Report. hw 828076. 1988-10-1.
Site Building Investigation

BWRA

ENVIRONMENTAL REPORT

ENVIRONMENTAL STUDY
SCOBELL CHEMICAL BUILDING

N.Y.S.D.O.T.
Rochester, N.Y.

ERDMAN, ANTHONY, ASSOCIATES
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OCTOBER 1988

ERDMAN, ANTHONY, ASSOCIATES
CONSULTING ENGINEERS AND PLANNERS

October 18, 1988

Mr. John Brennessel
NYS Dept. of Transportation
P.O. Box 10376
Rochester, NY 14610

Subject: Environmental Study
Scobell Chemical Site
One Rockwood Place
Rochester, NY

Dear Mr. Brennessel:

We are pleased to submit herewith our Environmental Study on the Scobell Chemical Site. This report was prepared in accordance with the proposed scope of work outlined in our Work Plan dated July 1988.

The report represents the results of the Phase I and Phase II sampling programs and a summary of these results.

If you have any questions concerning the report, please do not hesitate to contact us.

Sincerely yours,

ERDMAN, ANTHONY AND ASSOCIATES, INC.

Michael M. Rubinstein, I.E.
Engineer

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I. INTRODUCTION

The New York State Department of Transportation (NYSDOT) requested Erdman, Anthony and Associates, Inc. (EAA) of Rochester, New York to coordinate and conduct a sampling and analysis program prior to demolition of the Scobell Chemical Building. EAA's work on this project was performed as part of our construction services contract with the NYSDOT.

The Scobell Chemical site is located at One Rockwood Place and the facility is no longer in operation. Past operations at the site reportedly included chemical storage, warehousing, and sales. The 2.5 acre site includes one main building that provided office, warehouse, and storage space. Two (2) smaller buildings that appear to have been used for storage are located north of the main building. Four (4) above ground chemical storage tanks and an abandoned tank truck are located between the main building and the smaller storage buildings. Figure Nos. 1 and 2 contained in the Appendices provide additional information about the site and site area delineation.

Advanced Environmental Services, Inc. of Niagara Falls, NY conducted onsite sampling in March and May, 1988. The collected samples, including soil, dust, and sediment samples, were analyzed for volatile organics, heavy metal content, and other physical parameters. Nepcco, Inc. of Batavia, NY collected composite soil samples for a Dioxin Scan in Area II in May 1988. These preliminary results were the basis for the expanded sampling program, developed jointly by the NYSDOT and the New York State Department of Environmental Conservation (NYSDEC).

Sampling occurred in two phases during the period of June 27 through August 10, 1988. Phase I consisted of soil and water samples taken at locations south of a predetermined line that will be used as an excavation boundary for ongoing site work. Phase I sample analyses included volatile organics, EP Toxicity metals, and selected pesticides and herbicides. Phase II sampling consisted of soil and surface samples taken at locations north of the predetermined line. Phase II sample analyses included volatile organics, EP Toxicity metals, and EP Toxicity organic compounds (includes pesticides and herbicides). Several stored drums of material from previous samplings and structure decontamination were also analyzed for dioxins. Further information on sampling and analyses is contained in the July 1988 Scobell Chemical Building Work Plan, a copy of which is attached as Appendix A.

Soil samples for Phase I analyses were collected at depths of 24 inches, 84 inches, and at the top of bedrock. Soil samples for Phase II analyses were collected at the soil surface and at depths of 18 inches, 36 inches, and at the top of bedrock. Changes in depth were made as conditions warranted.

It was also suspected that an underground tank may be located in the warehouse of the main building due to the presence of two standpipes. The location of the suspected tank could not be confirmed during field investigations that included using a subsurface radar study and physical probing of the standpipes. A sample of the liquid in one of the standpipes was collected and tested for ignitability. The abandoned tank truck was not sampled during our investigations.

II. RESULTS

A. Volatile Organic Compounds

Volatile organic compounds appear at nearly every sample location with the exception of locations 88-88 through 88-11. Volatile organic compounds were not detected in samples recovered at those locations. It is noted that several volatile organic compounds were detected at high concentrations (>10,000 ppb) and at varying depths and quantities. The high concentration compounds selected for observation are trichloroethene, tetrachloroethene, toluene, and 1,2-dichloroethene. These compounds were observed throughout the site. Due to the high concentrations of these compounds, detection levels at certain sample locations will mask other compounds that appear at lower concentrations. These compounds may be present at low concentrations, but are reported as Not Detectable.

1. Trichloroethene

An area of high trichloroethene (TCE) concentration is located in the warehouse (Area 10) near sample location 88-47 (36,400 ppb), and the compound appears to have penetrated the asphalt floor. The contamination apears to have spread radially from location 88-47 in all directions with decreasing concentrations at increasing depths. The majority of the movement appears to be in an easterly direction. Trichloroethene was also observed in Area 4 (sample location 88-85a, concentration - 22,400 ppb) and outside the building to the north (sample location 88-97b,

concentration - 1,920 ppb).

2. Tetrachloroethene

Laboratory analysis shows tetrachloroethene (PCE) at high concentrations in both Area Nos. 10 and 4. An area of high concentration was observed near sample location 88-44 (54,600 ppb), and the compound appears to have penetrated the asphalt floor and moved radially in all directions. The data indicates the flow may have moved towards the east based on concentrations that decrease with distance from sample location 88-44 and with increasing depth.

The contamination in Area 4 appears to be centered near sample location 88-89a (36,000 ppb) and also appears to spread radially away from this area. However, the potential for contamination outside the building limits is not known due to the lack of confirming sample locations west and north of the site.

3. Toluene

Toluene appears across much of the site in varying quantities. The greatest concentrations appear to be located outside the main building in the vicinity of the above ground tanks (sample location 88-98d, concentration - 989,000 ppb). It should be noted that the toluene concentrations are the highest of all the volatile compounds analyzed. The toluene appears to have spread radially from the area of the tanks. Although the flow

of toluene appears to be moving below the ground surface, no detectable quantities were observed at the bedrock surface near the edge of the excavation located east of the property.

4. 1,2 - Dichloroethene

1,2 - Dichloroethene was observed primarily in the Phase I sampling area. Concentrations appear highest in the warehouse (sample location 88-64c, concentration - 34,100 ppb), and the contaminant appears to have moved to the south and east. 1,2 - Dichloroethene is considered Not Detected to the north and west of the warehouse.

Various other volatile organic compounds appear throughout the site including the loading bay in the main building, in the concrete wash basin outside the warehouse, in the standing water in the basement of the main building, and on the surface of the walls and floors. These compounds were detected in varying quantities and soil depths. Although many compounds appear to be present in the soil non-uniformly, there is an apparent trend to have contaminants spread to the south and east. "Hotspots" or areas of high concentration, appear at two locations outside the main building. One location is at the south portion of the site near sample location 88-16, where both trichloroethene and tetrachloroethene have higher than expected concentrations at the top of the bedrock. Another "hotspot" location is the area at the northeast corner of the property where several volatile organic compounds appear non-uniformly and at varying depths. These hotspots and/or non-uniformly patterned areas may be

due to:

1. past spills that may have changed due to past construction on the site,
2. small, localized spills that did not have sufficient material to have substantial flow,
3. past storage of containers in areas that show hotspots and/or non-uniform patterns,
4. prior locations of above ground or below ground tanks, and,
5. different subsurface soil conditions that would alter flow patterns.

B. EP Toxicity Metals

Eight (8) heavy metals were analyzed from the samples collected from the Phase I and Phase II locations. Arsenic (As), Barium (Ba), Cadmium (Cd), Chromium (Cr), Lead (Pb), Mercury (Hg), Selenium (Se), and Silver (Ag) were found across the site in varying quantities and soil depths. Most of the metals show no apparent pattern in their distribution (example - lead); however, some metals (example - silver) show a possible easterly movement through the soil on the east portion of the site. Some metals (example - chromium) show an occasional location of detectable quantities (sample location 88-72a, concentration - 758 ppm (EPTox result)). No uniform patterns of movement is observable based on the laboratory results.

