed. In the event of a hazardous material spill or reportable release, the appropriate regulatory agencies will be notified by the HSO.

12.0 EMERGENCY RESPONSE

Hospital and emergency contact information is included in Section 6.0. For non-emergencies, a first-aid kit will be located on site in the J.M. Associates project vehicle.

If an upgrade to Level C PPE is necessary, verbal hazard communication may become difficult. Under those circumstances, a universal set of hand signals will be used as follows:

Hand gripping throat	Can't breathe
Grip partner's wrist	Leave work area immediately
Hand on top of head	Need assistance
Thumbs up	Okay, I'm alright, I understand
Thumbs down	No, negative, I do not understand

If Level C PPE is used, the buddy system will be put in place. The buddy system ensures that no employee works alone in the exclusion zone. When working under the buddy system, employees are paired and must always be in close proximity of each other. If one employee needs to leave the exclusion zone, both employees must leave,

12.1 Evacuation and Emergency Response

In the even of an emergency, notify the HSO immediately. The signal to evacuate is a warning shout. All personnel will evacuate to the J.M Associates project vehicle unless otherwise defined by the HSO at the start of the work day.

12.2 Spills

All spills and leaks must be reported to the HSO. If the spill is a threat to human health or the environment, the area should be evacuated and the HSP immediately notified.

13.0 COMMUNITY HEALTH AND SAFETY PLAN (CHASP)

Safe working procedures will be adhered to in accordance with this HASP to ensure protection of the surrounding community. There are several establishments in close proximity to the work area. Construction fencing will be erected around the work areas to ensure confinement of contaminated work areas. Signs will be posted to warn the public to stay out of designated areas.

13.1 Community Air Monitoring Plan (CAMP)

Expanded air monitoring will be completed at the downwind perimeter of each designated work area when intrusive activities are being completed in the AOCs. The CAMP is designed to provide a measure of protection for the downwind community, not directly involved with the work, from potential airborne contaminant releases as a direct result of RI and IRM activities.

13.1.1 VOC Monitoring

VOCs will be monitored at the downwind perimeter of the exclusion zone or work zone during on-site work. Monitoring will be completed using a PID capable of calculating 15 minute averages. The meter will be calibrated daily and inspected to ensure it is in good working order. Upwind concentrations will be measured at the start of the work day and periodically to establish background conditions. Continuous air monitoring will be completed during intrusive work activities, including excavation and installation of monitoring wells. Continuous air monitoring will also be completed during the collection of soil gas samples, since the samples will be collected from inside occupied buildings. Periodic monitoring will be conducted during groundwater sampling activities.

All 5 minute readings will be recorded on the logs included in Appendix B. Instantaneous levels used for decision making purposes, if any, will also be recorded. Appropriate conditions will be taken if any of the action levels described below are met during monitoring. Upon completion of the appropriate steps, the HSO must be notified of the conditions that occurred and the steps that were taken.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

13.1.2 Particulate Monitoring

During intrusive activities, continuous particulate monitoring will be conducted at the downwind perimeters of the exclusion zone. Monitoring will be completed with a meter capable of measuring particulate matter less than 10 micrometers in size (PM-10) and that is capable of calculating a 15 minute running average concentration. The meter will have an audible alarm to indicate exceedance of the action level. The meter will be calibrated daily and inspected to ensure it is in good working order. Upwind concentrations will be measured at the start of the work day and periodically to establish background conditions.

All 5 minute readings will be recorded on the logs included in Appendix B. Instantaneous levels used for decision making purposed, if any, will also be recorded. Appropriate conditions will be taken if any of the action levels outlined below are met during monitoring. Upon completion of the appropriate steps, the HSO must be notified of the conditions that occurred and the steps that were taken. Fugitive dust migration will be visually assessed during all work activities. Water will be used to suppress excessive fugitive dust as needed and for general dust suppression.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m³) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m³ above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m³ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m³ of the upwind level and in preventing visible dust migration.

APPENDIX A
Incident Report Form

GLOBAL REMEDIATION INCIDENT / LESSON LEARNED REPORTING FORM

COMPLETE & SUBMIT WITHIN 24 HRS OF INCIDENT

INCIDENT/FILE NO. _____

Employee Contractor 3rd Party
 SAFETY ENVIRONMENTAL

INITIAL FINAL

ORIGINAL TO: Functional Manager

COPIES TO: Denise Amitrani

Business Client

Fuels
 Refining
 Supply
 Upstream
 Chemical
 Lubes
 Other _____

Global Remediation

U.S. Retail Service Stations
 Major Projects
 Technical and Support Services
 Americas South
 Europe/Africa/ME
 Asia Pacific
 Other

Incident Type

SAFETY

ENVIRONMENTAL

Type of Incident (check all that apply):

If injury/illness (check one):

Type of Incident (check all that apply):

