ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

PHASE II INVESTIGATION

Old Halfmoon Landfill Site No. 546013
Town of Halfmoon Saratoga County

DATE: January 1993

Report Appendices A-C

Prepared for:
New York State Department of Environmental Conservation

50 Wolf Road, Albany, New York 12233
Thomas C. Jorling, Commissioner

Division of Hazarous Waste Remediation
Michael J. O'Toole, Jr., P.E., *Director*

By:
Lawler, Matusky & Skelly Engineers

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES IN THE STATE OF NEW YORK PHASE II INVESTIGATIONS

Old Halfmoon Landfill Site
Town of Halfmoon, Saratoga County
NYSDEC I.D. No. 546013

Report Appendices A-C

Prepared for:

DIVISION OF HAZARDOUS WASTE REMEDIATION
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
50 Wolf Road
Albany, New York 12233-7010

Prepared by:

LAWLER, MATUSKY & SKELLY ENGINEERS
Environmental Science & Engineering Consultants
One Blue Hill Plaza
Pearl River, New York 10965

January 1993

File No. 576-067

APPENDIX A

1991 AND 1992 TEST TRENCH LOGS

REFERENCE 6

LAWLER, MATUSKY & SKELLY ENGINEERS
CREW CHIEF REPORT

PAGE 1 OF 1

A. 1. CREW CHIEF: Jim Gurzenich
CREW MEMBER(S): Seth Piker
2. CLIENT: NYSDEC
3. SURVEY: Old Halfmoon Ldfl
Surf H_2O/Sed. / Leachate
5. JOB NO: 576-044
6. PROJ. MGR: Ed Maikish
7. VEHICLE USED: Coke Van
8. BOAT(S) USED: 12' Jon Boat

B. CREW CHIEF REPORT (COMPLETE AFTER SURVEY.)

1. SURVEY START/END DATE	12.3 / 12.6	
2. SURVEY START/END TIME	~0600 / 2200	
3. DESCRIBE DETAILS IN SECTION C:		
(a) SAMPLING GEAR WORKING PROPERLY		(Y)/N
(b) METERS FIELD CALIBRATED: (1) WATER QUALITY		(Y)/N
(2) AIR MONITOR (HNU, OVA, CGI)		~~Y/N~~
(FIELD CALIB. MUST BE ATTACHED TO ORIG. C.C. REPORT & SENT TO QA/QC)		
(c) WAS DOWNTIME INCURRED? #HRS?		Y/(N)
(d) ANY INCIDENTS, ACCIDENTS, PERTINENT OBSER.		Y/(N)
4. WERE FOLLOWING REPORTS COMPLETED & SUBMITTED?		
(a) WEATHER CONDITIONS LISTED ON FIELD DATA SHEETS		(Y)/N
(b) RADIO LOGS		~~Y/N~~
(c) ~~EQUIPMENT USAGE~~		(Y)/N
(d) (BOAT/VEHICLE) LOGS		(Y)/N
5. BOAT USAGE		
(a) ENGINE HOURS	____ TO ____	
(b) RADIO LOGS	____ TO ____	
(c) BOAT LOCATION	Mohawk River 12.4	
6. CHAIN OF CUSTODY COMPLETED. SAMPLES SIGNED OVER.		(Y)/N 0900 1300

COMMENTS/OBSERVATIONS
Survey went very well. * See Field Log Book for sampling specific

* We did not need engine for the boat work

- NYSDEC DRT 15c Turb meter did not hold a charge well @ all (prob. due to cold weather)
- filtering of PCB samples (2+ℓ / SW location + 3 MS/MSD) consumed quite a bit of time (1 person ... 0.5 - 2.0 hrs / sample)
- It helped quite a bit that Dan Eaton was willing to drive me to sample locations while Seth was filtering
- We had some problems w/ Fed-X switching coolers (sending them to the wrong labs)

NOTE: SEND ORIGINAL CREW CHIEF REPORT TO QA/QC WITHIN 5 DAYS OF SURVEY COMPLETION
SEND YELLOW COPY TO WAREHOUSE. RETAIN PINK COPY FOR C.C. FILE.

C.C. SIGNATURE John M Gurzenich DATE: 12.11.91

USE ADDITIONAL SHEET(S), IF NECESSARY.

Date: 12.6.91
Crew: JG SP
Site: Old Halfmoon Landfill
Operation: Surf H2O / Sed. / Leachate

LAWLER, MATUSKY & SKELLY ENGINEERS
FIELD DATA SHEET FOR SURFACE WATER/LEACHATE

Job No: 576-044

pH No: DEC Orion #4776 / DEC Hydac
Therm. No: 994 / 894
Turbidity Meter No: DEC DRT 15C
Cond ~~Velocity~~ Meter No: DEC YSI #560 / DEC Hydac

STATION No.	SAMPLE DEPTH (ft)	TOTAL DEPTH (ft)	TIME (HHMM)	TEMP (°C)	pH	COND. (µmhos/cm)	TURB.* (NTUs)	FLOW MEAS.	SAMPLE BOTTLES				COMMENTS
									SAMPLE PARAMETERS	BOT. Nos.	SAMPLE PARAMETERS	BOT. Nos.	
OHL-2	–	–	0710	6.5°	6.8/7.0	992	20	1l/110 sec	VOCs TCL+10	02	Cyanide	01	Location marked by Mike Komoroske did not have any flow, we found a location nearby (Location 599) where there is flow into the river. Sample has slight leachate odor, clear
									BNAs TCL+20	01	COD	01	
									TCL Pest/PCBs EPTox Pest/Herbs	01	TSS, TDS, pH, SpC	01	
									TAL metals EPTox metals	01	Reac, Ignit, Corr	↓	
OHL-5	–	–	0830	4.9°	6.6/6.7	815	30	1l/28 sec	VOCs TCL+10	02	Cyanide	01	Collected @ base of culvert on river side of road Used s/s tube set-up Rather clear no noticeable odor
									BNAs TCL+20	01	COD	01	
									TCL Pest/PCBs EPTox Pest/Herbs	01	TSS TDS pH SpCond	01	
									TAL metals EPTox metals	01	Reac, Ignit., Corr	↓	
OHL-5 MS & MSD	↓	↓	↓	↓	↓	↓	↓	↓	VOC TCL+10	04	Cyanide	02	↓
									BNAs TCL+20	02			
									Pest/PCBs TCL	02			
									Metals TAL	02			
OHSW-6	Surf	0.5'	0915	0.6°	7.7	334	12	–	VOCs TCL+10	02	Cyanide	01	Collected off shore where there was enough water under ice to collect sample It is located down river from OHL-6
									BNAs TCL+20	01	COD / TSS, TDS, pH, SpCond	01/01	
									Pest/PCBs TCL	01	LL PCBs (Total)	01	
									TAL Metals	01	LL PCBs (Diss.)	01	
OHSW-7	Surf	0.5'	1025	0.3°	8.0	317	09	–	VOCs TCL+10		Cyanide	01	Collected just off bank (5' out) across river from road house
									BNAs TCL+20		COD / TSS TDS pH, SpCond	01/01	
									Pest/PCBs TCL		LL PCBs (Total)	01	
									TAL metals		LL PCBs (Diss.)	01	

* These samples were run 12.7/1930 due to meter problems (cold weather) on 12.6.91 (meter indicated low battery shortly

John M Gingerich

Date: 12·6·91
Crew: JG, SP
Site: Old Halfmoon Landfill
Operation: Surf H2O/Sed/Leachate

LAWLER, MATUSKY & SKELLY ENGINEERS
FIELD DATA SHEET FOR SURFACE WATER/LEACHATE

Job No: 576-044

pH No: DEC Orion # 4776 / DEC Hydac
Therm. No: 994 / 894
Turbidity Meter No: DEC DRT 15 c
Velocity Meter No: DEC TLC #560 / DEC Hydac

