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PROPOSED REMEDIAL ACTION PLAN
BELL'S FARM AND HOME CENTER SITE

SITE NO. 8-51-015
South Corning (T), Steuben County

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January, 1993

Prepared By:
Bureau of Western Remedial Action
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233

Thomas C. Jorling
Commissioner

BELL'S FARM AND HOME CENTER SITE
STEUBEN COUNTY
SITE NO. 8-51-015

PROPOSED REMEDIAL ACTION PLAN (PRAP)

SECTION 1: Purpose of the Proposed Plan

Section 1: Summary of the Proposed Plan

The New York State Department of Environmental Conservation (NYSDEC) has evaluated the effectiveness of an Interim Remedial Measure (IRM) conducted by the Potentially Responsible Party (PRP) and has determined that the IRM has remediated the site, that no further action is necessary and delisting is recommended.

The contamination on the site resulted from a fire at the Bell's Farm and Home Center (Bell's Farm) that left contaminated water and sediments in a pond and contaminated sediments in a dry well on the site. There was a concern that the well supplying water for the Village of South Corning could become contaminated and prompt measures to insure the integrity of the water supply were taken.

Removal of the pond water and sediments and other contamination in a dry well was shown by confirmatory sampling to have removed the sources of the contamination. Monitoring well data has shown that groundwater contamination due to the site has been adequately remediated.

Public comments are an important part of the remedial decision-making process. The public is encouraged to comment on the proposed action and on the information that supports the action.

It is important to understand that the final remedy selected by the Record of Decision (ROD) can be different from the preferred action presented in this document. Additional information and public input can be used to modify the preferred alternative.

This document is a summary of the information that can be found in greater detail in the IRM Work Plan and IRM report on file at the document repositories.

The following repositories have been established:

Corning Area Public Library
Civic Center Plaza
Corning, New York 14830
(607) 936-3713
Attn: Julia Grimsman

NYSDEC - Region 8 Office
6274 East Avon-Lima Road
Avon, New York 14414
(716) 226-2466
Attn: Manmohan Mehta, P.E.

NYSDEC
Div. of Haz. Waste Remediation
50 Wolf Road
Albany, NY 12233-7010
Attn: George Harris, P.E.

Written comments on the PRAP can be submitted to:

NYSDEC
50 Wolf Road, Room 222
Albany, NY
(518) 457-3373
Attn: George Harris, P.E.

SECTION 2: SITE DESCRIPTION

The Bell's Farm site is a Class 2 site listed in the NYSDEC Registry of Inactive Hazardous Waste Disposal sites for New York State.

As shown in Figure 1 (site locus) and Figure 2 and 3 (site plans), the site is located north of Flower Avenue and east of Park Avenue in the Village of South Corning. The property is roughly rectangular in shape and approximately two acres in size.
The site is approximately 700 feet from the Chemung River and formerly contained an operating Agway store, a small on-site retention pond and a dry well located at the corner of Garden Street and Flower Avenue.

The well that supplies drinking water to the village of South Corning is approximately 300 feet southeast from the site.

SECTION 3: SITE HISTORY

Bell's Farm and Home Center was an operating Agway store that caught fire on September 2, 1989. Among the materials released during or before the fire were various types of hazardous wastes including 1,1,1-trichloroethane, 2,4-dichlorophenoxyacetic acid (2,4-D), other pesticides, herbicides, fertilizer and metals present in the store area.

The New York State Department of Health (NYSDOH) conducted sampling at this site immediately following the fire and the analytical results are contained in Table 1. The elevated levels of 1,1,1-trichloroethane and herbicides caused concern about the possible contamination of the nearby well supplying drinking water to the Village of South Corning. As a precautionary measure, the NYSDOH recommended that the Village of South Corning discontinue use of the Village well, which they did voluntarily. This

well has subsequently been reactivated.

The PRP's hired Groundwater Technology, Inc. (GWT) shortly after the fire to sample soil and sediment at the site and to install four monitoring wells so that groundwater could be sampled. The results of this sampling are shown in Table 2. Groundwater from some of the monitoring wells contained arsenic, chromium, lead, zinc, and 2,4-D at levels which exceeded groundwater standards.