C. Pesticides

Two pesticides, Dieldrin and 4,4'-DDT, were analyzed in the Phase I sampling in accordance with the NYSDEC and the NYSDOT sampling and analysis plans. These compounds were found scattered through the Phase I sampling area. No distinct contamination patterns were observed, although some upper soil strata contamination was noted in the northeastern portion of the site. Concrete chip samples from Area 1 also show surface contamination. A water sample collected from the basement of Area 11 shows 4,4'-DDT contamination in very low quantities (0.88 ppb).

Four pesticides (Endrin, Lindane, Methoxychlor, and Toxaphene) were analyzed in Phase II sampling. Only Endrin and Lindane were detected in the Phase II sampling, and they appear to be concentrated in Areas 4 and 7. The pesticide Lindane is more prevalent and is detected in surface soil samples and wall samples in the Phase II sample area.

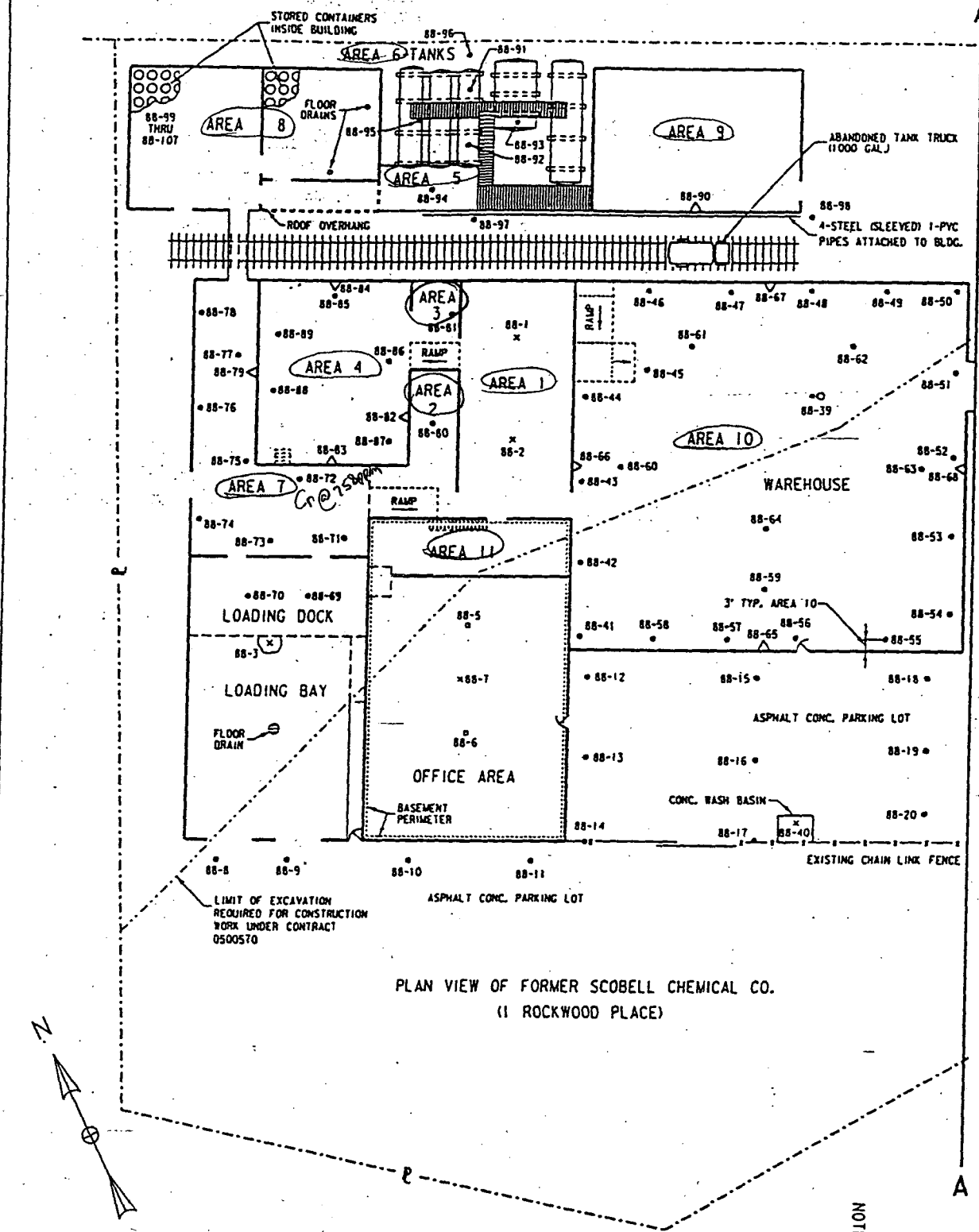
D. Herbicides

Three herbicides (MCPP, 2,4-D, and 2,4,5-TP [Silvex]) were analyzed in the Phase I sampling in accordance with the NYSDEC and NYSDOT. These compounds appear sporatically in the Phase I sample area. The herbicide MCPP was detected at higher levels (12,900 ppb and 9,160 ppb) at the northeastern portion of the site. Only 2,4-D and 2,4,5-TP were analyzed in the Phase II sampling. The herbicide 2,4-D was observed at detectable levels mainly in surface soil samples in Area

7 and under the loading dock. No pattern to the herbicide contamination was readily observable.

III. SUMMARY

Based on laboratory results and field inspections, the Scobell Chemical site has detectable chemical contamination in the surface soils and in sediment/dust on the building structure. The below grade contamination appears to have spread downward through the soil until reaching the top of the bedrock. It is not possible at this time to further define flow patterns and flow directions because reliable ground surface elevation and top of bedrock elevations are not available. However, the test data appears to indicate that contamination may be moving in a southerly and easterly direction along the top of bedrock zone.



PLAN VIEW OF FORMER SCOBELL CHEMICAL CO.
(1 ROCKWOOD PLACE)

NOTE:
THE PROJECT LIMITS FOR THIS PROJECT ARE WITHIN THE PROPERTY LINES OF THE FORMER SCOBELL CHEMICAL CO.

KEY

- SOIL SAMPLES
- ⊕ SOIL SAMPLES AT TOP OF ROCK
- ⊠ SOIL SAMPLES AT FACE OF EXCAVATION AT STAGE SPREAD AS EXCAVATED SOIL SAMPLES
- × CHIP SAMPLE FROM CONCRETE FLOOR
- ○ LIQUID SAMPLE
- ∧ WALL SAMPLE
- ●O STAND PIPES TO UNDERGROUND TANK

PROJECT SITE PLAN

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

INTERSTATE RTE CONN 580, ROCH CITY,
EASTERN EX. PART 1, FIC 60-6 & ROCH-
BUSHNELL BASIN PART 3&FISH 58-16 &
BRIGHTON-FAIRPORT PART 1, SM 5

this taken from listing package

p. 4 of 5/90
Tucker - Phase II
GW flow to NE?
GW@ 4'-7' / 88@ 7'-9'

WORK PLAN

ENVIRONMENTAL STUDY
SCOBELL CHEMICAL BUILDING

N.Y.S.D.O.T.
Rochester, N.Y.

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CONSULTING ENGINEERS AND PLANNERS
Rochester, New York Camp Hill, Pennsylvania
Mechanicsville, Virginia

JULY 1988

WORK PLAN
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ENVIRONMENTAL STUDY - SCOBELL CHEMICAL
WORK PLAN

1.0 Introduction

The purpose of this Work Plan is to define the objectives of the Phase I and II sampling investigations and to describe the work tasks associated with the field explorations at the Scobell Chemical Facility in Rochester, New York. (See Figure 1 - Site Location).