STATION No.	SAMPLE DEPTH (ft)	TOTAL DEPTH (ft)	TIME (HHMM)	TEMP (°C)	pH	COND. (µmhos/cm)	TURB.* (NTUs)	FLOW MEAS.	SAMPLE BOTTLES				COMMENTS
									SAMPLE PARAMETERS	BOT. Nos.	SAMPLE PARAMETERS	BOT. Nos.	
OHL-6	—	—	1135	3.6°	7.2	1119	84	1l/14sec	VOCs TCL+10	02	Cyanide	01	Collected where leachate "stream" runs into river (location No noticeable odor
									BNAs TCL+20	01	COD	01	
									TCL Pest/PCBs EPTox Pest/Herbs	01	TSS, TDS, pH, SpC	01	
									TAL metals EPTox metals	01	Reac, Ignit, Corr	↓	
OHL-8	—	—	1230	4.4°	7.1	Sp Cond 875 / uncorr 501/530 @ 3.7°	30	1l/34sec	VOCs TCL+10	02	Cyanide	01	Collected where leachate "stream" runs into River) Clear Leachate odor (location near LMS 57 too)
									BNAs TCL+20	01	COD	01	
									TCL Pest/PCBs EPTox Pest/Herbs	01	TSS, TDS, pH SpC	01	
									TAL metals EPTox metals	01	Reac, Ignit, Corr	↓	
OHSW-8	Surf.	0.5'	1220	0.4°	8.0	431	06	—	VOCs TCL+10	02	Cyanide	01	Collected off shore where there was a break in ice (~50' out) Location is up river from "Cable Crossing" sign
									BNAs TCL+20	01	COD / TSS, TDS pH Sp Cond	01/01	
									Pest/PCBs TCL	01	LL PCBs (Total) / LL PCBs (Total) ng/ml SDG	01 / 01	
									Metals TAL	01	LL PCBs (Diss.) / LL PCBs (Diss.) ng/ml SDG	01 / 01	
OHL-7	—	—	1445	7.4°/7.4°	6.9	829	31	~1gal/6sec*	VOCs TCL+10	02	Cyanide	01	Collected from culvert where it empties into river, Rather clear w/ leachate odor
									BNAs TCL+20	01	COD	01	
									TCL Pest/PCBs EPTox Pest/Herbs	01	TSS, TDS, pH, SpC	01	
									TAL metals EPTox metals	01	Reac, Ignit, Corr	↓	
								↓ * This is a very rough est. mate Water flowing out of culvert @ a good pace					

* See note on page 1

John M Guzzi
12·7·91

ce: 12.6.91
ew: JG SP
te: Old Half moon Ldg 1

LAWLER, MATUSKY & SKELLY ENGINEERS
FIELD DATA SHEET FOR SOIL/SEDIMENT SAMPLES
Job No: 576-044

Oper: Surf H_2O/Sed/Leachate
Thermometer No: —

A.	TIME	SMPL DPTH	METHOD	TEXT.	CLR.	ODOR	SAMPLE BOTTLES: SAMPLE PARAMETERS	BOT. Nos.	SAMPLE PARAMETERS	BOT. Nos.	COMMENTS
SD-	0935	0-3"	S/S Spoon	Creamy smooth silty mud w/ a lot of org material	Brn w/ some Blk	None Noticed	VOCs TCL+10	02			Collected off shore where there is enough water to collect SW
							BNAs TCL+20 Pest/PCBs TCL	01			
							TAL metals, Cyanide	↓			
SD-	1050	0-3"	S/S Spoon	fn - cs Sand w/ some silt, rock, [illegible]	Brn, Gray mottled	None Noticed	VOCs TCL+10	02			Collected just off shore (~5') across from red house
SD	1210	0-3	S/S Spoon	med-fn sand + silt, some org. material	Brn + Gray	None Noticed	VOCs TCL+10	02			Collected off shore (~50') where there was enough water under ice to collect SW sample Station is up river from
							BNA's TCL+20, Pest/PCBs TCL	4 vials	*		
							TAL Metals, Cyanide	↓			
SD	* 1250	See OH=D-7 1050	→	→	→	→	TCL+20 BNAs, TCL Pest/PCBs	4 vials	*		"Cable Crossing" sign
							Metals TAL, Cyanide	↓			* we did not have enough sed. Jars so we used VOA vials. We returned to collect BNA's etc samples

* We were not supplied with enough soil jars for BNAs etc so we used 4 40ml vials for each of the last 2 stations

John M Grzywinski
12.6.91

Date: 12/4/91
Crew: JG [illegible]
Site: [illegible]
Operation: Surf H2O/Sed., Leachate

LAWLER, MATUSKY & SKELLY ENGINEERS
FIELD DATA SHEET FOR SURFACE WATER/LEACHATE

Job No: 576-044

pH No: DEC Orion 4776 / DEC Hydac
Therm. No: 894
Turbidity Meter No: DEC DRT-15C
Cond. ~~Velocity~~ Meter No: DEC TLC #560 / DEC Hydac

STATION No	SAMPLE DEPTH (ft)	TOTAL DEPTH (ft)	TIME (HHMM)	TEMP (°C)	pH	COND. (μmhos/cm)	TURB. (NTUs)	FLOW MEAS.	SAMPLE BOTTLES: SAMPLE PARAMETERS	BOT. Nos.	SAMPLE PARAMETERS	BOT. Nos.	COMMENTS
Field Blank	—	—	0940	—	—	—	—	—	VOCs TCL+10	02	COD / Cyanide	01/01	FB Performed on Bailer #4/1 before sampling OHSW-12
									BNA TCL+20	01	TSS TDS pH SpC.	01	
									Pest/PCBs TCL	01	LL PCBs Total	01	
									Metals TAL	01	LL PCBs Diss.	01	
OHSW-12	mid	1.5'	1000	0.8°	7.4/7.4	325	06	—	VOCs TCL+10	02	COD/Cyanide	01/01	Sample collected with Bailer #4/1 [illegible]
									BNAs TCL+20	01	TSS, TDS, pH, SpC.	01	
									Pest/PCBs TCL	01	LL PCBs Total	01	
									Metals TAL	01	LL PCBs Diss.	01	
OHSW-11	mid	2.0'	1105	1.4°	7.5	316	05	—	VOCs TCL+10	02	COD/Cyanide	01/01	150' from shore (OHSW-2) Samples collected directly into sample bottles
									BNAs TCL+20	01	TSS, TDS, pH, SpC	01	
									Pest/PCBs TCL	01	LL PCBs Total	01	
									Metals TAL	01	LL PCBs Diss	01	
OHSW-10	mid	2.0'	1130	1.3°	7.3	342	06	—	VOCs TCL+10	02	COD/Cyanide	01/01	50' from shore (OHSW-3) sample collected directly into bottles
									BNAs TCL+20	01	TSS, TDS, pH SpC	01	
									Pest/PCBs TCL	01	LL PCBs Total	01	
									Metals TAL	01	LL PCBs Diss	01	
OHSW-2	Surf	0.5'	1450	2.4°	7.1	SP Cond 571; Uncorr 317/344 @ 2.5°C	16	—	VOCs TCL+10	02	COD/Cyanide	01/01	Sample collected just off bank immed. down river from OHL-4. Slight Leachate-type odor
									BNAs TCL+20	01	TSS, TDS, pH SpC	01	
									Pest/PCBs TCL	01	LL PCBs Total	01	
									Metals TAL	01	LL PCBs Diss	01	

John M Gurzewicz 12.4.91

Date: 12.4.91
Crew: JG SP
Site: Old Halfmoon Ldfl
Operation: Surf H2O / Leachate / Seep

LAWLER, MATUSKY & SKELLY ENGINEERS
FIELD DATA SHEET FOR SURFACE WATER/LEACHATE

Job No: 576-044

pH No: DEC orion 4776
Therm. No: 894
Turbidity Meter No: DEC D RT-152
Velocity Meter No: DEC TLC #560