<input type="checkbox"/> Injury	<input type="checkbox"/> Fatality
<input type="checkbox"/> Illness	<input type="checkbox"/> Lost Time
<input type="checkbox"/> Motor Vehicle Incident	<input type="checkbox"/> Medical Treatment
<input type="checkbox"/> Lesson Learned	<input type="checkbox"/> 1st Aid Administered (only)
<input type="checkbox"/> Property/Equipment Damage	<input type="checkbox"/> Restricted Work Activity
<input type="checkbox"/> Critical Safety Device Failure	<input type="checkbox"/> Other _____
<input type="checkbox"/> Other _____	

Environmental Release/Spill
 Exceedance
 Notice of Violation (NOV)
 Environmental Fine/Penalty
 Consent Order
 Lesson Learned
 Other _____

Background Information

Company Name: _____ (ExxonMobil or Contractor Company)
 Location of Incident: _____ City: _____ State: _____ Site/Facility/Store #: _____
 Name: _____ Social Security #: _____ (EM Employee only)
First Middle Last
 Home Address: _____ Phone: _____
(No. & Street) City State
 Age: _____ Gender: Male Female
 Occupation (Job Title): _____
 # Years Worked for Company (Incl Heritage Exxon & Mobil years): _____ Years of Service in Current Position: _____
 Supervisor's Name: _____ Supervisor's Phone #: _____
 EM Contact: _____ EM Contact Phone #: _____

Initial Summary Information

1. Date of Incident: _____ Time of Incident: _____ a.m. p.m.
Mo. Day Yr

GO TO NEXT PAGE →

Root Cause Analysis

*(It is important to carefully examine the events and conditions of what happened during an event to determine the root causes and identify fixable problems. Keep asking "Why" until you get to the bottom or root cause. Too often, we look for the easy or quick answer and never identify the real problems.)
(Check All Appropriate Boxes)

Possible Root Causes

- | | | | |
|---|---|--|---|
| <input type="checkbox"/> Human Performance
(Ex: Human errors or mistakes; deviation from procedure, work omitted or forgotten, broken rules, incorrect calculations, etc) | <input type="checkbox"/> Equipment Difficulty
(Ex: Preventive maintenance problem, design error, unexpected failure, faulty parts) | <input type="checkbox"/> Natural Phenomenon/Sabotage
(Ex: Tornado, hurricane, natural disaster that is not reasonably protected by facility design, Deliberate & harmful intentions) | <input type="checkbox"/> Other
(Ex: Cause does not fit into any other category.) |
|---|---|--|---|

Part Injured	Type Injury/Illness	Type of Incident	Physical Agent
<input type="checkbox"/> Head/Face/Neck	<input type="checkbox"/> Amputation	<input type="checkbox"/> Trip, Slip, or Fall	<input type="checkbox"/> Fixed Equipment, Machinery, Piping, Fittings
<input type="checkbox"/> Eye	<input type="checkbox"/> Fracture/Contusion	<input type="checkbox"/> Over-exertion	<input type="checkbox"/> Portable Equipment, Hoses
<input type="checkbox"/> Arm, Wrist, Hand, Finger	<input type="checkbox"/> Burn/Inflammation	<input type="checkbox"/> Exposure - Vapor/Fume/Dust	<input type="checkbox"/> Solvents/Solvent Vapors/Gases
<input type="checkbox"/> Chest/Neck	<input type="checkbox"/> Embedded Body Puncture/ Foreign Body	<input type="checkbox"/> Splash/Spray	<input type="checkbox"/> Chemicals - Corrosive, Irritants, Others
<input type="checkbox"/> Groin/Abdomen	<input type="checkbox"/> Sprain/Strain/Hernia	<input type="checkbox"/> Temperature Extreme	<input type="checkbox"/> Chemicals - Other
<input type="checkbox"/> Back	<input type="checkbox"/> Laceration/Abrasion	<input type="checkbox"/> Struck by or Against	<input type="checkbox"/> Drums, Pails, Bags
<input type="checkbox"/> Leg	<input type="checkbox"/> Dermatitis/Irritation/ Eczema/ Rash	<input type="checkbox"/> Contact By or With	<input type="checkbox"/> Ladders, Scaffolds, Stairs, Walking Surfaces
<input type="checkbox"/> Foot/Toes/Ankle	<input type="checkbox"/> Occupational Illness, Other	<input type="checkbox"/> Caught In, On, or Between	<input type="checkbox"/> Hand or Portable Tools
<input type="checkbox"/> Shoulder	<input type="checkbox"/> Frostbite	<input type="checkbox"/> Aggravation of Pre-Existing Condition	<input type="checkbox"/> Vehicles, Forklifts, Transports
<input type="checkbox"/> Knee	<input type="checkbox"/> Heat stroke/sunstroke/ heat exhaustion	<input type="checkbox"/> Exceedance: ___ Water ___ Air ___ Other	<input type="checkbox"/> Metals
<input type="checkbox"/> Respiratory System	<input type="checkbox"/> Disorder Assoc with Repetitive Motion; Vibration	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Environmental heat
<input type="checkbox"/> None	<input type="checkbox"/> None		<input type="checkbox"/> Radiation
<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____		<input type="checkbox"/> Noise/vibration/pressure
			<input type="checkbox"/> Other: _____

15 If employee received first aid/medical treatment, where? _____

16 Employee Comments (use space below or attach additional sheet)

GO TO NEXT PAGE →

Initial Summary Information (cont.)