2.0 Project Objectives

The objectives of the Phase I and II sampling investigations for the Scobell Chemical Facility are:

- To obtain data from field investigations to further define the nature and extent of contamination;
- To determine if cleanup is required; and
- To evaluate and recommend available cleanup technologies, if necessary.

3.0 Standard Operating Procedures

Table 1 summarizes the number of samples for each matrix along with the corresponding sample type or depth for the Phase I sampling program developed by the New York State Department of Environmental Conservation (NYSDEC). Table 2 summarizes the number of sampling points and samples along with the corresponding sample type and area location for the Phase II sampling program developed by the NYSDEC. Figure 2 identifies the sample and test locations of the Phase I and II sampling programs developed by the NYSDEC. The following step-by-step procedures should be followed during the Phase I and II field activities:

Task 1: Phase I and II Soil Sampling - Test Borings

During Phase I sampling the thirty (30) test borings will be drilled and samples collected at 24-inch, 84-inch, and top of rock. During Phase II sampling the sixty-one (61) outside test borings and twenty (20) test borings inside the building will be drilled and samples collected at the surface, 18-inch, 36-inch, and top of rock below concrete and wood floor surfaces. Quality Assurance/Quality Control (QA/QC) sample locations will also be collected for Phase I and II in accordance with Tables 3 and 4, respectively.

Field screen the first test boring with a portable organic vapor analyzer (OVA) and a combustible gas/oxygen meter to determine the appropriate level of personnel protection required throughout the test boring program. Test borings cored through concrete and wood floors inside the building will be screened to determine if volatile organic vapors or explosive conditions are present.

Advance test borings into the soil using an Acker AD2 drill rig for Phase I. An Acker AD2 or similar sized drill rig will be used for Phase II sampling to the top of rock. In addition, a tripod arrangement will be used for Phase II sampling to the top of rock in areas in which the drill rig can not operate. An AG Penetrometer will be used for Phase II sampling at locations no deeper than 36 inches.

Collect samples with a split spoon sampler at the designated depths. Upon retraction, each split spoon will be removed from the drill stem and disassembled for sample collection. Following sample collection, each split spoon will be decontaminated.

Carefully collect each sample in a clean plastic bag to composite the sample. Place the sample in a precleaned glass container, seal the container, and appropriately label. Place the samples for analytical testing in ice-packed coolers. Samples collected outside the building will be shipped as low hazard samples. Clean split spoons with Alconox and subsequently rinse with tap water, methanol, hexane, 10% nitric acid, and deionized water. Air dry the equipment for future use. Store and seal soil and floor cuttings, wash water, and spent decontamination chemicals in approved drums.

Task 2: Phase I and II Floor Sampling - Concrete

Field screen with the OVA and combustible gas/oxygen meter at entry into the building. Identify the three (3) sampling floor locations in the building, one (1) floor location in the cellar, and one (1) wash basin location in the storage yard in accordance with the proposed Phase I sampling locations shown on Figure 2. Identify the nineteen (19) sampling floor locations in the building and one (1) sampling location from the dock in accordance with the proposed Phase II sampling locations shown on Figure 2. QA/QC sample locations for Phase I and II will also be identified in accordance with Tables 3 and 4, respectively. Clean the floor surface with deionized water to remove surface debris prior to collection of the underlying surface materials. Collect approximately one (1) cubic feet of concrete for each concrete chip sample at the designated floor and wash basin locations using a jack hammer.

Place concrete chips into appropriate sampling jars and the remaining debris and spent decontamination chemicals placed in a drum. Label the jars accordingly and fill out the chain of custody forms. Place the samples for analytical testing in ice-packed coolers. Samples collected inside the building will be shipped as low hazard samples.

Task 3: Phase I Aqueous/Residue Sampling - Building

Field screen with the OVA and combustible gas/oxygen meter in the building. Identify the two (2) locations in the cellar with 2 - 3 ft standing water for sample collection using a bailer or other sampling device. (See Figure 2) Immerse the sampling collecter in the standing water and fill the sample containers.

Identify the two (2) sampling locations in Area 10 of the suspected underground tank. (See Figure 2) The suspected underground tank will be sampled using a method acceptable with the NYSDEC.

Locate the sampling location for the residue sample in the loading bay. (See Figure 2) The residue will be sampled using a clean stainless steel scoop and placed into precleaned glass containers and sealed.

QA/QC samples for Phase I will be collected in accordance with Table 3. Label the sample jars and fill out the chain of custody forms. Place the samples for analytical testing in ice-packed coolers. Samples collected inside the building will be shipped as low hazard samples.

Task 4: Phase II Wall Sampling - Concrete & Steel

Field screen with the OVA and combustible gas/oxygen meter in the building. Identify the six (6) concrete block wall sample locations in the building, the one (1) concrete wall sample location in Area 9, and the five (5) steel wall sample locations (See Figure 2). QA/QC samples for Phase II will be collected in accordance with Table 4. Collect approximately one (1) cubic feet of concrete for each concrete block wall sample using a jack hammer. Drill approximately one (1) cubic feet of steel for each steel wall sample. The analytical laboratory will grind the steel into the powder form necessary for testing. Place concrete chips and steel pieces into appropriate sampling jars, seal, and appropriately label. Fill out the chain of custody forms. Place the samples for analytical testing in ice-packed coolers. Samples collected inside the building will be shipped as low hazard samples.

In addition to the samples identified above, New York State Department of Transportation (NYSDOT) has requested that one (1) liquid sample be collected from the discolored surface water near the excavated material. The additional sample is identified as sample no. 88-28 on Figure 2 and will be collected along with the Phase II sampling program.

4.0 Description of Work Tasks

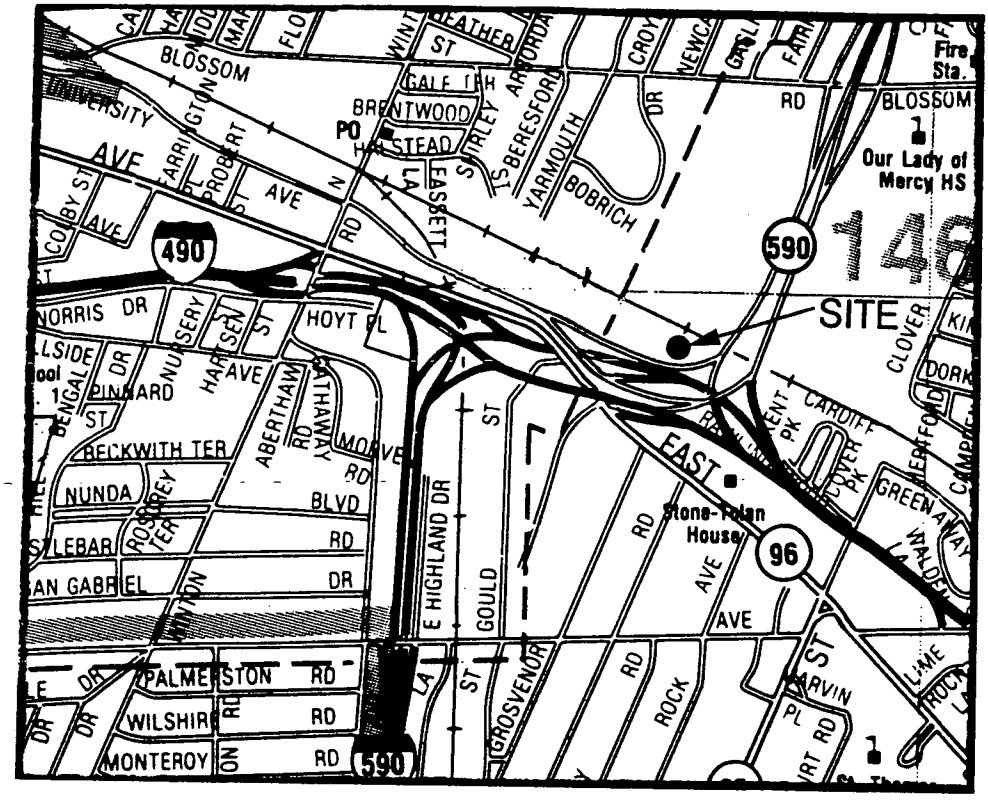
The scope of work of the Phase I and II sampling programs and associated tasks include project administration, overall and subcontractor coordination, initial data review, development of Health & Safety Plan and Work Plan, completion of an initial site walk-through, preparatory sampling activities, Phase I and II field explorations, project meetings, data analysis, preparation of reports, and additional consultation services as requested by NYSDOT. Figure 3 is a project schedule of the discussed work tasks. The laboratory will submit analytical results to EAA within two (2) weeks following their first sample receipt and on a continual basis until completion of full submittal of Phase I and II test results. Table 5 summarizes the work tasks of the Phase I and II sampling programs.