STATION No.	SAMPLE DEPTH (ft)	TOTAL DEPTH (ft)	TIME (HHMM)	TEMP (°C)	pH	COND. (µmhos/cm)	TURB. (NTUs)	FLOW MEAS.	SAMPLE BOTTLES				COMMENTS
									SAMPLE PARAMETERS	BOT. Nos.	SAMPLE PARAMETERS	BOT. Nos.	
OHL-4	—	—	1535	8.0° / 8.0°	6.9	804	12	1 l / 40 sec	VOC: TCL+10	02	Cyanide	01	Leachate-type odor sampled directly into bottles through S/S tube set-up (see photos)
									BNAs TCL+20	01	COD	01	
									TCL Pest/PCBs EPTox Pest/Herbs	01	TSS, TDS, pH SpC	01	
									TAL metals EPTox Metals	01	Ignit, Reac, Corr.	↓	
OHL-3	—	—	1655	10.9°	6.6	1364	06	1 l / 13 sec	VOCs TCL+10	02	Cyanide	01	Slight leachate type odor sampled directly into bottles through S/S tube set-up
									BNAs TCL+20	01	COD	01	
									TCL Pest/PCBs EPTox Pest/Herbs	01	TSS, TDS, pH SpC	01	
									TAL metals EPTox metals	01	Reac, Ignit, Corr	↓	
Trip Blank	—	—	—	—	—	—	—	—	VOCs TCL+10	02			* both vials have small bubbles

John Guzenski 12.4.91

ate: 12-4-91
rew: DS SP
ite: Halfmoon [illegible]

LAWLER, MATUSKY & SKELLY ENGINEERS
FIELD DATA SHEET FOR SOIL/SEDIMENT SAMPLES
Job No: 576-044

Oper: Sediment collection
Thermometer No: 894

TA. O.	TIME	SMPL DPTH	METHOD	TEXT.	CLR.	ODOR	SAMPLE BOTTLES: SAMPLE PARAMETERS	BOT. Nos.	SAMPLE PARAMETERS	BOT. Nos.	COMMENTS
SD-12	1025	0-3"	S/S Pan & S/S spoon	Creamy Smooth w/ org. matter	Dark Brown	None noticed	TCL+10 VOA'S TCL+20 BNA, TCL, Pest., PCB'S, TAL, Metals, CN	2 vials 1 Jar ↓			Sample collected 300 ft from shore (OHSD-2)
SD-1	1120	0-3"	"	"	"	"	TCL+10 VOA'S TCL+20 BNA TCL Pest PCB'S, TAL metal CN	2 vials 1 Jar ↓			Sample collected 150 ft from shore OHSD-2 Layer of veg. matter on top
SD-10	1140	0-3"	"	"	"	"	TCL+10 VOA'S TCL+20 BNA TCL Pest PCB'S TAL metals CN	2 vials 1 Jar ↓			sample collected 50 ft. from shore [illegible] matter on top.
SD-2	1520	0-3"	S/S Spoon	fn-med Sand w/ some silt & sm stones	lt-med brn w/ some red-orange staining	None Noticed	TCL+10 VOAs TCL+20 BNAs, TCL Pest/PCBs TAL Metals, Cyanide	02 01 ↓			Sample collected just off bank immediately downriver from OHL-4

John M Gruzewicz 12.4.91

Date: 12.5.91
Crew: JG SP
Site: Old Halfmoon Landfill
Operation: Surf H2O/Sed, Leachate

LAWLER, MATUSKY & SKELLY ENGINEERS
FIELD DATA SHEET FOR SURFACE WATER/LEACHATE

Job No: 576-044

pH No: DEC Orion # 4776 / DEC Hydac
Therm. No: 994/
Turbidity Meter No: DEC DRT 15-C
Cond ~~Velocity~~ Meter No: DEC TLC #500

STATION No.	SAMPLE DEPTH (ft)	TOTAL DEPTH (ft)	TIME (HHMM)	TEMP (°C)	pH	COND. (µmhos/cm)	TURB.* (NTUs)	FLOW MEAS.	SAMPLE BOTTLES				COMMENTS
									SAMPLE PARAMETERS	BOT. Nos.	SAMPLE PARAMETERS	BOT. Nos.	
OHSW-1	Surf.	1.0'	0830	1.8°	7.5	343	15	—	VOCs TCL+10	02	Cyanide/COD	01/01	sample collected from area along bank where water not frozen. It appears that there may be inflow from base of bank. There is no red-orange staining but the sediment here appears light tan compared to surrounding sediment
									BNAs TCL+20	01	TSS, TDS, pH, SpC	01	
									Pest/PCBs TCL	01	LL PCBs Total	01	
									Metals TAL	01	LL PCBs Diss	01	
OHSW-1 MS/MSD	↓	↓	↓	—	—	—	—	—	VOCs TCL+10	04	Cyanide	02	
									BNAs TCL+20	02			
									Pest/PCBs TCL	02			
									Metals TAL	02			
OHL-1	—	—	1145	11.6°	6.9	1460	160**	1l/24 sec	VOCs TCL+10	02	Cyanide	01	Collected @ base of cattails down infront of Clam Steam House. Leachate-type odor, bacteria-type staining. Collected sample w/ tube
									BNAs TCL+20	01	COD	01	
									Pest/PCBs TCL EPTox Pest/Herbs	01	TSS, TDS, pH SpC	01	
									TAL Metals EPTox Metals	01			
OHSW-9	Surf.	1.0'	1035	2.4°	8.0/8.1	293	06	—	VOCs TCL+10	02	Cyanide/COD	01/01	Sample collected upriver from Rt 87 bridges. Samples collected directly into jars
									BNAs TCL+20	01	TSS, TDS, pH SpC	01	
									Pest/PCBs TCL	01	LL PCBs Total	01	
									Metals TAL	01	LL PCBs Diss	01	
OHSW-5	Surf	0.5'	1300	1.8°	7.1	635	35		VOCs TCL+10	02	LL PCBs Total LL PCBs Total MS/MSD	01 01	Cut hole in ice & used dip bucket to collect samples. Sampled ~ 25-30' off shore where there was sufficient water
									BNAs TCL+20	01	LL PCBs Diss LL PCBs Diss MS/MSD	01 01	
									Pest/PCBs TCL	01	Cyanide/COD	01/01	
									Metals TAL	01	TSS, TDS, pH, SpC	01	

* Due to temp conditions we decided to run turbidities @ hotel @ end of day, ** OHL-1 was rather clear when collected but appears to have oxidized & turned light tan w/ some precipitant

John M Dunnigan 12.5.91

Date: 12.5.91
Crew: JG SP
Site: old Halfmoon Ldfl
Operation: Surf H_2O/Sed/Leachate

LAWLER, MATUSKY & SKELLY ENGINEERS
FIELD DATA SHEET FOR SURFACE WATER/LEACHATE

Job No: 576-044

pH No: DEC Orion #4776 / DEC Hydac
Therm. No: #994 / 894
Turbidity Meter No: DEC DRT 15C
Cond ~~Velocity~~ Meter No: DEC TLC*560 / DEC Hydac

STATION No.	SAMPLE DEPTH (ft)	TOTAL DEPTH (ft)	TIME (HHMM)	TEMP (°C)	pH	COND. (µmhos/cm)	TURB. (NTUs)	FLOW MEAS.	SAMPLE BOTTLES				COMMENTS
									SAMPLE PARAMETERS	BOT. Nos.	SAMPLE PARAMETERS	BOT. Nos.	
OHSW-4	Surf	0.5'	1420	2.2°	7.2	525	50	—	VOCs TCL+10	02	Cyanide/COD	01/01	sample collected from area where culvert runs under road into "bay". There is a lot of orange staining in this area. Sample collected w/ a teflon dip bucket
									BNAs TCL+20	01	TSS, TDS, pH, SpC	01	
									Pest/PCBs TCL	01	LL PCBs Total	01	
									Metals TAL	01	LL PCBs Diss.	01	
OHSW-3	Surf	0.5'	1600	1.5°/1.5°	7.1/7.1	Sp Cond 521 uncorr 296/302 @ 3.4°	31	—	VOCs TCL+10	02	LL PCBs Total / LL PCBs Total ms/msD	01 / 01	Sample collected just off bank along area accross from "No Dumping" sign. It was collected where water was not freezing. There is no orange staining in this area. Sample collected w/ teflon dip bucket
									BNAs TCL+20	01	LL PCBs Diss / LL PCBs Diss ms/msD	01 / 01	
									Pest/PCBs TCL	01	Cyanide/COD	01/01	
									Metals TAL	01	TSS TDS pH SpCond	01	
													* Note: Dan Eaton of DEC collected PCB samples from all surface water sample locations today. He also collected a sample from OHSW-2 which we sampled yesterday