2 State what individual(s) was doing when injured (be specific).

3 Facts of How Incident Occurred? As known as of date of this report. (Describe fully)

4 Damage control measures/response actions taken. What is being done to minimize or contain the incident?

5 Effect on Company operations.

6 Was alcohol/drug use suspected? Yes No If yes, summarize actions/testing where legally permissible

7 Name of employee and/or contractors involved (if more than 1 individual or personal injury) Extent of injuries

Name	Employee/Contractor?	Company	Extent of injuries
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____

8 Had individual(s) been instructed in the Safe Work Procedure for this job? Yes No _____

9 Were third-party individuals/property involved? Yes No If yes, complete below.

Name of Third-Party Personnel Involved	Extent of Injuries to Third Party Personnel	Extent of Damages to Third Party Property
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

10 Facilities or equipment damage:

Company-Owned/Operated Contractor-Owned/Operated Extent of damage: <\$50k ≥ \$50k

11 Authorities/Agencies involved or notified; extent and nature of their actual or anticipated involvement.

Authority/Agency Involved	Type (State/Federal/Local)	When Notified	Extent & Nature of Their Actual or Anticipated Involvement
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____

12 Extent and nature of media coverage, actual or expected. (For boxes checked, describe coverage)

None TV Radio Newspaper Other

13 Equipment and/or Product Checks Performed:

Equipment _____ Product _____
(Equipment name) (Product name)

Quality Check(s) Performed? Yes No If yes, by Who? _____ When? _____

GO TO NEXT PAGE →

Initial Investigation Findings & Follow-up Action Items

17. Investigation Initiated? Yes No *If yes, by Who?* _____ *When?* _____

18. Preliminary investigation findings and conclusions regarding the cause of the incident.

19. Corrective action measures being implemented. (See following outline on requirements for reporting Personnel injury)

20. Recommendations to Prevent Future

Recommendation	Person Responsible for Implementation	Due Date
_____	_____	_____
_____	_____	_____
_____	_____	_____

21. OIMS System Relationship (Check all that apply i e. 3a or 6c. etc) *Indicate the specific System the incident relates to based on the root cause analysis.

- System 1 Management Leadership, Commitment and Accountability
- System 2 Risk Assessment and Management
- System 3a Design Practices and Standards
- System 3b Project Management / Quality Control
- System 4a Drawings and Other Documentation
- System 4b Hazard Communication
- System 4c Maintaining Operating Permits & Communicating SHE Regs
- System 4d Data Integrity
- System 5a Selection, Placement & Assessment of Employees
- System 5b Initial, Ongoing & Refresher Training
- System 5c Personnel Safety & Occupational Health
- System 6a Facility Operation, Inspection & Maintenance Procedures
- System 6b Work Permit Procedures
- System 6c Critical Safety Devices
- System 6d Hazardous Emissions / Waste Tracking & Compliance
- System 6e Facility Abandonment / Temporary Shutdown
- System 7 Management of Changes
- System 8 Third-Party Services
- System 9 Incident Reporting, Investigation and Analysis
- System 10a Community Awareness
- System 10b Emergency Response
- System 1J Operations Integrity Assessment and Improvement

I have reviewed this form with ExxonMobil Representative.

Employee/Contractor/3rd Party Signature _____
Date

I have reviewed this form with above person.

ExxonMobil Representative Signature _____
Date

PRELIMINARY CONCLUSIONS

Initial incident reports may need to be submitted based on incomplete information. Affiliates should ensure the following:

- Initial reports should be clearly marked as being an "Initial Report."
- The initial report should be as factual as possible. Avoid speculation and note when information or conclusions are tentative.

The initial report should indicate that it will be supplemented or corrected as necessary to accurately reflect the cause of the incident as more complete information becomes available.

APPENDIX B
Air Monitoring Log

APPENDIX E

Citizen Participation Plan

CITIZEN PARTICIPATION PLAN
THE CONCORD HOTEL & RESORT SITE
Concord Road, Kiamesha Lake
Thompson, NY 12751

October 2004

Prepared for:

Concord Associates, LP
115 Stevens Ave
Valhalla, NY 10595

Prepared By:

JM Associates, Inc.
225 Railroad Ave
Bedford Hills, NY 10507

TABLE OF CONTENTS

Section	Page
1.0 INTRODUCTION	1
2.0 SITE BACKGROUND	1
3.0 PROJECT DESCRIPTION	2
4.0 CITIZEN PARTICIPATION ACTIVITIES	3
5.0 PROJECT CONTACTS	4
6.0 DOCUMENT REPOSITORIES AND LIST OF AVAILABLE DOCUMENTS	4
7.0 PROJECT MAILING LIST	5

FIGURES

- 1 Site Location Map
- 2 Site Zones

APPENDICES

- A Hazardous Waste Site Program Glossary and Acronyms
- B Fact Sheet

1.0 INTRODUCTION

The New York State Department of Environmental Conservation (NYSDEC), the New York State Department of Health (NYSDOH), and Concord Associates, LP ("the Applicant") are committed to informing and involving the public during the remedial process at the Concord Hotel & Resort Site under the New York State Brownfield Cleanup Program (BCP). Citizen participation promotes public understanding of the responsibilities and remedial activities associated with this process. Citizen participation provides the Applicant and the NYSDEC with an opportunity to gain public input to support a comprehensive remedial program which is protective of both public health and the environment.