The site was listed on the New York State Registry of Inactive Hazardous Waste Sites on January 21, 1990.

The PRP's hired H&A of New York to conduct additional investigative and remedial work at the site. The first portion of this work involved installation of two additional monitoring wells, located halfway between the site and the South Corning well. One of these wells was constructed to sample groundwater from a shallow aquifer. The other samples water from a deep aquifer which supplies water to the South Corning well. Additional soil and sediment samples were collected from locations as indicated on Figures 2 and 3.

The results of that investigation which were contained in an IRM report are summarized in Tables 3 and 4. The results of the groundwater sampling, as shown on Table 3, indicated elevated levels of chormium, lead and zinc in the shallow well but no exceedance of groundwater standards in the deep aquifer. Soils were found to be below the cleanup criteria, but pond and sediment levels, as shown in Table 4, had elevated levels of chromium, lead, arsenic, cadmium, nickel and copper.

A removal of contaminated sediments from the pond and dry well was conducted at this site and confirmatory samples were obtained on August 21, 1991 before the pond was backfilled and graded. The results of this sampling are contained in Table 5 and show all metals below the cleanup goals with the exception of one sample showing slightly elevated levels of zinc. The results of a confirmatory groundwater monitoring program are contained in Tables 6, 7, 8, 9 and 10. These results show that all levels of metals in the groundwater were below groundwater standards for two rounds of sampling.

SECTION 4: Enforcement Status

4.1 Initial Field Investigation

4.2 Consent Order

A Consent Order was signed by the PRPs in May 1990 to develop and implement the field investigation program and an IRM to:

- Determine the nature of wastes and the aerial extent and vertical distribution of wastes, if any, disposed of at the site;

- Identify any past, current and/or potential future releases or migration of hazardous wastes

from the site to other on site and off-site areas; and

- o Evaluate the on site and off-site impacts, if any, of such migration upon the environment.

The Consent Order was structured to determine if there was contamination of concern in the soils, groundwater, sediments or surface waters at or in the vicinity of the site. Once the determination of contamination was verified, the order provided for an interim remedial measure to be taken to remediate this contamination.

4.3 Potentially Responsible Parties

The PRP's for the site include John Eberenz, Inc., as property owner, and Mr. Paul Bell as operator of the Agway Store.

SECTION 5: CURRENT STATUS

Analytical results are given in Tables 1 through 10.

Groundwater - The initial groundwater sampling indicated that arsenic, chromium, lead, nickel and 2,4-D were above groundwater standards for this site. Subsequent groundwater monitoring indicated that chromium was above groundwater standards for much of 1990. Based on groundwater sampling conducted on February 3, 1992, all metal constituents were within State standards. Based on the last rounds of groundwater sampling, our evaluation of site geology, and the removal of the contaminated sediments as a source, it was concluded that there is not now a groundwater problem at the site due to contamination from the Bell's Farm fire.

The analytical results of a November 5, 1991 groundwater sampling episode are not being used to assess this site because of high turbidity problems with the samples as documented in the September 1, 1992 letter from Dave Napier of NYSDOH to Robert Hall of NYSDEC. High levels of turbidity in groundwater samples can falsely indicate metals contamination. All groundwater results are based on unfiltered samples.

Soils - The soil sampling program did not indicate the presence of any contamination that was above cleanup goals for this site. Therefore, it was concluded that a soil contamination problem does not exist at the site.

Sediment Samples - The sampling program indicated that arsenic, cadmium, chromium, copper, lead, nickel and zinc were above the work plan cleanup criteria goals for sediment in the dry well and pond for this site.

Several feet of the sediments of the pond and dry well were removed and disposed of. Confirmatory sampling indicated that the remaining sediment was at or below cleanup criteria goals for this site. The dry well sediments were disposed of as hazardous waste and the pond sediments were disposed of at the sanitary landfill.