John M Dzyenis 12.5.91

Date: 12.5.91
Crew: JG SP
Site: Old Halfmoon Landfill

LAWLER, MATUSKY & SKELLY ENGINEERS
FIELD DATA SHEET FOR SOIL/SEDIMENT SAMPLES
Job No: 576-044

Oper: Surf H_2O/Sed./Leachate
Thermometer No: —

STA. NO.	TIME	SMPL DPTH	METHOD	TEXT.	CLR.	ODOR	SAMPLE BOTTLES: SAMPLE PARAMETERS	BOT. Nos.	SAMPLE PARAMETERS	BOT. Nos.	COMMENTS
OHSD-1	1015	0-3"	S/S Spoon	med, fn sand + silt w/ small rocks & cobbles	Light tan	None	TCL+10 VOCs BNAs TCL+20, Pest/PCBs TCL TAL Metals, Cyanide	02 01 ↓			Collected @ edge of bank where water not freezing from inflow from base of bank
OHSD-1 MS/MSD	↓	↓	↓		↓	↓	TCL+10 VOCs MS BNAs TCL+20, Pest/PCBs TCL TAL Metals, Cyanide ↓	02 01 ↓	TCL+10 VOCs MSD BNAs TCL+20 Pest/PCBs TCL TAL Metals, Cyanide ↓	02 01 ↓	↓
OHSD-9	1110	0-2"	S/S Spoon	Creamy Smooth fine silt (cs-fn sand underneath)	Brn	None	TCL+10 VOCs BNAs TCL+20, Pest/PCBs TCL TAL Metals, Cyanide	02 01 ↓			Collected upriver from Rt 87 bridges
OHSD-5	1325	0-3"	S/S Ladle	Creamy Smooth Alot of Org Matter (leaves etc)	Drk Brn-Black	None	TCL+10 VOCs BNAs TCL+20 Pest/PCBs TCL TAL Metals, Cyanide	02 01 ↓			Cut hole in ice & collected sample through ice
OHSD-4	1435	0-3"	S/S Ladle	fn-cs sand w/ some silt, small rocks & organic material	Brn	None	TCL+10 VOCs BNAs TCL+20 Pest/PCBs TCL TAL Metals, Cyanide	02 01 ↓			Sampled from area next to culvert that runs into bay
OHSD-3	1635	0-3"	S/S Spoon	Silty muck w/ alot of organic material	Blk	None	TCL+10 VOCs BNAs TCL+20 Pest/PCBs TCL TAL Metals, Cyanide	02 01 ↓			Sampled 5' off bank in area where water is not freezing

[signature] 12.5.91

REFERENCE 8

TEST PIT AND PERC TEST LOG

DATE STARTED 9/22/92 TIME 900 Am JOB No. 576-067

DATE FINISHED ______ TIME ______ TEST PIT No. 1B

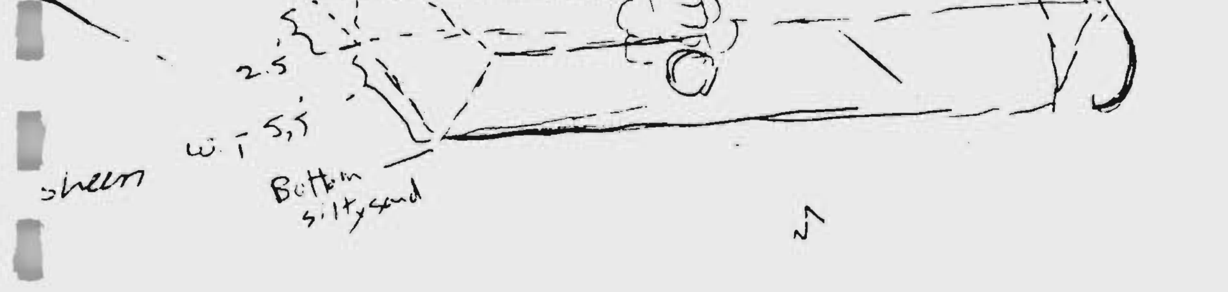
CLIENT NYSDEC SITE ______

SURFACE ELEVATION ______ EXCAVATOR ______

DATUM ______ EQUIPMENT ______

WATER ELEVATION ______ INSPECTOR ______

DEPTH (ft)	LITHOLOGIC SYMBOL	MOIST.	DESCRIPTION OF SOIL	STONES
0			Covered w/ grass, Topsoil (Dark Brown & Light Brown silty sand (Dry)	
1			Brown silty v.f. sand; little f. sand.	
2			→ Blackish garbage. Rubbers.. Bottles, Plastics (Blacks, wires, wood	Hi max Reading 95 p
3				
4				OVA 300
5				methane, 0-1
			Black water, no sheen on water. , some sheen on water surface. allot of wood peaces, Bottol	→ 5.5 w. Table
			* Bottom of the Garbage about 9' deep. silty sand at the bottom.	
			* Tires, Car parts,	
10			* Hole 23 x 3.5' x 10-11' Dimensions	
			* Samples were collected at the bottom	9'-10'
			* No extraordinary material was found.	
			*	



TEST PIT AND PERC TEST LOG

DATE STARTED ______ TIME ______ JOB No. ______

DATE FINISHED ______ TIME ______ TEST PIT No. TP. 2B

CLIENT ______ SITE ______

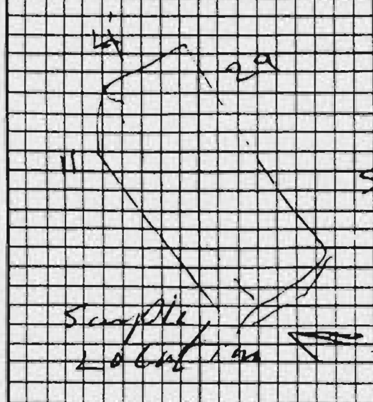
SURFACE ELEVATION ______ EXCAVATOR ______

DATUM ______ EQUIPMENT ______

WATER ELEVATION ______ INSPECTOR ______

DEPTH (ft)	LITHOLOGIC SYMBOL	MOIST.	DESCRIPTION OF SOIL	STONES
0			Grass, Brown Top soil 0-1'	
			Smilly Garbage, Blackish, wood, wires Plastic, Bottles, Paper, mixed with silt. (Orange Dry cheese	
			at 5 ft Deep 10 gal Drum (800 OVA) 50 methane, 600 another compounds	
5	Water Table.		* Parts of Refrigerator, wood Tires, some sheen, Product on the water surface	
			2 water Tank,	
			bottom at 11 ft silty clay to v.f. sandy silt. Percentage of metals is very High samples were collected from 11' deep clay native at the bottom.	
10				

TEST PIT LOCATION:



PERC TEST No. 1 DEPTH		PERC TEST No. 2 DEPTH	
RUN No.	TIME (min sec)	RUN No.	TIME (min sec)
1		1	
2		2	
3		3	
4		4	
5		5	
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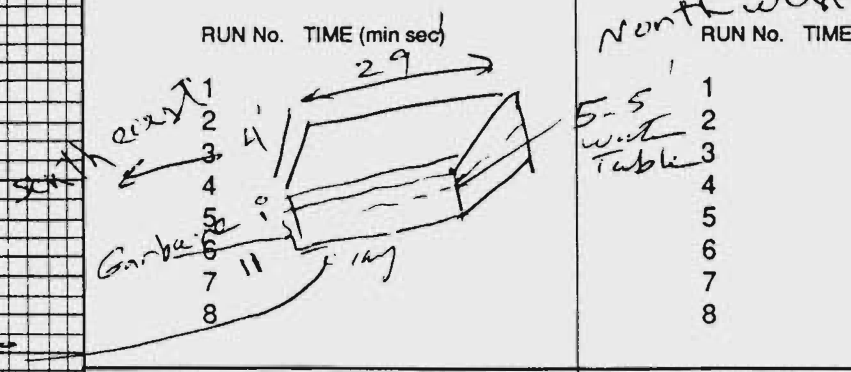
7		7	
8		8	



TEST PIT AND PERC TEST LOG

DATE STARTED 9/23/94 TIME 8 Am JOB No. 576-067

DATE FINISHED _____ TIME _____ TEST PIT No. ~~TP-3B~~

CLIENT _____ SITE _____

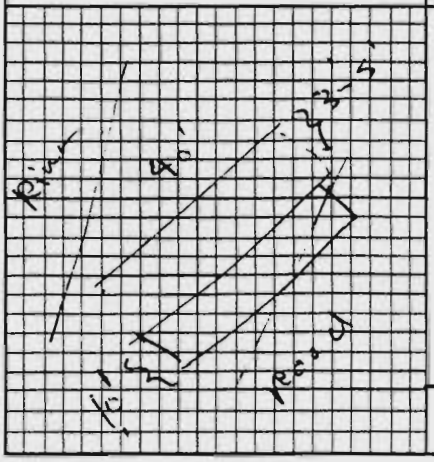
SURFACE ELEVATION _____ EXCAVATOR _____

DATUM _____ EQUIPMENT _____

WATER ELEVATION _____ INSPECTOR _____

DEPTH (ft)	LITHOLOGIC SYMBOL	MOIST.	DESCRIPTION OF SOIL	STONES
0	0 - 1	Dry	Top soil & grass. (Brown)	
	1 - 3		Garbage: (Paper, glass, clothes wires, mixed with Brown Fill	
	3 - 4'		One foot of gray silty clay Layer it could be the boundary for second left	
5				
6'	4 - 6		Garbage.; Bottles, ~~coals~~ Logs. Piece of Rock — Trees stems large size Gray water at 6' depth.	
W.T -			Bottle at 10' ft. Gray ft. of sand. & some Gray c lay..	
10			Samples are collected at 10 depth from sandy interface.	

TEST PIT LOCATION:



PERC TEST No. 1 DEPTH

RUN No. TIME (min sec)

1
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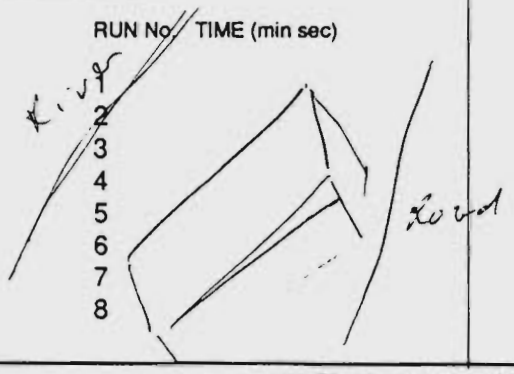

PERC TEST No. 2 DEPTH

RUN No. TIME (min sec)

1
2
3
4
5
6
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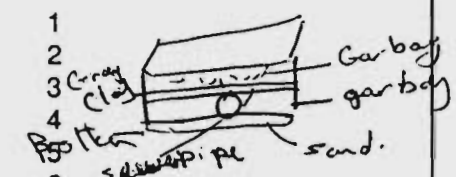
8



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TEST PIT AND PERC TEST LOG

DATE STARTED _____ TIME _____ JOB No. _____

DATE FINISHED _____ TIME _____ TEST PIT No. TB-4B

CLIENT _____ SITE _____

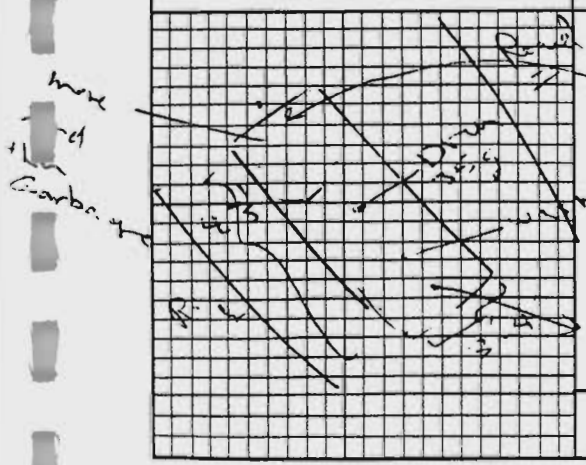
SURFACE ELEVATION _____ EXCAVATOR _____

DATUM _____ EQUIPMENT _____

WATER ELEVATION _____ INSPECTOR _____

DEPTH (ft)	LITHOLOGIC SYMBOL	MOIST.	DESCRIPTION OF SOIL	STONES
0				
0 - 2			0-2 13-cm Top. Soil, Grass - more silty at layer depth	
2-12'			Garbage mixed with grey silty sand. Zone is a group of multilaye Garbage and alternative	
5	10'		at water Table	
			one crushed drum was found No high readings was detected	
			Test Pit Direction southeast - NW	
10				

TEST PIT LOCATION:



PERC TEST No. 1 DEPTH

RUN No. TIME (min sec)

1
2
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4
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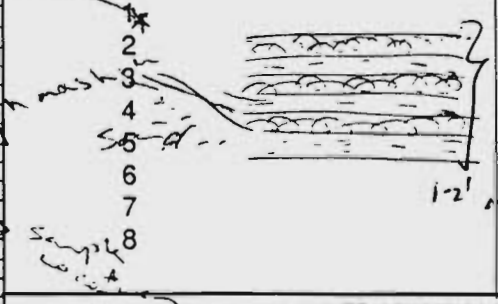

PERC TEST No. 2 DEPTH

RUN No. TIME (min sec)

1
2
3
4
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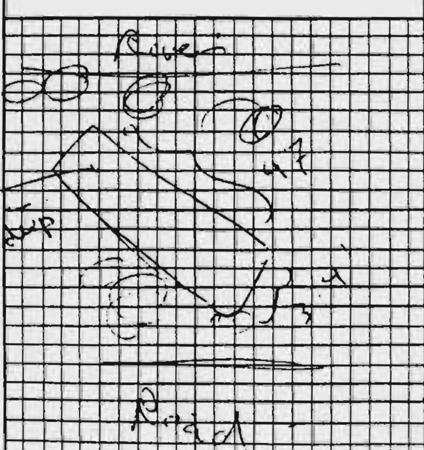
TEST PIT AND PERC TEST LOG

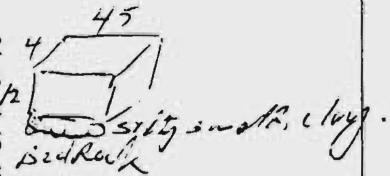
DATE STARTED		TIME	12:00
DATE FINISHED		TIME	
JOB No.	576-067	TEST PIT No.	T.P. 5B
CLIENT		SITE	
SURFACE ELEVATION		EXCAVATOR	
DATUM		EQUIPMENT	
WATER ELEVATION		INSPECTOR	

DEPTH (ft)	LITHOLOGIC SYMBOL	MOIST.	DESCRIPTION OF SOIL	STONES
0 (0–0.5')			Topsoil & Brown silty sand fill	
	0.5'–		Garbage – Papers, metals (Refrigerator... wood, plastic, glass mixed with sand more appliance junk, metal pipes, methane gas bubbling from the garbage bottom.	
5'				
6'			Grayish Black water, no sheen – smelly garbage southeast Trench Direction. bedrock at 12' deep gray – silty clay; some v.f. sand at the bottom	
10				