The Remedial Investigation (RI) of a site is a detailed study to determine how much hazardous waste contamination there is at the Site, how far it extends, and potential threats to public health and the environment. An Interim Remedial Measure (IRM) is a discrete action which can be conducted at a site relatively quickly to reduce the risk to people's health and the environment from a well-defined hazardous waste problem. A Remedial Action (RA) takes place to remediate contamination delineated during an RI that was not addressed as part of an IRM.

The CPP describes activities to be conducted throughout the project. The CP activities are designed to achieve the following objectives:

- Help the interested and affected public to understand the contamination problems at the Concord Hotel & Resort Site, and the nature and progress to investigate and clean up the site;
- Ensure open communication between the public and project staff throughout the remedial process;
- Create opportunities for the public to contribute information, opinions and perspectives that have potential to influence decisions about the site's investigation and cleanup.

The Applicant is conducting a remedial program NYSDEC oversight. NYSDEC will implement the CP activities described in this CPP. NYSDOH will participate in many of these activities.

2.0 SITE BACKGROUND

The site is located on Concord Rd, Kiamesha Lake, Town of Thompson, Sullivan County, New York as shown on Figure 1. The Site occupies approximately 378 acres of the 1,729 acre property. The Site is located in a rural area and is surrounded by residential properties. A small shopping center, retail and food establishments are also located in the vicinity of the Site. Kiamesha Lake, a Class A waterbody, is located adjacent to the Site to the west, as shown on Figure 1. Kiamesha Creek and its tributaries flow through the Site. As outlined in the Phase II Report completed by Environmental Compliance Services, Inc. (ECSI), dated September 1998, the Leisure Time Water Company, a drinking water supply bottler, is located on the southwestern banks of Kiamesha Lake. Also noted in the Phase II is the existence of Kiamesha Artesian Spring Water Co. located at the northeast portion of the Lake. The Kiamesha Artesian

Spring Water Co. provides potable water to nearby Village and Town residents and businesses, including the Concord facilities.

The site consists of three main areas; Zones 1, 2 and 3. Zone 1 consists of areas in the northwestern portion of the property and includes the Main Hotel Complex, the Main Parking Area Dump Site, the Gas Station and the International Golf Club House and Maintenance Building. The total area of Zone 1 is approximately 203 acres. Zone 2 consists of areas in the south/southeastern central portion of the site and includes the Monster Club House, the Chalet House and Chalet Dump Site and the Golf Maintenance Building and Golf Maintenance Dump Site. The total area of Zone 2 is approximately 170 acres. Zone 3 consists of the International Golf Course Dump Site, located in the northern central portion of the site, north of Zone 2. The total area of Zone 3 is approximately 5 acres.

3.0 PROJECT DESCRIPTION

The planned development for the site consists of the construction of a hotel and recreation complex with retail establishments.

Underground storage tanks (USTs) at the site have historically leaked and have impacted surrounding soils at the Gas Station and Golf Maintenance Building. The USTs and impacted soil will be removed as an Interim Remedial Measure (IRM). The objective of the IRM will be to remove and dispose of all impacted soil and the remaining USTs. The material will be disposed of off-site at a licensed disposal facility. Confirmatory samples will be collected to ensure the contaminated material is removed. During the IRM, remaining chemicals and pesticides stored on site will be removed from the site and properly disposed of. Chemicals are currently being stored in the Gas Station building, the maintenance buildings and in the Main Hotel Complex. Asbestos containing material (ACM) will also be removed from portions of the Main Hotel Complex as part of the IRM.

Preliminary sampling completed during the Phase II has indicated that groundwater at the site may have been impacted by the petroleum contamination at the Gas Station and Golf Maintenance Building. It is unknown if the dump sites are affecting groundwater. A Remedial Investigation (RI) at the Site will be completed after the IRM to fully characterize groundwater conditions throughout the Site. In addition to a groundwater investigation, Zone 3 will also be investigated to determine the extent of the International Golf Course Dump Site. Test pits will be installed around the perimeter of the dump to determine the extent and depth of the waste mass.

Also during the RI, three septic systems existing at the Site will be sampled along with the discharge points of the systems into Kiamesha Creek. The Phase II also revealed the presence of seeps near the Creek at two of the dump sites; the Main Parking Area Dump Site and the International Golf Course Dump Site. Surface water and sediment samples will be collected from the Creek to determine if the septic systems and/or the dump sites have impacted the Creek.