5.0 Quality Assurance/Quality Control (QA/QC)

In accordance with standard field exploration and sampling programs, QA/QC samples have been incorporated into the Phase I and II Sampling Programs developed by the NYSDEC. QA/QC samples include the collection of duplicates to confirm standard laboratory methods, field blanks to confirm standard field cleaning procedures, and trip blanks to confirm volatile organics results.

Tables 3 and 4 identify the sample descriptions, sample matrices, number of samples, analyses required, and analytical method references associated with the expanded sampling program with QA/QC samples. Tables 6 and 7 are the original Phase I and II sampling programs developed by the NYSDEC.

FIGURES



NOTE: ROAD CONSTRUCTION NEAR SITE

ERDMAN ANTHONY ASSOCIATES

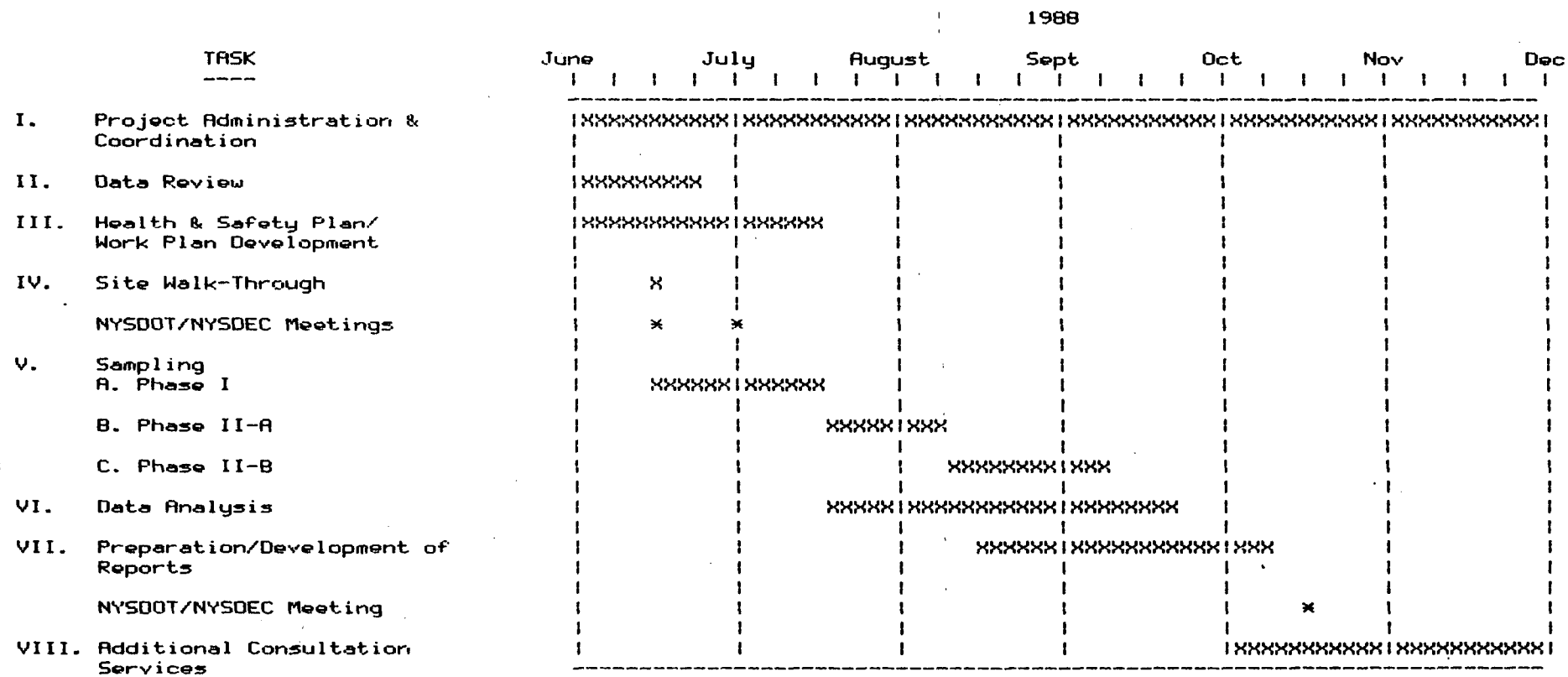
Scobell Chemical
Work Plan

SITE LOCATION

FIGURE 1

NOT TO SCALE

FIGURE 3
SCOBELL CHEMICAL
PROJECT SCHEDULE



TABLES

TABLE 1
SCOBELL CHEMICAL
SUMMARY OF ORIGINAL PHASE I SAMPLING PROGRAM

Concrete Samples:

Sample No.	Type	No. of Samples
88-1	chip	1
-2	chip	2
-3	chip	3
-7	chip	4
-40	chip	5

Total No. of Concrete Samples = 5

Soil Samples:

Sample No.	Depth	No. of Samples	No. of Borings
88-8a	24 in	1	
-8b	84 in	2	
-8c	top	3	#1
-9a	24 in	4	
-9b	84 in	5	
-9c	top	6	#2
-10a	24 in	7	
-10b	84 in	8	
-10c	top	9	#3
-11a	24 in	10	
-11b	84 in	11	
-11c	top	12	#4
-12a	24 in	13	
-12b	84 in	14	
-12c	top	15	#5
-13a	24 in	16	
-13b	84 in	17	
-13c	top	18	#6
-14a	24 in	19	
-14b	84 in	20	
-14c	top	21	#7
-15a	24 in	22	
-15b	84 in	23	
-15c	top	24	#8

Soil Samples:

Sample No.	Depth	No. of Samples	No. of Borings
-16a	24 in	25	
-16b	84 in	26	
-16c	top	27	#9
-17a	24 in	28	
-17b	84 in	29	
-17c	top	30	#10
-18a	24 in	31	
-18b	84 in	32	
-18c	top	33	#11
-19a	24 in	34	
-19b	84 in	35	
-19c	top	36	#12
-20a	24 in	37	
-20b	84 in	38	
-20c	top	39	#13
-21a	24 in	40	
-21b	84 in	41	
-21c	top	42	#14
-22a	24 in	43	
-22b	84 in	44	
-22c	top	45	#15
-23a	24 in	46	
-23b	84 in	47	
-23c	top	48	#16
-24a	24 in	49	
-24b	84 in	50	
-24c	top	51	#17
-25a	24 in	52	
-25b	84 in	53	
-25c	top	54	#18
-26a	24 in	55	
-26b	84 in	56	
-26c	top	57	#19
-28a	24 in	58	
-28b	84 in	59	
-28c	top	60	#20