TEST PIT LOCATION:



PERC TEST No. 1 DEPTH		PERC TEST No. 2 DEPTH	
RUN No.	TIME (min sec)	RUN No.	TIME (min sec)
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
8		8	



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TEST PIT AND PERC TEST LOG

DATE STARTED ______ TIME ______ JOB No. ______

DATE FINISHED ______ TIME ______ TEST PIT No. TP-6B

CLIENT ______ SITE ______

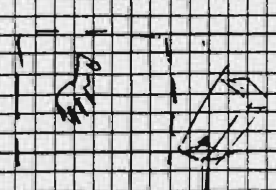
SURFACE ELEVATION ______ EXCAVATOR ______

DATUM ______ EQUIPMENT ______

WATER ELEVATION ______ INSPECTOR ______

DEPTH (ft)	LITHOLOGIC SYMBOL	MOIST.	DESCRIPTION OF SOIL	STONES
0	0 - .4'	Dry	Topsoil + grass (Brown silty sand	
	0.4 - 6		Garbage mixed with silty brown sand.. Plastic, glass, wires, paper	low odor ~~no high~~ decay No water Table
	6 - 10'		Natural material of greenish yellow silty clay with roots in it No water (only traped into fracture)	
5	10' -		hit Refusal : it may be a blocks of Rock.	
			No ground water was detected at 10' deep.	
10				

TEST PIT LOCATION:



PERC TEST No. 1 DEPTH		PERC TEST No. 2 DEPTH	
RUN No.	TIME (min sec)	RUN No.	TIME (min sec)
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
8		8	

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TEST PIT AND PERC TEST LOG

DATE STARTED ______ TIME ______ JOB No. ______

DATE FINISHED ______ TIME ______ TEST PIT No. T.P. 7B

CLIENT ______ SITE ______

SURFACE ELEVATION ______ EXCAVATOR ______

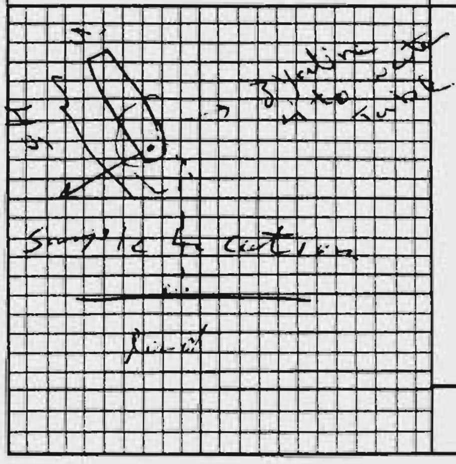
DATUM ______ EQUIPMENT ______

WATER ELEVATION ______ INSPECTOR ______

DEPTH (ft)	LITHOLOGIC SYMBOL	MOIST.	DESCRIPTION OF SOIL	STONES
0	0-1'		Topsoil Brown silty sand.	
	1'-3'		garbage - clayey mixed with sand	
	3'-5		garbage (glass, Tires, wood, Paper & Plastic) mixed with greenish gray silty Clay	
5	5'-6'		+ water at 5.6 ft and methan gas	
	6'-8'		+ Garbage to 8' deep	
	8'→		Bottom of Bluish gray silty Clay. Little sand	
			sheen and strong ~~with~~ sweet odor of aromatic compound.	
10			samples ~~were~~ were collected at interface 8' deep. from sheeny strong odor clay.	Reading over 2500 m[illegible] 400 HNU
			+ Trench was extended to 45 ft tracing the odor until ~~[illegible]~~ it was gone.	Most of the day

and cotton were saturated

TEST PIT LOCATION:	PERC TEST No. 1 DEPTH	PERC TEST No. 2 DEPTH



RUN No. TIME (min sec)

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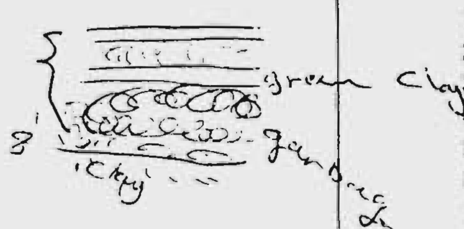

RUN No. TIME (min sec)

1
2
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TEST PIT AND PERC TEST LOG

DATE STARTED 9/24/92 TIME 7:30 Am JOB No. _____

DATE FINISHED _____ TIME _____ TEST PIT No. TP 8B

CLIENT _____ SITE _____

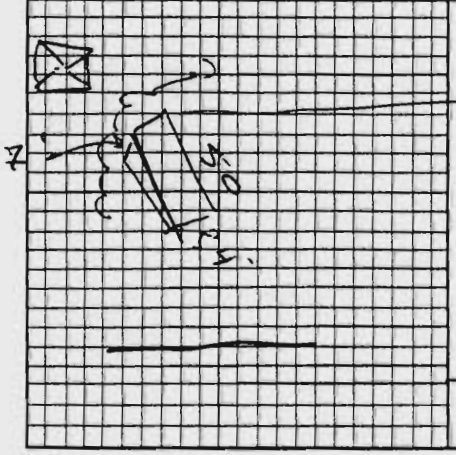
SURFACE ELEVATION _____ EXCAVATOR _____

DATUM _____ EQUIPMENT _____

WATER ELEVATION _____ INSPECTOR _____

DEPTH (ft)	LITHOLOGIC SYMBOL	MOIST.	DESCRIPTION OF SOIL	STONES
0	0 - 5		Topsoil, Roots, grass. Dry, Loose sand & layers of garbage over 50 ft long the garbage was thicking from 1.5' to 3.0' of garbage	1.0 1.5 3.0
	1 - 4			
	4 - 8		* Dry Compacted greenish yellow Clay, Roots. no smell, No odor, no water.	
5				
10				

TEST PIT LOCATION:



PERC TEST No. 1 DEPTH		PERC TEST No. 2 DEPTH	
RUN No.	TIME (min sec)	RUN No.	TIME (min sec)
1.0	Topsoil	1	
1.5	Garbage	2	
3.0	natural clay compacted	3	
4		4	
5		5	
6		6	
7		7	
8		8	

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TEST PIT AND PERC TEST LOG

DATE STARTED 9 24 TIME 10 50 JOB No.

DATE FINISHED 9/24 TIME TEST PIT No. TP 9B

CLIENT SITE

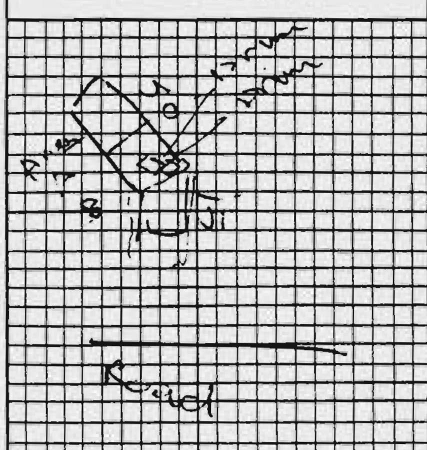
SURFACE ELEVATION EXCAVATOR

DATUM EQUIPMENT

WATER ELEVATION INSPECTOR

DEPTH (ft)	LITHOLOGIC SYMBOL	MOIST.	DESCRIPTION OF SOIL	STONES
0	0 —	Area A	Garbage on surface mixed with Brown silty sand. Dry Plastic, Tires, glass, wood cans, metals, paint bucket was found with green Paint in it. Ey water Tanks. Bedrock at 12' deep, Thin layer of greenish gray Clay on the surface of the bedrock. No [illegible] No odor.	Licence Plate N.Y 1962
5				
10		Area B	+ Garbage on surface mixed with Brown silty to Black × One Drum was found and product was sampled from it (at 3' deep) (could not identified). × Another Drum was found near the first one was GE and Silicone label on it.	
W. Table 12'				