A RI/IRM Work Plan dated October 2004 has been submitted to the NYSDEC that outlines the activities to be completed. The Work Plan was prepared in accordance with NYSDEC guidance documents and is available at the Document Repositories listed in Section 6.0 of this CPP.

4.0 CITIZEN PARTICIPATION ACTIVITIES

This section describes the CP activities to be conducted for this Brownfield Cleanup Project. Project staff will perform these activities to inform and involve the affected and interested community in the activities for the Concord Hotel & Resort Site.

A Fact Sheet has been distributed to the project mailing list (see Section 7.0) announcing the transition of the Site into the BCP from the Voluntary Cleanup Program (VCP) and the availability of the RI/IRM Work Plan at the document repositories. The Fact Sheet presented a brief description of the site, including what is known about the extent of contamination, and announced a 45-day public comment period on the Work Plan. It also outlined upcoming activities and identified State contacts that can provide additional site information. A copy of this Fact Sheet is attached in Appendix B.

When the 45-day comment period is over, and the Work Plan is approved by the NYSDEC and NYSDOH, the work will be completed. A Fact Sheet will be mailed at that time to announce the start of the field work.

Once the IRM work is complete, the findings and a description of the activities completed will be submitted to the NYSDEC in an IRM Report. After completion of the RI activities, a RI Report will be submitted. At the time of the Report submission, a Fact Sheet will be mailed that presents the findings of the RI and IRM and that outlines the next steps to be taken at the Site based on the findings.

CP activities for this site include:

- Establishment of Document Repositories.
- Creation of a mailing list for the Potentially Affected/Interested Public. Individuals and groups included in the Contact List (see Section 7.0 of this CPP) will receive all mailings. The list will be updated as needed.
- Identification of the NYSDEC and NYSDOH Project Managers for the project and the ways for the public to contact them. Interested persons are encouraged to contact staff at any time with additional issues or information needs.
- Mailing of a Fact Sheet announcing the availability of the RI/IRM Work Plan and a 45-day public comment period on the Work Plan to the Public Contact List (see Appendix B).
- Mailing a Fact Sheet prior to the commencement of field activities notifying the public when the construction activities will begin. A copy of the approved RI/IRM Work Plan will be placed in the document repositories.
- Mailing an RI and IRM Complete Fact Sheet and announcing the availability of the RI and IRM Reports to the Public Contact List. The RI Report will evaluate alternatives for remediating the Site.

- Development and submittal of a Remedial Action Work Plan which outlines the chosen remedy for the Site. At the time of the Work Plan submission to the NYSDEC, a Fact Sheet will be mailed and a 45-day public comment period on the Work Plan will be announced.
- Mailing of a Fact Sheet prior to commencement of construction activities related to the remediation outlined in the Remedial Action Work Plan.
- After completion of the work, a Final Engineer's Report, also called a Remedial Action Report, will be prepared summarizing the work performed. A Fact Sheet will be mailed describing the Engineer's Report.
- A Fact Sheet will be mailed to the Public Contact list after the remediation has been deemed complete and a Certificate of Completion (COC) is issued by the NYSDEC.

5.0 PROJECT CONTACTS

For additional information about the program to investigate and remediate the Concord Hotel & Resort Site, the public is encouraged to contact any of the following project staff:

New York State Department of Environmental Conservation (NYSDEC):

Andrew Lent
NYSDEC Region 3
200 White Plains Rd, 5th Floor
Tarrytown, NY 10591
(914) 332-1835

New York State Department of Health (NYSDOH):

Project Manager
NYSDOH
Flannigan Square
547 River Street
Troy, NY 12180
(800) 458-1158 x2-7880

6.0 DOCUMENT REPOSITORIES AND LIST OF AVAILABLE DOCUMENTS

Two document repositories have been established to provide the public with convenient access to important project documents and other information. This information will include reports, data and other information gathered and developed during the course of the BCP Project. The Document Repositories are established at the following locations:

Crawford Public Library
Reference Desk
187 Broadway #189
Monticello, NY 12701
(845) 794-4660

Hours of Operation:

Monday, Tuesday, Thursday, Friday	10:00 am – 6:00 pm
Wednesday	10:00 am – 7:30 pm
Saturday	11:00 am – 3:00 pm
Sunday	Closed

NYSDEC
Region 3 Office
21 South Putt Corners Rd
New Paltz, NY 12561
(845) 256-3000

Hours of Operation:

Monday to Friday 9:00 am - 4:45 pm

Available Documents

The documents available in the repositories are:

- Remedial Investigation and Interim Remedial Measure Work Plan, J.M. Associates, October 2004
- Citizen Participation Plan for the Concord Hotel & Resort Site, J.M. Associates, October 2004
- Brownfield Cleanup Program Fact Sheet, Work Plan Availability and Comment Period Announcement, October 2004

As new documents are generated during the remedial process, they will be placed in the repositories.