Soil Samples:

Sample No.	Depth	No. of Samples	No. of Borings
-29a	24 in	61	
-29b	84 in	62	
-29c	top	63	#21
-30a	24 in	64	
-30b	84 in	65	
-30c	top	66	#22
-31a	24 in	67	
-31b	84 in	68	
-31c	top	69	#23
-32a	24 in	70	
-32b	84 in	71	
-32c	top	72	#24
-33a	24 in	73	
-33b	84 in	74	
-33c	top	75	#25
-34a	24 in	76	
-34b	84 in	77	
-34c	top	78	#26
-35a	24 in	79	
-35b	84 in	80	
-35c	top	81	#27
-36a	24 in	82	
-36b	84 in	83	
-36c	top	84	#28
-37a	24 in	85	
-37b	84 in	86	
-37c	top	87	#29
-38a	24 in	88	
-38b	84 in	89	
-38c	top	90	#30

Total No. of Test Borings = 30
Total No. of Samples = 90

Water Samples:

Sample No.	Type	No. of Samples
88-5	Standing Water	1
-6	Standing Water	2
-39a	Liquid	3
-39b	Liquid	4

Total No. of Water Samples = 4

Waste Samples:

Sample No.	Type	No. of Samples
88-4	Residue in pipe casing	1

Total No. of Waste Samples = 1

TABLE 2
SCOBELL CHEMICAL
SUMMARY OF ORIGINAL PHASE II SAMPLING PROGRAM

Let Phase II-A include collection of samples 88-41 through 88-70 and Phase II-B include collection of samples 88-71 through 88-107 and additional sample (88-28).

PHASE II-A:

No. of Sampling Points	Type of Sample	No. of Samples	Area #
18	Concrete chip floor samples	18	Area 10
6	Soil samples below concrete slab (18"/36"/ top of rock)	18	Area 10
3	Steel Wall samples (6" and 36" from floor)	5	Area 10
1	Concrete chip wall samples (6" and 36" from floor)	2	Area 10
2	Soil samples below wood floor (surface/18"/36")	6	Loading Dock

PHASE II-B:

No. of Sampling Points	Type of Sample	No. of Samples	Area #
8	Soil samples below wood floor (surface/18"/36"/ top of rock)	26	Area 7
1	Concrete chip wall sample (12" from wood floor)	1	Area 7

Phase II-B: (cont)

No. of Sampling Points	Type of Sample	No. of Samples	Area #
1	Soil sample (12" below surface - no floor)	1	Area 2
1	Concrete chip floor sample	1	Area 3
3	Concrete chip wall samples (18"/48" from floor)	3	Area 4
5	Soil samples below concrete floor (18"/36" below floor)	10	Area 4
1	Concrete chip wall sample (36" from floor)	1	Area 9
1	Soil - outside building (Surface/ 18"/36"/top of rock)	4	Area 9
6	Soil samples below, east, & west of tanks (surface/18"/36")	16	Area 5
1	Concrete chip sample from concrete dock	1	Area 5
1	Wood floor samples from random 4 drums	4	Area 8
1	Soil samples from Drum 1 & Random 3 drums	4	Area 8
1	Dust sample from Random drum	1	Area 8
1	Leachate sample (addtl NYSDOT sample)	1	88-28

Analytical Testing Program

TABLE 3
SCOBELL CHEMICAL
PHASE I ANALYTICAL TESTING PROGRAM

Sample Description	Type of Sample	Sample Matrix	Number of Samples	Duplicate Samples	Total No. of Samples	Analyses Required	Analytical Method Reference
Floor Samples inside Building	Chip	Concrete	5	1	6	Purgeable VO Aromatic VO Herbicides Pesticides Heavy Metals	Method 8010 Method 8020 Method 8150 Method 8080
	QA/QC: Field Blank	Water	1	0	1	Purgeable VO Aromatic VO Herbicides Pesticides Heavy Metals	Method 8010 Method 8020 Method 8150 Method 8080
	Trip Blank	Water	1	0	1	Purgeable VO Aromatic VO	Method 8010 Method 8020
Test Borings (East & South sides of building)	Split-spoon	Soil	90	2	92	Purgeable VO Aromatic VO Herbicides Pesticides Heavy Metals	Method 8010 Method 8020 Method 8150 Method 8080
	QA/QC: Field Blank	Water	1	0	1	Purgeable VO Aromatic VO Herbicides Pesticides Heavy Metals	Method 8010 Method 8020 Method 8150 Method 8080
	Trip Blank	Water	1	0	1	Purgeable VO Aromatic VO	Method 8010 Method 8020
Standing Water in Cellar	Surface water	Water	2	0	2	Purgeable VO Aromatic VO Herbicides Pesticides Heavy Metals	Method 8010 Method 8020 Method 8150 Method 8080
Unknown Liquid in Warehouse Underground Tank	Liquid	Water	2	1	3	Hydrocarbon Scan IR Scan PCBs Flashpoint	Method 310-13 Method 418.1 Method 8080
	QA/QC: Trip Blank	Water	1	0	1	Purgeable VO Aromatic VO	Method 8010 Method 8020
Residue in dry well pipe casing	Grab	Waste	1	0	1	Purgeable VO Aromatic VO Herbicides Pesticides Heavy Metals	Method 8010 Method 8020 Method 8150 Method 8080

TABLE 4
SCOBELL CHEMICAL
PHASE II ANALYTICAL TESTING PROGRAM

Sample Description	Type of Sample	Sample Matrix	Number of Samples	Duplicate Samples	Total No. of Samples	Analyses Required	Analytical Method Reference
Floor Samples inside Building	Chip	Concrete	19	1	20	Volatile Organics EP Toxicity: Heavy Metals Pesticides Herbicides	Method 8240 Method 1310
	QA/QC:						
	Field Blank	Water	1	0	1	Volatile Organics EP Toxicity: Heavy Metals Pesticides Herbicides	Method 8240 Method 1310
	Trip Blank [1]	Water	5	0	5	Volatile Organics	Method 8240
Test Borings inside Building	Split-spoon & Surface	Soil	61	1	62	Volatile Organics EP Toxicity: Heavy Metals Pesticides Herbicides	Method 8240 Method 1310
	QA/QC: Field Blank	Water	1	0	1	Volatile Organics EP Toxicity: Heavy Metals Pesticides Herbicides	Method 8240 Method 1310
	Trip Blank [2]	Water	7	0	7	Volatile Organics	Method 8240
Wall Samples inside Building	Chip	Concrete	7	0	7	Volatile Organics EP Toxicity: Heavy Metals Pesticides Herbicides	Method 8240 Method 1310
	Section	Steel	5	0	5	Volatile Organics EP Toxicity: Heavy Metals Pesticides Herbicides	Method 8240 Method 1310
Floor Samples on Concrete Dock outside Building	Chip	Concrete	1	0	1	Volatile Organics EP Toxicity: Heavy Metals Pesticides Herbicides	Method 8240 Method 1310
Test Borings outside Building	Split-spoon & Surface	Soil	20	0	20	Volatile Organics EP Toxicity: Heavy Metals Pesticides Herbicides	Method 8240 Method 1310
Material Stored in Drums	Grab	Wood floor	4	0	4	Dioxin Scan	
		Soil	4	0	4	Dioxin Scan	
		Dust	1	0	1	Dioxin Scan	

Notes:

[1] One (1) trip blank per day will be included in the estimated 5-day sampling event (concrete, steel, and drum samples).

[2] One (1) trip blank per day will be included in the estimated 7-day test boring work.