TEST PIT LOCATION:



PERC TEST No. 1 DEPTH

water [illegible] at 12' below surface

RUN No. TIME (min sec)

Bedrock was found at 13'

× VOA sample X

1
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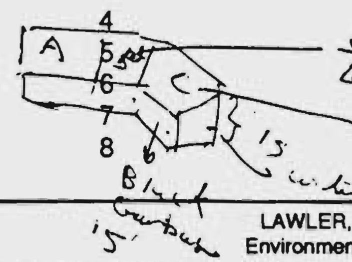

PERC TEST No. 2 DEPTH

RUN No. TIME (min sec)

1 area C
2 mixed garbage
3
4 To 13' with Table
5 at bottom at 14.
6 [illegible] of silty clay
7 sample gray.
8 location

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TEST PIT AND PERC TEST LOG

DATE STARTED 9/25/92 TIME _____ JOB No. 576-067

DATE FINISHED _____ TIME _____ TEST PIT No. TP-12B

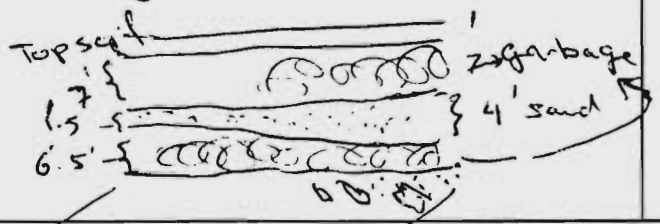
CLIENT _____ SITE _____

SURFACE ELEVATION _____ EXCAVATOR _____

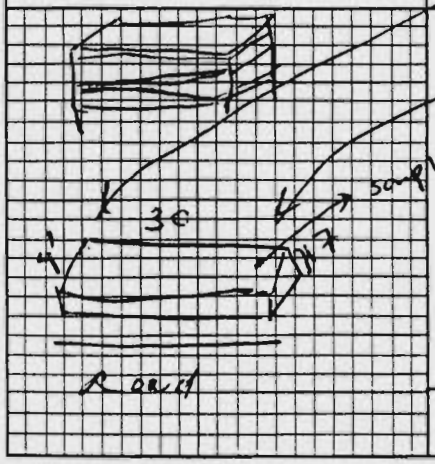
DATUM _____ EQUIPMENT _____

WATER ELEVATION _____ INSPECTOR _____

DEPTH (ft)	LITHOLOGIC SYMBOL	MOIST.	DESCRIPTION OF SOIL	STONES
0	0 – 1'	Dry	Brown Top Soil & Fill	
	1' – 8'		Household garbage (Plastic, paper Bottles, Rusty metales, Tires, woods, Junks, (water Tank,)	
	8 – 9.5		Layer of grey sand (left Boundary) and clay.	
5	9.5-16		Second Bfft of Garbage. (New clothes, same Type of garbage	
	16 → 17 Refusal		at the bottom grey silty clay with Roots and Rock Pieces at 16'-17' dep. (Refusal at 17'	
			Sample was collected from green gray silty clay, some Roots & Rocks.	
10				



TEST PIT LOCATION:



PERC TEST No. 1 DEPTH

RUN No. TIME (min sec)

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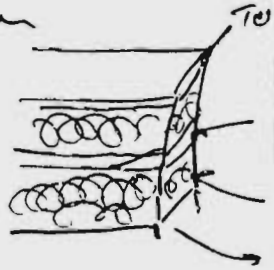

PERC TEST No. 2 DEPTH

RUN No. TIME (min sec)

1
2
3
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8

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TEST PIT AND PERC TEST LOG

DATE STARTED 9/25/92 TIME 1130 JOB No. _____

DATE FINISHED _____ TIME _____ TEST PIT No. ~~TP. 13~~

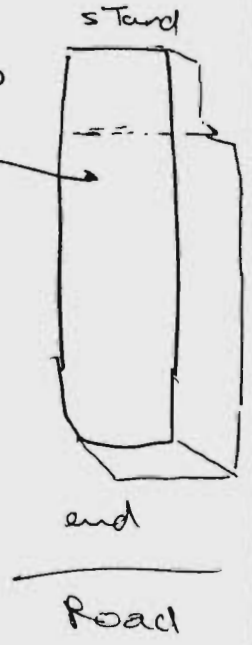
CLIENT _____ SITE _____

SURFACE ELEVATION _____ EXCAVATOR _____

DATUM _____ EQUIPMENT _____

WATER ELEVATION _____ INSPECTOR _____

DEPTH (ft)	LITHOLOGIC SYMBOL	MOIST.	DESCRIPTION OF SOIL	STONES
0	0-0.5		Topsoil ~~mixed with~~ garbage.	
	0.5-5		Garbage (Bottles, cans, glass, Plastic wood, Tires. Paper.	
			Broken	
			+ A GE x Drum was found at 5' deep from the hole filled with white sand material easy to be friable, it has silicone cable and GE Tradmark on it.	
5	5'-16'		x samples were collected from the center of the canal at 16-17' depth. of greenish gray silty sand some clay, and Rock pieces.	
10				



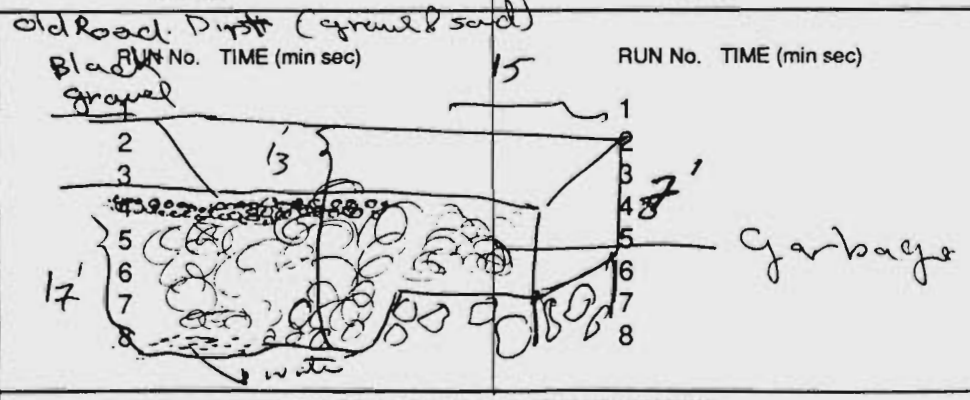
TEST PIT LOCATION:

PERC TEST No. 1 DEPTH

RUN No. TIME (min sec)

PERC TEST No. 2 DEPTH

RUN No. TIME (min sec)



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TEST PIT AND PERC TEST LOG

DATE STARTED 9/28/92 TIME 14 30 JOB No. ____

DATE FINISHED ____ TIME ____ TEST PIT No. TP-19B

CLIENT ____ SITE ____

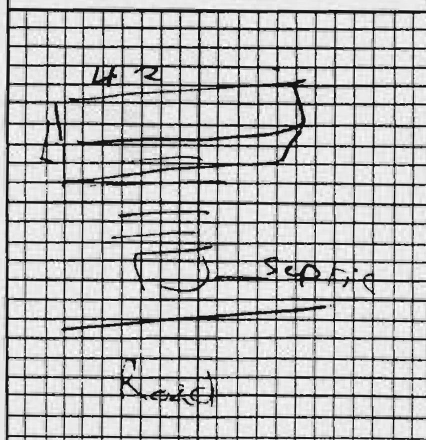
SURFACE ELEVATION ____ EXCAVATOR ____

DATUM ____ EQUIPMENT ____

WATER ELEVATION ____ INSPECTOR ____

DEPTH (ft)	LITHOLOGIC SYMBOL	MOIST.	DESCRIPTION OF SOIL	STONES
0	0-2		Brown silty Topsoil (grass on the Top)	
1	2-5	household	Garbage (mixed with fill (Brown silty sand)	
			Paper, Plastic, Tires, Bottles, wood)	
2				
3	5-10		Standing water Table, and methane is Bubbling (gas is coming out, sewer smell.	
4			garbage (Blackish).	(OVA) → breathing zone 1 ppm methane 5-10
5				
at	10-11-12'		OVA equal (Background).	
			at 12' deep a crushed drum filled with	
			Blue Liquid (heavy Like Paint) was found	
			and a 2 VOA & 300 Bottle were collected	
			the drum was cover Back and will be pu	
10	Area →		A	