Surface Water Samples - Initial sampling results after the fire indicated surface water samples that contained 1,1,1-trichloroethane and 2,4-D were above State surface water standards. Subsequent sampling by the Potentially Responsible Party's consultant did not detect these contaminants. In the course of removal of the sediments from the pond, the pond water was filtered and pumped to the City of Corning Sewage Treatment Plant (STP). Monitoring guidelines developed by the NYSDEC Division of Water (DOW) were observed.

SECTION 6: GOALS FOR THE REMEDIAL ACTION

The overall objective of remediation is to reduce the concentrations of contaminants and the routes of exposure to levels which are protective of human health and the environment. The site-specific goals for remediating the Bell's Farm site can be summarized in general as follows:

- Reduce, control or eliminate the contamination threat to the shallow groundwater aquifer.
- Reduce, control or eliminate the contamination threat to the deep groundwater aquifer, and thus to the South Corning Village Well.
- Reduce, control or eliminate the contamination threat to the South Corning Village Agway store neighbors.

SECTION 7: SUMMARY OF THE EVALUATION OF THE REMEDIAL ALTERNATIVES

7.1 Summary of Remedy

The Interim Remedial Action conducted at the site accomplished the goals as identified above in Section 6. Consequently, further investigation and development and evaluation of additional alternatives is not planned for this site.