7.0 PROJECT MAILING LIST

The following mailing list has been developed to help NYSDEC keep the community informed about and involved in the remedial process for the Concord Hotel & Resort Site. The list includes adjacent property owners, local officials and local media. This list will be reviewed periodically and updated as appropriate.

Note: The adjacent/affected property owner and resident portion of the list is maintained confidentially in project files at the NYSDEC Region 3 Office.

Federal Elected Officials

Senator Hillary R. Clinton
United States Senate
476 Russell Senate Office Building
Washington, D.C. 20510

Senator Charles Schumer
United States Senate
313 Hart Senate Office Building
Washington, D.C. 20510

Representative Maurice Hinchey
291 Wall St.
Kingston, NY 12401

State Officials

Marc Moran, Regional Director
NYSDEC – Region 3 Office
21 South Putt Corners Road
New Paltz, New York 12561

Wendy Rosenbach, Public Affairs Officer
NYSDEC – Region 3 Office
21 South Putt Corners Road
New Paltz, New York 12561

Ram Pergadia
NYSDEC – Region 3 Office
21 South Putt Corners Road
New Paltz, New York 12561

Michael J. Knipfing
NYSDEC – Region 3 Office
21 South Putt Corners Road
New Paltz, New York 12561

Denise D'Ambrosio, Esq.
NYSDEC DEE
200 White Plains Road, 5th Floor
Tarrytown, NY 10591-5805

Andrew Lent
NYSDEC Region 3
200 White Plains Road, 5th Floor
Tarrytown, NY 10591-5805

Gary Litwin
NYSDOH
Flannigan Square
547 River Street
Troy, NY 12180

State Elected Officials

Senator John J. Bonacic
815 Legislative Office Building
Albany, NY 12247

Assembly Member Aileen M. Gunther
417 Legislative Office Building
Albany, NY 12248

County and Town Officials

Briggs, Daniel L
County Manager
100 North Street
County Government Center
Monticello, NY 12701

Sullivan County Clerk
Cooke, George L.
100 North Street
County Government Center
Monticello, NY 12701

Mayor Gary P. Sommers
Village of Monticello
2 Pleasant Street
Monticello, New York 12701

Commissioner Dr. William Pammer, Jr.
Sullivan County Planning & Community
Development
Sullivan County Government Center
100 North Street, P.O. Box 5012
Monticello, NY 12701-5192

Director
New York State Department of Health
Monticello District Office
50 North Street #2
Monticello, NY 12701

Anthony Cellini
Town of Thompson Supervisor
4052 Route 42
Monticello, NY 12701

Norman Kaufman, Chairman
Village of Monticello Planning Board
2 Pleasant Street
Monticello, New York 12701

Allen Mendels, Chairman
Village of Monticello Zoning Board
2 Pleasant Street
Monticello, New York 12701

Councilman Peter Briggs
4052 Route 42
Monticello, NY 12701

Councilman William Rieber
4052 Route 42
Monticello, NY 12701

Councilman Stewert Satenstein
4052 Route 42
Monticello, NY 12701

Councilman John Washington
4052 Route 42
Monticello, NY 12701

Clarence A. Decker.
Water Department Superintendent
NYS Route 42
Kiamesha Lake, New York 12751

Donald S. Price
Town Clerk, Town of Thompson
4052 Route 42
Monticello, NY 12701

Media

Editor
Hudson Valley Business Journal
86 East Main Street
Wappingers Falls, New York 12590

Editor
The River Reporter
PO Box 150
Narrowsburg, NY 12764

Editor
The Sullivan County Democrat
P.O. Box 1035
10 St. John Street
Monticello, NY 12701

Editor
The Times Herald Record
40 Mulberry Street
PO Box 2046
Middletown, NY 10940

Editor
The Towne Crier
PO Box 321
Livingston Manor, NY 12758

News Director
Time Warner Cable 6
P.O. Box 887
Middletown, NY 10940

News Director
Hudson Valley News Network
42 Marcy Lane
Middletown NY 10941

News Director
WDNB
286 Broadway
Monticello, NY 12701

News Director
WJFF Radio Catskill
4765 State Rt. 52
P.O. Box 546
Jeffersonville, NY 12748

News Director
WSUL
PO Box 98.3
198 Bridgeville Rd
Monticello, NY 12701

News Director
WVOS
Mountain Broadcasting Corp
Sullivan Ave
Liberty, NY 12754

Other Interested Parties

Crawford Public Library
Reference Desk
187 Broadway #189
Monticello, NY 12701

APPENDIX A

Hazardous Waste Site Program Glossary and Acronyms

Hazardous Waste Site Program Glossary and Acronyms

GLOSSARY

This glossary defines terms associated with New York's hazardous waste site citizen participation program, and important elements of the hazardous waste site remedial program. Words in **bold** in the definitions are defined elsewhere in the glossary. A list of acronyms often used in the remedial program begins on page D-7.