TABLE 5
SUMMARY OF PHASE I AND II WORK TASKS

Let Phase I include collection of samples 88-1 through 88-40. The samples will be collected in the order below:

Phase I

Task 1.	90 soil samples + 2 duplicates 1 field blank + 1 trip blank (30 test borings)	
Task 2.	5 concrete chip floor samples + 1 duplicate 1 field blank + 1 trip blank (5 sampling points)	
Task 3.	2 standing water samples (2 sampling points)	
Task 4.	2 underground tank samples + 1 duplicate 1 trip blank (1 sampling point)	
Task 5.	1 waste/residue sample (1 sampling point)	

Let Phase II-A include collection of samples 88-41 through 88-70 and Phase II-B include collection of samples 88-71 through 88-107 and additional sample 88-28. Following the completion of Phase I sampling, the samples will be collected in the order indicated below:

Phase II-A

Task 1.	18 concrete chip floor samples = 1 dup 1 field blank + 5 trip blanks (18 sampling points)	Area 10
Task 2.	5 steel wall samples (3 sampling points)	Area 10
Task 3.	2 concrete chip wall samples (1 sampling point)	Area 10
Task 4.	1 concrete chip wall sample (1 sampling point)	Area 7
Task 5.	3 concrete chip wall samples (3 sampling points)	Area 4
Task 6.	1 concrete chip floor sample (1 sampling point)	Area 3

Tasks 1 through 6 involve collection of wall and floor samples prior to drilling activities in corresponding areas to prevent contamination of wall

and floor surfaces from drilling dust and debris. EAA will be following the sampling program developed by the NYSDOT with the following modifications:

- Samples 88-79, 88-81, 88-82, 88-83, and 88-84 (Tasks 4, 5, and 6) will be collected prior to Phase III sampling to prevent contamination of wall and floor surfaces.

- EAA will continue floor, wall, and drum sampling (Tasks 14, 15, 16, 17, and 18) only after the completion of all test borings.

- Five (5) trip blanks are included for the estimated 5-day field activities (Phase II-A concrete sampling) and seven (7) trip blanks are included for the estimated 7-day field explorations (Phase II-B test borings).

Phase II-B

Task 7.	18 soil samples (6 test borings)	Area 10
Task 8.	6 soil samples (2 test borings)	Loading Dock
Task 9.	26 soil samples (8 test borings)	Area 7
Task 10.	10 soil samples (5 test borings)	Area 4
Task 11.	1 soil sample (1 test boring)	Area 2
Task 12.	16 soil samples (6 test borings)	Area 5
Task 13.	4 soil samples (1 test boring)	Area 9
Task 14.	1 concrete chip wall sample (1 sampling point)	Area 9
Task 15.	1 concrete chip dock sample (1 sampling point)	Area 5
Task 16.	4 wood floor samples (4 random drums)	Area 8
Task 17.	4 soil samples - 4 drums (3 random drums + Drum 1)	Area 8
Task 18.	1 dust sample - 1 random drum	Area 8
Task 19.	1 leachate sample (addtl sample)	88-28

TABLE 6

NYSDEC Phase I Sampling Program

D500570

I-490 I/NY-590 INTERCHANGE RECONSTRUCTION, STAGE 3 (I-490 FROM CULVER ROAD TO EAST OF PENFIELD ROAD AND I/NY-590 FROM HIGHLAND AVENUE TO BLOSSOM ROAD) MONROE COUNTY
P.I.N. 4088.03.311

SAMPLING AND TESTING LOCATIONS-
SCOBELL CHEMICAL BUILDING AND ENVIRONS

SAMPLE NUMBER	LOCATION	MATERIAL	DEPTH
88-1	INSIDE BUILDING	CONCRETE FLOOR	CHIP SAMPLE
88-2	INSIDE BUILDING	CONCRETE FLOOR	CHIP SAMPLE
88-3	INSIDE BUILDING-SW CORNER-DARK STAIN	CONCRETE FLOOR	CHIP SAMPLE
88-4	INSIDE BUILDING-SW CORNER-DRY WELL	RESIDUE INSIDE PIPE	----
88-5	INSIDE BUILDING-CELLAR	STANDING WATER	----
88-6	INSIDE BUILDING-CELLAR	STANDING WATER	----
88-7	INSIDE BUILDING-CELLAR	CONCRETE FLOOR	CHIP SAMPLE
88-8a	SOUTHSIDE BUILDING-IN FRONT OF LOADING BAYS	EARTH	24"
88-8b	SOUTHSIDE BUILDING-IN FRONT OF LOADING BAYS	EARTH	84"
88-8c	SOUTHSIDE BUILDING-IN FRONT OF LOADING BAYS	EARTH	TOP OF ROCK
88-9a	SOUTHSIDE BUILDING-IN FRONT OF LOADING BAYS	EARTH	24"
88-9b	SOUTHSIDE BUILDING-IN FRONT OF LOADING BAYS	EARTH	84"
88-9c	SOUTHSIDE BUILDING-IN FRONT OF LOADING BAYS	EARTH	TOP OF ROCK

SAMPLE NUMBER	LOCATION	MATERIAL	DEPTH
88-10a	SOUTHSIDE BUILDING	EARTH	24"
88-10b	SOUTHSIDE BUILDING	EARTH	84"
88-10c	SOUTHSIDE BUILDING	EARTH	TOP OF ROCK
88-11a	SOUTHSIDE BUILDING	EARTH	24"
88-11b	SOUTHSIDE BUILDING	EARTH	84"
88-11c	SOUTHSIDE BUILDING	EARTH	TOP OF ROCK
88-12a	STORAGE YARD	EARTH	24"
88-12b	STORAGE YARD	EARTH	84"
88-12c	STORAGE YARD	EARTH	TOP OF ROCK
88-13a	STORAGE YARD	EARTH	24"
88-13b	STORAGE YARD	EARTH	84"
88-13c	STORAGE YARD	EARTH	TOP OF ROCK
88-14a	STORAGE YARD	EARTH	24"
88-14b	STORAGE YARD	EARTH	84"
88-14c	STORAGE YARD	EARTH	TOP OF ROCK
88-15a	STORAGE YARD	EARTH	24"
88-15b	STORAGE YARD	EARTH	84"
88-15c	STORAGE YARD	EARTH	TOP OF ROCK
88-16a	STORAGE YARD	EARTH	24"
88-16b	STORAGE YARD	EARTH	84"
88-16c	STORAGE YARD	EARTH	TOP OF ROCK
88-17a	STORAGE YARD	EARTH	24"
88-17b	STORAGE YARD	EARTH	84"
88-17c	STORAGE YARD	EARTH	TOP OF ROCK
88-18a	STORAGE YARD	EARTH	24"
88-18b	STORAGE YARD	EARTH	84"
88-18c	STORAGE YARD	EARTH	TOP OF ROCK
88-19a	STORAGE YARD	EARTH	24"
88-19b	STORAGE YARD	EARTH	84"
88-19c	STORAGE YARD	EARTH	TOP OF ROCK
88-20a	STORAGE YARD	EARTH	24"
88-20b	STORAGE YARD	EARTH	84"
88-20c	STORAGE YARD	EARTH	TOP OF ROCK
88-21a	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	24"
88-21b	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	84"

SAMPLE NUMBER	LOCATION	MATERIAL	DEPTH
88-21c	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	TOP OF ROCK
88-22a	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	24"
88-22b	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	84"
88-22c	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	TOP OF ROCK
88-23a	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	24"
88-23b	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	84"
88-23c	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	TOP OF ROCK
88-24a	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	24"
88-24b	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	84"
88-24c	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	TOP OF ROCK
88-25a	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	24"
88-25b	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	84"
88-25c	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	TOP OF ROCK
88-26a	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	24"
88-26b	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	84"