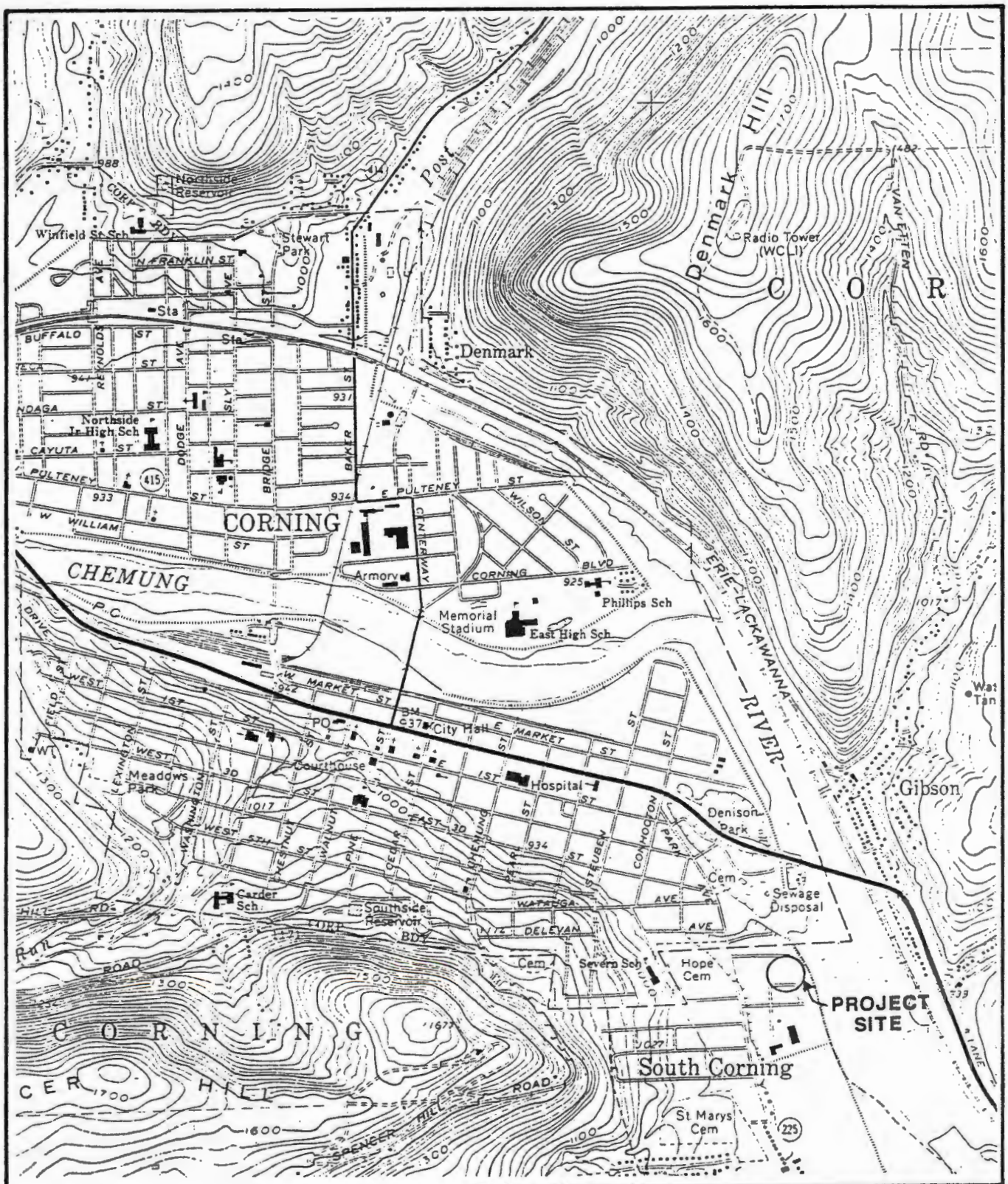
7.2 NYSDOH Acceptance

The NYSDOH concurs with the remedy selected for this site.

SECTION 8: SUMMARY OF THE GOVERNMENT'S DECISION

The preferred alternative is no further action. The dry well and pond sediments were potential sources of groundwater contamination at this site. These sources of contamination have now been removed and recent groundwater sampling indicates that the groundwater contamination associated with this site has been reduced below State standards. The surface soil along with the remaining pond and dry well sediment at the site and in adjacent residential community showed that all levels are now below clean-up criteria for this site. This remedy will allow unrestricted use of this property in the future. This alternative involves delisting this site from the State's registry of inactive hazardous waste sites.

FIGURES



H&A of New York
Consulting Geotechnical Engineers, Geologists and Hydrogeologists