Administrative Record	Part of a site's Record of Decision which lists and defines documents used in the development of NYSDEC's decision about selection of a remedial action.
Availability Session	A scheduled gathering of program staff and members of the public in a casual setting, without a formal presentation or agenda but usually focusing on a specific aspect of a site's remedial process.
Citizen Participation	A program of planning and activities to encourage communication among people affected by or interested in hazardous waste sites and the government agencies responsible for investigating and remediating them.
Citizen Participation Plan	A document which must be developed at a site's Remedial Investigation stage. A CP Plan describes the citizen participation activities that will be conducted during a site's remedial process.
Citizen Participation Record	A document prepared at a major remedial stage which describes the citizen participation activities required at that stage. A CP Record also directs a scoping process to determine if additional citizen participation activities are appropriate and feasible.

3 Hazardous Waste Site Program Glossary and Acronyms

Citizen Participation Specialist

A staff member from an NYSDEC central office or regional office who has specialized training and experience to assist a **project manager** and other staff to plan, conduct and evaluate a site-specific citizen participation program.

Classification

A process to place a hazardous waste site within a category which defines its hazardous waste status and its threat or potential threat to public health and the environment. Sites are listed along with their classifications in the **Registry of Inactive Hazardous Waste Disposal Sites**.

Class 1 - causing or representing an imminent danger of causing irreversible or irreparable damage to public health or environment -- immediate action required.

Class 2 - significant threat to public health or environment -- action required.

Class 2a - temporary classification assigned to a site for which there is inadequate or insufficient data for inclusion in any other classification.

Class 3 - does not present a significant threat to public health or environment -- action may be deferred.

Class 4 - site properly closed -- requires continued management.

Class 5 - site properly closed -- no further action required.

Delisted - site no longer considered an inactive hazardous waste disposal site.

Comment Period

A time period for the public to review and comment about various documents and DER actions. For example, a 30-day comment period is provided when DER issues a **Proposed Remedial Action Plan (PRAP)**, and when DER proposes to **Delist** a site from the **Registry of Inactive Hazardous Waste Disposal Sites**.

4 Hazardous Waste Site Program Glossary and Acronyms

Consent Order

A legal and enforceable agreement negotiated between NYSDEC and a **responsible party**. The order sets forth agreed upon terms by which a responsible party will undertake site investigation and/or cleanup, or pay for the costs of those activities. The order includes a description of the remedial actions to be taken by the responsible party with NYSDEC oversight, and a schedule for implementation.

Contact List

Names, addresses and/or telephone numbers of individuals, groups, organizations, government officials and media affected by or interested in a particular hazardous waste site. The size of a contact list and the categories included are influenced by population density, degree of interest in a site, the stage of the remedial process and other factors. It is an important tool needed to conduct outreach activities.

Delist

Action by which DER removes a hazardous waste site from the **Registry of Inactive Hazardous Waste Disposal Sites** upon determination that: the site contains inconsequential amounts of hazardous waste; or that a remediated site no longer requires **Operation and Maintenance**; or that a remediated site does not require Operation and Maintenance. A proposal to delist a site triggers a public notification and **comment period** process.

Division of Environmental Enforcement (DEE)

A unit within the New York State Department of Environmental Conservation which works with the **Division of Environmental Remediation** and others to negotiate with **responsible parties** to achieve agreements for the investigation and remediation of hazardous waste sites. A negotiated agreement is contained in a **consent order**.

Division of Environmental Remediation

Formerly the **Division of Hazardous Waste Remediation**, a major program unit within the New York State Department of Environmental Conservation created to manage the hazardous waste site remedial program from site discovery through **Operation and Maintenance** activities. Staff include: engineers, geologists, chemists, attorneys, citizen participation specialists, environmental program specialists and support staff.

5 Hazardous Waste Site Program Glossary and Acronyms

Division of Hazardous Waste Remediation of (See **Division of Environmental Remediation**.)

- Document Repository** A file of documents pertaining to a site's remedial and citizen participation programs which is made available for public review. The file generally is maintained in a public building near the hazardous waste site to provide access at times and a location convenient to the public.
- Enforcement** NYSDEC's efforts, through legal action if necessary, to compel a **responsible party** to perform or pay for site remedial activities. NYSDEC may perform this effort by itself or in concert with other agencies.
- Environmental Quality Bond Act (EQBA)** The 1986 Environmental Quality Bond Act which gives New York State bonding authority of up to \$1.2 billion to fund the State's share of the total cost of remediating hazardous waste sites in New York State.
- Fact Sheet** A written discussion about part or all of a site's remedial process, prepared and provided by DER to the public. A fact sheet may focus on: a particular element of the site's remedial program; opportunities for public involvement; availability of a report or other information, or announcement of a **public meeting** or **comment period**. A fact sheet may be mailed to all or part of a site's **contact list**, distributed at meetings, placed in a **document repository** and/or sent on an "as requested" basis.
- Interim Remedial Measure (IRM)** A discrete action which can be conducted at a site relatively quickly to reduce the risk to people's health and the environment from a well-defined hazardous waste problem. An IRM can involve removing contaminated soil and drums, providing alternative water supplies or securing a site to prevent access.
- National Priorities List** The U.S. Environmental Protection Agency's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial response using money from a special trust fund.