SAMPLE NUMBER	LOCATION	MATERIAL	DEPTH
88-26c	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	TOP OF ROCK
88-27	NO SAMPLE TAKEN		
88-28a	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	24"
88-28b	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	84"
88-28c	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	TOP OF ROCK
88-29a	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	24"
88-29b	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	84"
88-29c	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	TOP OF ROCK
88-30a	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	24"
88-30b	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	84"
88-30c	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	TOP OF ROCK
88-31a	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	24"
88-31b	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	84"
88-31c	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	TOP OF ROCK

SAMPLE NUMBER	LOCATION	MATERIAL	DEPTH
88-32a	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	24"
88-32b	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	84"
88-32c	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	TOP OF ROCK
88-33a	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	24"
88-33b	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	84"
88-33c	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	TOP OF ROCK
88-34a	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	24"
88-34b	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	84"
88-34c	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	TOP OF ROCK
88-35a	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	24"
88-35b	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	84"
88-35c	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	TOP OF ROCK
88-36a	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	24"
88-36b	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	84"
88-36c	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	TOP OF ROCK

SAMPLE NUMBER	LOCATION	MATERIAL	DEPTH
88-37a	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	24"
88-37b	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	84"
88-37c	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	TOP OF ROCK
88-38a	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	24"
88-38b	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	84"
88-38c	STORAGE YARD-EASTSIDE OF BUILDING	EARTH	TOP OF ROCK
88-39a*	INSIDE BUILDING-BELOW GROUND TANK	LIQUID	24"
88-39b*	INSIDE BUILDING-BELOW GROUND TANK	LIQUID	AT BOTTOM OF TANK
88-40	STORAGE YARD-CONCRETE WASH BASIN	CONCRETE	CHIP SAMPLE

NOTES: 1. All samples except as noted in "2" below shall be tested according to the following methods as outlined in U.S.E.P.A. Publication SW-846:
Method No. 8010 - VOLATILE ORGANICS (PURGEABLE)
Method No. 8020 - AROMATIC VOLATILE ORGANICS
Method No. 8150 - CHLORINATED HERBICIDES
Heavy Metal Analysis

2. Samples 88-39a and 88-39b (marked by asterisk) shall have the following tests:
a. identify liquid
b. check flashpoint
c. do hydrocarbon scan

3. Erdman-Anthony shall provide the backhoe or drill rig for subsurface testing. The cost of furnishing and operating such equipment shall be included in the cost of sampling and testing.

06/07/88 LA/EJO

TABLE 7

NYSDEC Phase II Sampling Program

D500570

I-490 I/NY-590 INTERCHANGE RECONSTRUCTION, STAGE 3 (I-490 FROM CULVER ROAD TO EAST OF PENFIELD ROAD AND I/NY-590 FROM HIGHLAND AVENUE TO BLOSSOM ROAD) MONROE COUNTY
P.I.N. 4088.03.311

SAMPLING AND TESTING LOCATIONS-
SCOBELL CHEMICAL BUILDING AND ENVIRONS

PHASE II

SAMPLE NUMBER	LOCATION	MATERIAL	DEPTH
88-41	AREA #10-WAREHOUSE	CONCRETE FLOOR	CHIP SAMPLE
88-42	AREA #10-WAREHOUSE	CONCRETE FLOOR	CHIP SAMPLE
88-43	AREA #10-WAREHOUSE	CONCRETE FLOOR	CHIP SAMPLE
88-44	AREA #10-WAREHOUSE	CONCRETE FLOOR	CHIP SAMPLE
88-45	AREA #10-WAREHOUSE	CONCRETE FLOOR	CHIP SAMPLE
88-46	AREA #10-WAREHOUSE	CONCRETE FLOOR	CHIP SAMPLE
88-47	AREA #10-WAREHOUSE	CONCRETE FLOOR	CHIP SAMPLE
88-48	AREA #10-WAREHOUSE	CONCRETE FLOOR	CHIP SAMPLE
88-49	AREA #10-WAREHOUSE	CONCRETE FLOOR	CHIP SAMPLE
88-50	AREA #10-WAREHOUSE	CONCRETE FLOOR	CHIP SAMPLE
88-51	AREA #10-WAREHOUSE	CONCRETE FLOOR	CHIP SAMPLE
88-52	AREA #10-WAREHOUSE	CONCRETE FLOOR	CHIP SAMPLE
88-53	AREA #10-WAREHOUSE	CONCRETE FLOOR	CHIP SAMPLE
88-54	AREA #10-WAREHOUSE	CONCRETE FLOOR	CHIP SAMPLE
88-55	AREA #10-WAREHOUSE	CONCRETE FLOOR	CHIP SAMPLE
88-56	AREA #10-WAREHOUSE	CONCRETE FLOOR	CHIP SAMPLE
88-57	AREA #10-WAREHOUSE	CONCRETE FLOOR	CHIP SAMPLE
88-58	AREA #10-WAREHOUSE	CONCRETE FLOOR	CHIP SAMPLE

SAMPLE NUMBER	LOCATION	MATERIAL	DEPTH
88-59a	AREA #10-WAREHOUSE-BELOW CONCRETE FLOOR	EARTH	18"
88-59b	AREA #10-WAREHOUSE-BELOW CONCRETE FLOOR	EARTH	36"
88-59c	AREA #10-WAREHOUSE-BELOW CONCRETE FLOOR	EARTH	TOP OF ROCK
88-60a	AREA #10-WAREHOUSE-BELOW CONCRETE FLOOR	EARTH	18"
88-60b	AREA #10-WAREHOUSE-BELOW CONCRETE FLOOR	EARTH	36"
88-60c	AREA #10-WAREHOUSE-BELOW CONCRETE FLOOR	EARTH	TOP OF ROCK
88-61a	AREA #10-WAREHOUSE-BELOW CONCRETE FLOOR	EARTH	18"
88-61b	AREA #10-WAREHOUSE-BELOW CONCRETE FLOOR	EARTH	36"
88-61c	AREA #10-WAREHOUSE-BELOW CONCRETE FLOOR	EARTH	TOP OF ROCK
88-62a	AREA #10-WAREHOUSE-BELOW CONCRETE FLOOR	EARTH	18"
88-62b	AREA #10-WAREHOUSE-BELOW CONCRETE FLOOR	EARTH	36"
88-62c	AREA #10-WAREHOUSE-BELOW CONCRETE FLOOR	EARTH	TOP OF ROCK
88-63a	AREA #10-WAREHOUSE-BELOW CONCRETE FLOOR	EARTH	18"
88-63b	AREA #10-WAREHOUSE-BELOW CONCRETE FLOOR	EARTH	36"
88-63c	AREA #10-WAREHOUSE-BELOW CONCRETE FLOOR	EARTH	TOP OF ROCK

SAMPLE NUMBER	LOCATION	MATERIAL	DEPTH
88-64a	AREA #10-WAREHOUSE-BELOW CONCRETE FLOOR	EARTH	18"
88-64b	AREA #10-WAREHOUSE-BELOW CONCRETE FLOOR	EARTH	36"
88-64c	AREA #10-WAREHOUSE-BELOW CONCRETE FLOOR	EARTH	TOP OF ROCK
88-65a	AREA #10-WAREHOUSE	STEEL WALL	6" FROM FLOOR
88-65b	AREA #10-WAREHOUSE	STEEL WALL	36" FROM FLOOR
88-66a	AREA #10-WAREHOUSE	CONCRETE BLOCK WALL	CHIP SAMPLE 6" FROM FLOOR
88-66b	AREA #10-WAREHOUSE	CONCRETE BLOCK WALL	CHIP SAMPLE 36" FROM FLOOR
88-67	AREA #10-WAREHOUSE	STEEL WALL	36" FROM FLOOR
88-68a	AREA #10-WAREHOUSE	STEEL WALL	6" FROM FLOOR
88-68b	AREA #10-WAREHOUSE	STEEL WALL	36" FROM FLOOR
88-69a	LOADING DOCK-BELOW WOOD FLOOR	EARTH	SURFACE
88-69b	LOADING DOCK-BELOW WOOD FLOOR	EARTH	18"
88-69c	LOADING DOCK-BELOW WOOD FLOOR	EARTH	36"
88-70a	LOADING DOCK-BELOW WOOD FLOOR	EARTH	SURFACE
88-70b	LOADING DOCK-BELOW WOOD FLOOR	EARTH	18"
88-70c	LOADING DOCK-BELOW WOOD FLOOR	EARTH	36"
88-71a	AREA #7-BELOW WOOD FLOOR	EARTH	SURFACE
88-71b	AREA #7-BELOW WOOD FLOOR	EARTH	18"
88-71c	AREA #7-BELOW WOOD FLOOR	EARTH	36"