SAYLES, EVANS, BRAYTON, PALMER & TIFT
BELL'S FARM AND HOME CENTER
CORNING, NEW YORK

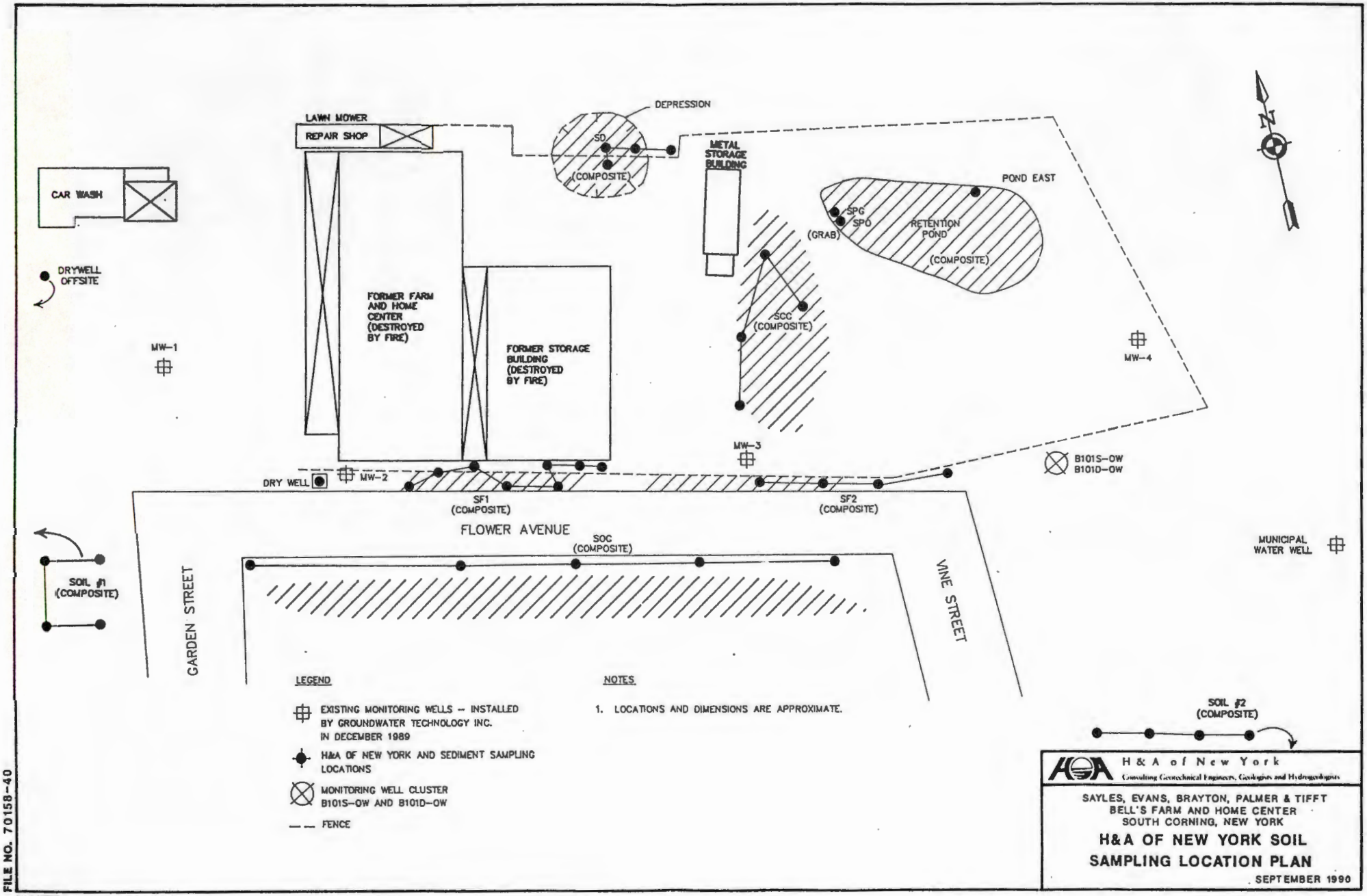
PROJECT LOCUS

SCALE: 1 IN. = 2000 FT. APRIL 1990

FILE NO. 70158-40

CHARRETTE

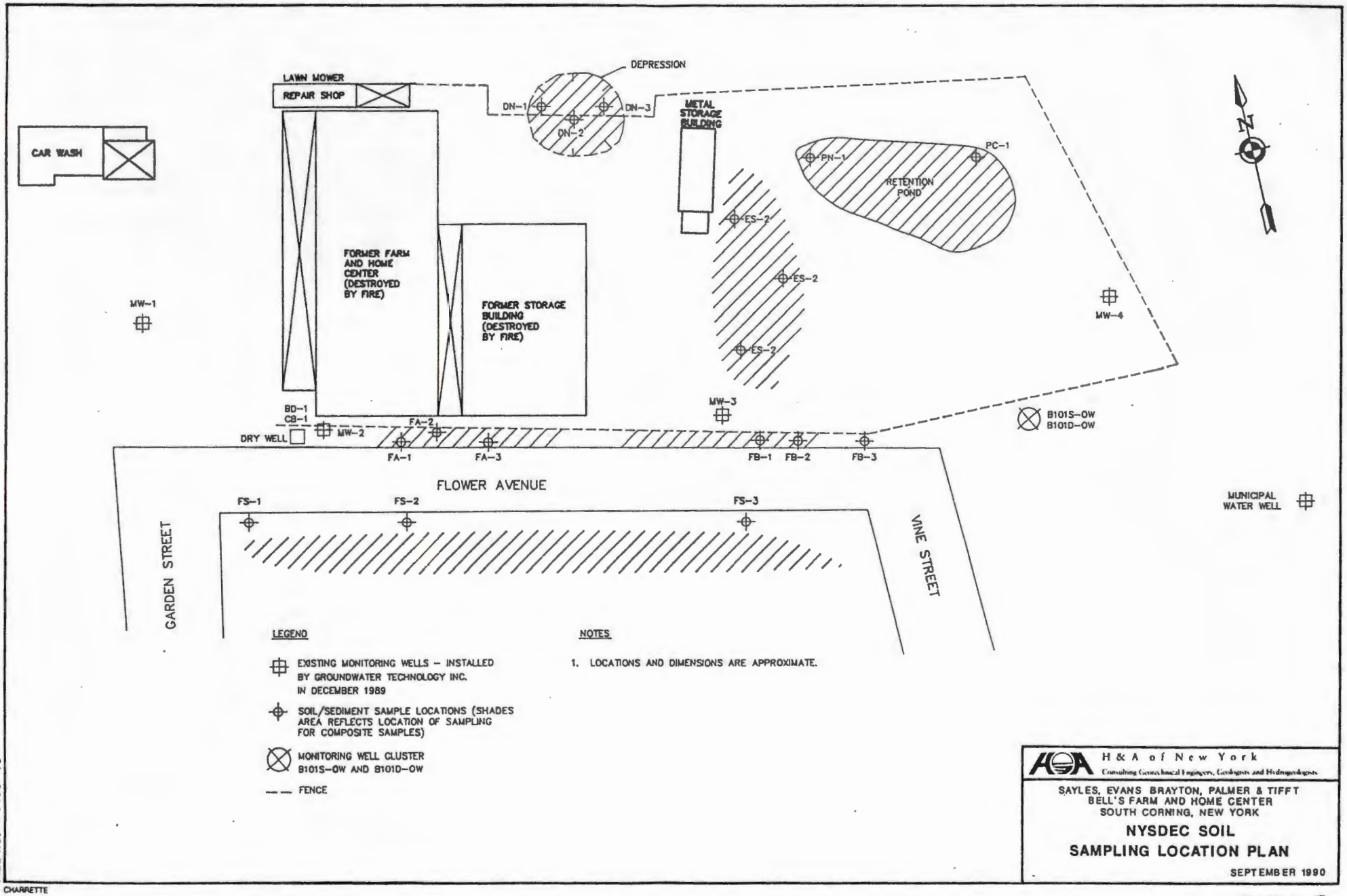
FIGURE 1



FILE NO. 70158-40

CHARRETTE

FIGURE 2



H&A of New York
Consulting Geotechnical Engineers, Geologists and Hydrogeologists

SAYLES, EVANS BRAYTON, PALMER & TIFFT
BELL'S FARM AND HOME CENTER
SOUTH CORNING, NEW YORK

NYSDEC SOIL
SAMPLING LOCATION PLAN

SEPTEMBER 1990

FILE NO. 70158-40

CHARRETTE

FIGURE 3

TABLES

Table 1

Analytical Results Conducted by NYSDOH Immediately Following the Fire in September 1989

Chemical Constituent	Pond Surface Water (ug/l)	Pond Sediment (ug/g)	Soil West of Restoration Pond (ug/g)	Dry Well Water (ug/l)	Well For Car Wash (ug/l)	Groundwater Standard (ug/l)
Methoxychlor	5	ND	ND	ND	ND	35.0
Diazinon	20	ND	ND	ND	ND	0.7
Malathion	20	ND	ND	ND	ND	7.0
2,4,D	120	ND	ND	1800	ND	4.4
Lindane	0.49	.01	ND	ND	ND	4.0