6 Hazardous Waste Site Program Glossary and Acronyms

New York State Department of Health of Agency within the executive branch of New York State government which: performs health-related inspections at suspected hazardous waste sites; conducts health assessments to determine potential risk from environmental exposure; reviews Risk Assessments prepared during the **Remedial Investigation and Feasibility Study**; conducts health-related community outreach around sites; and reviews remedial actions to assure that public health concerns are adequately addressed.

New York State Department of Law Agency within the executive branch of New York State government which takes the lead on hazardous waste sites requiring civil enforcement through court action. Litigation can involve negotiations and court action with **responsible parties** to clean up sites; natural resource damage claims, and recovery of remedial costs.

New York State Registry of Inactive Hazardous Waste Disposal Sites The “Registry.” A document which NYSDEC is directed by law to maintain and which lists and provides information about every hazardous waste site in New York State which meets criteria established through a definition of hazardous waste and a **classification** system.

Operable Unit A discrete part of an entire site that produces a release, threat of release, or pathway of exposure. An Operable Unit can receive specific investigation, and a particular remedy may be proposed. A **Record of Decision** is prepared for each Operable Unit.

Operation and Maintenance A period in which remedial action may be conducted following construction at a site (for example, operation of a “pump and treat” system), or which is performed after a remedial action to assure its continued effectiveness and protection of people’s health and the environment. Activities can include site inspections, well monitoring and other sampling.

Preliminary Site Assessment (PSA) A PSA is DER’s first investigation of a site. A PSA is performed to determine if a site meets New York State’s definition of an inactive hazardous waste disposal site by confirming the presence of hazardous waste and determining if the site poses a significant threat to public health or the environment.

7 Hazardous Waste Site Program Glossary and Acronyms

Project Manager	An NYSDEC staff member within the Division of Environmental Remediation (usually an engineer, geologist or hydro geologist) responsible for the day-to-day administration of remedial activities at, and ultimate disposition of, a hazardous waste site. The Project Manager works with legal, health, citizen participation and other staff to accomplish site-related goals and objectives.
Proposed Remedial Action Plan (PRAP)	An analysis by DER of each alternative considered for the remediation of a hazardous waste site and a rationale for selection of the alternative it recommends. The PRAP is created based on information developed during the site's Remedial Investigation and Feasibility Study . The PRAP is reviewed by the public and other state agencies.
Public Meeting	A scheduled gathering of Division of Environmental Remediation staff with the affected/interested public to give and receive information, ask questions and discuss concerns about a site's remedial program. Staff from other NYSDEC divisions, legal and health staff, and staff from consultants and a responsible party often also attend. A public meeting, unlike an availability session , generally features a formal presentation and a detailed agenda.
Reclassification	A process by which DER redefines the threat posed by a hazardous waste site to public health and the environment by developing and assessing site information and, based on findings and conclusions, assigning a new classification code.
Record of Decision (ROD)	A document which provides definitive record of the cleanup alternative that will be used to remediate a hazardous waste site. The ROD is based on information and analyses developed during the Remedial Investigation/Feasibility Study and public comment.

8 Hazardous Waste Site Program Glossary and Acronyms

Remedial Alternatives Report (RAR)

A report that contains an evaluation of options for the remediation of any contamination in, on, or under, or emanating from, a property that includes an analysis of data and other information concerning the nature and extent of that property's contamination and is generally performed concurrently, and in an interactive fashion, with the site investigation.

Remedial Construction

The physical development, assembly and implementation of the remedial alternative selected to remediate a site. Construction follows the **Remedial Design** stage of a site's remedial program.

Remedial Design

The process following finalization of a **Record of Decision** in which plans and specifications are developed for the **Remedial Construction** of the alternative selected to remediate a site.

Remedial Investigation/ Feasibility Study (RI/FS)

The RI fully defines and characterizes the type and extent of hazardous waste contamination at the site. The FS, which may be conducted during or after the RI, uses information developed during the RI to develop alternative remedial actions to eliminate or reduce the threat of hazardous waste contamination to public health and the environment.

Responsible Party

An individual or business who: currently owns or operates a hazardous waste site; or historically owned or operated a site when hazardous waste was disposed; or generated hazardous waste at a site; or transported hazardous waste to a site.

Responsiveness Summary

A written summary of major oral and written comments received by DER during a **comment period** about key elements of a site's remedial program, such as a **Proposed Remedial Action Plan**, and DER's response to those comments.

Site Investigation (SI)

A process undertaken to determine the nature and extent of contamination in, on, and under, and emanating from a property. The **SI** includes the gathering of sufficient information to determine the necessity for, and the selection of the appropriate method of, remediation of contamination in, on, or under, or emanating from a property.