SAMPLE NUMBER	LOCATION	MATERIAL	DEPTH
88-72a	AREA #7-BELOW WOOD FLOOR	EARTH	SURFACE
88-72b	AREA #7-BELOW WOOD FLOOR	EARTH	18"
88-72c	AREA #7-BELOW WOOD FLOOR	EARTH	36"
88-72d	AREA #7-BELOW WOOD FLOOR	EARTH	TOP OF ROCK
88-73a	AREA #7-BELOW WOOD FLOOR	EARTH	SURFACE
88-73b	AREA #7-BELOW WOOD FLOOR	EARTH	18"
88-73c	AREA #7-BELOW WOOD FLOOR	EARTH	36"
88-74a	AREA #7-BELOW WOOD FLOOR	EARTH	SURFACE
88-74b	AREA #7-BELOW WOOD FLOOR	EARTH	18"
88-74c	AREA #7-BELOW WOOD FLOOR	EARTH	36"
88-75a	AREA #7-BELOW WOOD FLOOR	EARTH	SURFACE
88-75b	AREA #7-BELOW WOOD FLOOR	EARTH	18"
88-75c	AREA #7-BELOW WOOD FLOOR	EARTH	36"
88-76a	AREA #7-BELOW WOOD FLOOR	EARTH	SURFACE
88-76b	AREA #7-BELOW WOOD FLOOR	EARTH	18"
88-76c	AREA #7-BELOW WOOD FLOOR	EARTH	36"
88-77a	AREA #7-BELOW WOOD FLOOR	EARTH	SURFACE
88-77b	AREA #7-BELOW WOOD FLOOR	EARTH	18"
88-77c	AREA #7-BELOW WOOD FLOOR	EARTH	36"
88-77d	AREA #7-BELOW WOOD FLOOR	EARTH	TOP OF ROCK

SAMPLE NUMBER	LOCATION	MATERIAL	DEPTH
88-78a	AREA #7-BELOW WOOD FLOOR	EARTH	SURFACE
88-78b	AREA #7-BELOW WOOD FLOOR	EARTH	18"
88-78c	AREA #7-BELOW WOOD FLOOR	EARTH	36"
8-79	AREA #7	CONCRETE BLOCK WALL	CHIP SAMPLE 12" FROM WOOD FLOOR
88-80	AREA #2	EARTH	12" BELOW EXISTING SURFACE
88-81	AREA #3a-BELOW TOLUTOL SIGN	CONCRETE FLOOR	CHIP SAMPLE
88-82	AREA #4	CONCRETE BLOCK WALL	CHIP SAMPLE 48" FROM FLOOR
88-83	AREA #4	CONCRETE BLOCK WALL	CHIP SAMPLE 48" FROM FLOOR
88-84	AREA #4-BELOW WALL METER	CONCRETE BLOCK WALL	CHIP SAMPLE 18" FROM FLOOR
88-85a	AREA #4-5' FROM WALL METER-BELOW CONCRETE FLOOR	EARTH	18"
88-85b	AREA #4-5' FROM WALL METER-BELOW CONCRETE FLOOR	EARTH	36"
88-86a	AREA #4-BELOW CONCRETE FLOOR	EARTH	18"
88-86b	AREA #4-BELOW CONCRETE FLOOR	EARTH	36"
88-87a	AREA #4-BELOW CONCRETE FLOOR	EARTH	18"
88-87b	AREA #4-BELOW CONCRETE FLOOR	EARTH	36"

SAMPLE NUMBER	LOCATION	MATERIAL	DEPTH
88-88a	AREA #4-BELOW CONCRETE FLOOR	EARTH	18"
88-88b	AREA #4-BELOW CONCRETE FLOOR	EARTH	36"
88-89a	AREA #4-BELOW CONCRETE FLOOR	EARTH	18"
88-89b	AREA #4-BELOW CONCRETE FLOOR	EARTH	36"
88-90	AREA #9	CONCRETE BLOCK WALL	CHIP SAMPLE 36" FROM FLOOR
88-91a	AREA #5-BELOW TANK #3	EARTH	18"
88-91b	AREA #5-BELOW TANK #3	EARTH	36"
88-92a	AREA #5-BELOW TANK #3	EARTH	18"
88-92b	AREA #5-BELOW TANK #3	EARTH	36"
88-93a	AREA #5-10' EAST OF TANK #3	EARTH	SURFACE
88-93b	AREA #5-10' EAST OF TANK #3	EARTH	18"
88-93c	AREA #5-10' EAST OF TANK #3	EARTH	36"
88-94	AREA #5-CONCRETE DOCK	CONCRETE	CHIP SAMPLE
88-95a	AREA #5-10' WEST OF TANK #3	EARTH	SURFACE
88-95b	AREA #5-10' WEST OF TANK #3	EARTH	18"
88-95c	AREA #5-10' WEST OF TANK #3	EARTH	36"
88-96a	AREA #5-10' NORTH OF TANK #3	EARTH	SURFACE
88-96b	AREA #5-10' NORTH OF TANK #3	EARTH	18"
88-96c	AREA #5-10' NORTH OF TANK #3	EARTH	36"

SAMPLE NUMBER	LOCATION	MATERIAL	DEPTH
88-97a	ADJACENT TO AREA #5	EARTH	SURFACE
88-97b	ADJACENT TO AREA #5	EARTH	18"
88-97C	ADJACENT TO AREA #5	EARTH	36"
88-98a	SOUTHEAST CORNER BLDG. #9	EARTH	SURFACE
88-98b	SOUTHEAST CORNER BLDG. #9	EARTH	18"
88-98c	SOUTHEAST CORNER BLDG. #9	EARTH	36"
88-98d	SOUTHEAST CORNER BLDG. #9	EARTH	TOP OF ROCK
88-99 88-100 88-101 88-102	AREA #8- RANDOMLY SELECT 4 DRUMS OF WOOD FLOORING. COLLECT SAMPLE FROM EACH.	WOOD FLOOR	--------
88-103 88-104 88-105 88-106	AREA #8- SELECT DRUM #1 AND RANDOMLY SELECT THREE OTHER DRUMS OF SOIL. COLLECT SAMPLE FROM EACH	EARTH	--------
88-107	AREA #8- DRUM	DUST	--------

NOTES: 1. All samples except as noted below shall be tested according to the following methods as outlined in U.S.P.A. Publication SW-846:
Method No. 8240
E P Toxicity

2. Sample #88-80. Test as indicated in Note #1 and also give Dioxin Scan Test.
3. Samples #88-99 through 88-107. Sample materials removed from AREA #2 and stored in drums in AREA #8. Give samples Dioxin Scan Test.
4. Erdman-Anthony shall provide the backhoe or drillrig for subsurface testing. The cost of furnishing and operating such equipment shall be included in the cost of sampling and testing.
5. The location of the underground tank shall be

established before any earth samples are taken in the warehouse (Area #10)

6. All visible accumulations of dirt, dust or debris shall be removed from the immediate surface area before any concrete floor chip sample is taken.

07/01/88 LA/EJO