4,4DDE	ND	ND	.002	ND	ND	ND
Atrazine	ND	ND	ND	40	ND	7.5
1,1,1Trichloroethane	1000	NA	NA	NA	NA	5.0
Trichloroethylene	<500	NA	NA	NA	NA	5.0

ug/l = Part Per Billion
ug/g = Part Per Million
ND = Not Detected
NA = Not Analyzed
< = Less Than Value

NYSDOH = New York State Department of Health
NS = No Standard
Fire = September 1989

NOTE 1: These analytical results were submitted by Dave Napier of NYSDOH to Robert Hall of NYSDEC by memos with the following attached dated reports: 10/11/89, 10/17/89, 11/6/89, 11/16/89, and 11/22/89.

Table 2

Analytical Results Conducted by GWT
After Installation of Monitoring Wells on
12/11/89

GROUNDWATER SAMPLING

Chemical Constituent	MW-1 (ug/l)	MW-2 (ug/l)	MW-3 (ug/l)	MW-4 (ug/l)	Ground-Water Standard (ug/l)
2,4,D	ND	ND	ND	6.9	4.4
Arsenic	NA	ND	NA	49	25
Chromium	NA	ND	NA	690	50
Lead	NA	12	NA	209	25
Zinc	NA	21	NA	2200	300

NA = Not Analyzed
ND = Not Detected
ug/l = Part Per Billion
MW = Monitoring Well
GWT = Groundwater Technology, Inc.

Note 1: GWT did not supply QA/QC data or a data validating report for these analytical results submitted to the Department.

Table 3
Groundwater Monitoring Data Obtained by H&A of New York
For the Period 4/90 to 9/90, Before the IRM at this Site

Monitoring Well No. B101S-OW (Shallow Well)

Chemical Constituent	4/25	7/13	8/10	9/13	Groundwater Standard
Arsenic	9	ND	ND	ND	25
Cadmium	ND	ND	ND	ND	10
Chromium	75	26	15	91	50
Copper	104	17	ND	15	1000
Lead	40	ND	ND	12	25
Nickel	90	ND	ND	50	NS
Silver	ND	ND	ND	ND	50
Thallium	ND	ND	ND	ND	4
Zinc	315	49	67	58	300

Monitoring Well No. B101D-OW (Deep Well)

Chemical Constituent	4/25	7/13	8/10	9/13	Groundwater Standard
Arsenic	ND	ND	ND	ND	25
Cadmium	ND	ND	ND	ND	10
Chromium	6	ND	ND	ND	50
Copper	7	17	ND	ND	1000
Lead	ND	ND	ND	ND	25
Nickel	15	ND	ND	ND	NS
Silver	ND	ND	ND	ND	50
Thallium	ND	ND	ND	ND	4
Zinc	32	ND	110	20	300

All concentrations in ug/l or Part Per Billion

IRM = Interim Remedial Measure
ND = Not Detected
NS = No Standard Exists for this Chemical

TABLE 4

Metals in Sediment Before IRM at this Site

Comparison of Applicable Cleanup Standards with Contaminant Concentrations for Sediment Samples Taken by H&A of New York and NYSDEC on 5/31/90

DRY WELL SEDIMENTS

Chemical Constituents	Cleanup Criteria Goals (mg/kg)	Soil 1 Background (mg/kg)	SW (mg/kg)	CB-1 (mg/kg)	BD-1 (mg/kg)
Arsenic	20	5.8	11.4	8.5	8.8
Cadmium	3	0.96	2.9	1.3	1.4
Chromium	100	14.0	20.0	15.2	14.2
Copper	170	16.0	85.7	52.4	60.3
Lead	500	44.9	221	205	132
Nickel	100	17.6	19.7	12.8	10.8
Silver	5	ND	ND	ND	ND
Thallium	5	ND	ND	ND	ND
Zinc	350	72.6	422	535	643

POND SEDIMENT

Chemical Constituents	Cleanup Criteria Goals (mg/kg)	Soil 1 Background (mg/kg)	PE (mg/kg)	SPG (mg/kg)	PC-1 (mg/kg)	PN-1 (mg/kg)
Arsenic	20	5.8	22.2	5.6	16.4	7.2
Cadmium	3	0.96	40.4	10.6	9.3	7.4
Chromium	100	14.0	207	54.0	99.6	47.0
Copper	170	16.0	824	111	629	117
Lead	500	44.9	1410	142	2300	212
Nickel	100	17.6	147	51.2	76.7	46.2
Silver	5	ND	ND	ND	ND	ND
Thallium	5	ND	ND	ND	ND	ND
Zinc	350	72.6	2270	633	680	554

ND = Not Detected
PE and SPG = H&A of New York Pond Sediment Samples
SW = H&A Dry Well Sediment Sample
PC-1 and PN-1 = NYSDEC Pond Sediment Samples
CB-1 and BD-1 = NYSDEC Dry Well Sediment Samples
mg/kg = Part Per Million
IRM = Interim Remedial Measure

TABLE 5

Confirmatory Sampling for Pond and Dry Well Sediment Obtained on 8/21/91 by NYSDEC After Remediation was Completed at the Site

Chemical Constituent	DW-1	S-1	S-3	S-4	Cleanup Criteria Goals
Arsenic	12	0.5	6.0	6.0	20
Cadmium	ND	ND	5	5	3
Chromium	7	37	7	9	100
Copper	37	23	34	38	170
Lead	140	100	160	170	500
Mercury	ND	ND	ND	ND	NS
Nickel	12	18	22	23	100
Silver	0.25	0.30	0.40	0.5	5
Zinc	400	120	170	230	350

All results are in ug/g or part per million

ND = Not Detected
NS = No Cleanup Criteria Set for this Chemical
DW-1 = Dry Well Sediment Sample
S-1, S-3, and S-4 = Pond Sediment Samples

Note 1: Sample S-2 was broken in transit and not analyzed .

Note 2: Analytical results were submitted to Robert Hall of NYSDEC from Fred Woodward of NYSDEC in a 10/31/91 report.

TABLE 6

Groundwater Results from MW-4 Obtained by
NYSDOH on 7/13/90

Chemical Constituent	MW-4	Groundwater Standards
Chloroform	2	100
1,1,1 Trichloroethane	ND	5
Trichloroethylene	1	5
2,4D	ND	4.4

All results are in ug/l or parts per billion.

ND = Not Detected
NYSDOH = New York State Department of Health

Note 1: Analytical results were submitted by memo from Dave Napier of NYSDOH to Robert Hall of NYSDEC dated 10/2/92.

TABLE 7

Groundwater Results from B101S-OW Obtained by NYSDEC
on 2/3/92 - After Remediation was Completed for the Site

Chemical Constituent	B101S-OW	Groundwater Standards
Arsenic	ND	25
Cadmium	ND	10
Chromium	ND	50
Lead	ND	25
Mercury	ND	2
Nickel	ND	NS
Zinc	ND	300

TABLE 8

Groundwater Results from B101S-OW Obtained by NYSDOH on 2/3/92
After Remediation was Completed for the Site

Chemical Constituent	B101S-OW	Groundwater Standard
Arsenic	ND	25
Cadmium	ND	10
Chromium	ND	50
Lead	ND	25
Nickel	25	NS
Zinc	ND	300

All results are in ug/l or parts per billion

ND = Not Detected
NS = No Groundwater Standard Exists for this Chemical

Note 1: NYSDEC = New York State Department of Environmental Conservation

Note 2: NYSDOH = New York State Department of Health

Note 3: Analytical results were submitted in a report dated 3/5/92 from Fred Woodward of NYSDEC to Robert Hall of NYSDEC.

Note 4: Analytical results were submitted in a report to Robert Hall of NYSDEC from Dave Napier of NYSDOH by a memo dated 3/5/92.

TABLE 9

Groundwater Results from B101S-OW and MW-1 Taken by NYSDEC on 7/14/92 After Remediation was Completed at this Site

Chemical Constituent	MW-1	B101S-OW	Groundwater Standard
Methoxychlor	ND	ND	35
2,4D	ND	ND	4.4
Trichloroethylene	ND	6	5
1,1,1 Trichloroethane	ND	ND	5
Arsenic	ND	ND	25
Cadmium	ND	0.3	10
Lead	3.0	3	25
Nickel	ND	ND	NS
Zinc	13	28.9	300
Chromium	ND	16	50

TABLE 10

Groundwater Results from B101S-OW and MW-1 Taken by NYSDOH on 7/14/92 After Remediation was Completed at this Site

Chemical Constituent	MW-1	B101S-OW	Groundwater Standard
Arsenic	ND	ND	25
Cadmium	ND	ND	10
Chromium	ND	8	50
Lead	ND	ND	25
Nickel	ND	ND	NS
Zinc	ND	ND	300

All results in ug/l or parts per billion

NS = No Standard Exists for This Chemical
ND = Not Detected
NYSDEC = New York State Department of Environmental Conservation
NYSDOH = New York State Department of Health
Note 1: Analytical results were submitted by a letter from Deborah Kinecki of RECRA to John Ryan of NYSDEC dated 8/11/92.
Note 2: Analytical results were submitted by memo from Dave Napier of NYSDOH to Robert Hall of NYSDEC dated 8/17/92.