TEST PIT LOCATION:



PERC TEST No. 1 DEPTH	
RUN No.	TIME (min sec)
1	
2	
3	
4	
5	
6	
7	
8	

PERC TEST No. 2 DEPTH	
RUN No.	TIME (min sec)
1	
2	
3	
4	
5	
6	
7	
8	

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TEST PIT AND PERC TEST LOG

DATE STARTED 9/29/92 TIME 0800 JOB No. 576-067

DATE FINISHED ______ TIME ______ TEST PIT No. 15-B

CLIENT ______ SITE ______

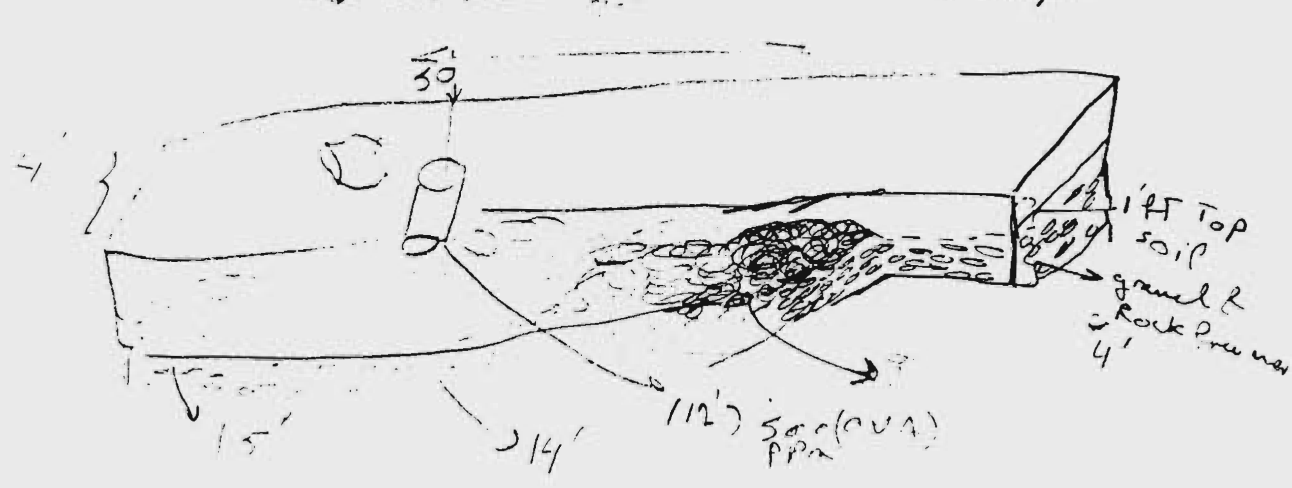
SURFACE ELEVATION ______ EXCAVATOR ______

DATUM ______ EQUIPMENT ______

WATER ELEVATION ______ INSPECTOR ______

DEPTH (ft)	LITHOLOGIC SYMBOL	MOIST.	DESCRIPTION OF SOIL	STONES
0	0 – 1		Brown Topsoil and sand Fill	
1	1 – 3		~~Black~~ Black gravel and Rock fragment	extend To 3' deep
	(old Road)		~~garbage start to show up laterally~~ on the	
2			~~Top of the gravel. Household garbage~~	mixed with Fill
3			~~(Paper, Plastic, Bottle, Junks, wood)~~	
reading 8 – 4	2 – 3 ppm HNu		~~at 50' extention a drum~~ Blue ~~with no label~~	was found
5			yellow glue ~~viscous~~ heavy viscous Liquide was found inside and was enough to collect samples	
			another Drum was found Crushed Empty, no Lable	
			* bottom at 14' (silty) gray sand. Rock fragments, Roo[ts]	
			* extend to 5' and Bottom was at 15 the same [illegible] silty sand [illegible]	
10			* ~~As~~ samples were collected, from the B interface Bottom.	
			* The sampled Drum was [illegible] Packed and	

and was put back in the hole at [illegible] deep.



TEST PIT AND PERC TEST LOG

DATE STARTED 9/29/92 TIME 1200 JOB No. 57[illegible]

DATE FINISHED 9/29/92 TIME 1330 TEST PIT No. TP-16B

CLIENT _____ SITE _____

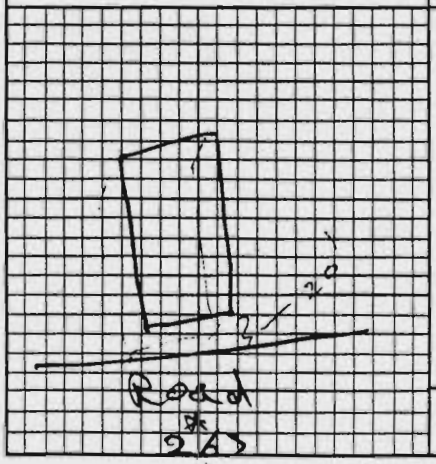
SURFACE ELEVATION _____ EXCAVATOR _____

DATUM _____ EQUIPMENT _____

WATER ELEVATION 1.0 below surface INSPECTOR _____

DEPTH (ft)	LITHOLOGIC SYMBOL	MOIST.	DESCRIPTION OF SOIL	STONES
0	0 – 0.5'		Top mixed garbage and Topsoil	
	0.5 – 1.5		Garbage (household) paper, Bottles Plastic, sand Fill.	
	1.0 w.t. →		water Table. (shallow water Table). gray color.	
	1.5 – 6'		garbage (household.)	
5	6'–		bottom sediments (gray silty fine sand, some clay & very fined sand & rock chips	
			* Same sheen on wat surface from the bottom sample.	
			* Sample were collected from the silty sand (gray)	
10			* No Reading During the digging because 1 - shallow water Table (1.0)	

TEST PIT LOCATION:

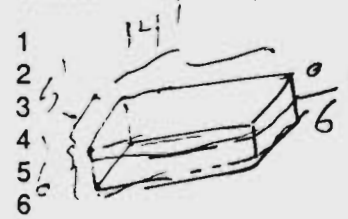


PERC TEST No. 1 DEPTH 2 – less garbage thick

PERC TEST No. 2 DEPTH ss (6')

3 – less cover Fill (0.5')

RUN No.	TIME (min sec)	RUN No.	TIME (min sec)
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
8		8	



LAWLER, MATUSKY & SKELLY ENGINEERS
Environmental Science & Engineering Consultants

APPENDIX B

DATA USABILITY SUMMARY

REFERENCE 45

DATA USABILITY REPORT

OLD HALFMOON LANDFILL SITE

The report from Data Validation Services concluded that analyses performed on samples collected from the Old Halfmoon Landfill site were in compliance with the exceptions discussed below.

The volatiles analyses of samples OHTB-1 and -14-D1 were found not in compliance because they were analyzed in association with a method blank containing a surrogate failure. A reanalysis performed for OHTB-1 was one day outside the prescribed holding time. The outlying surrogate response in the associated method blank and the holding time violation do not affect the reported results in OHTB-1 or -14-D1; the data for the initial analyses and reanalysis are usable without qualification.

The volatiles analyses of samples OHTB-4 and -5 were initially processed under a continuing calibration standard (CCS) with an outlying response requiring reanalyses; the reanalyses holding time was exceeded. As the validator found the outlying CCS response was consistent with calibration standards in subsequent calibration curves, and the reanalyses were only one to two days outside the holding time, the initial and reanalysis for both samples are usable without qualification.

Samples OHTB-9-D1, -14-D1, and -15-D1 were analyzed at medium level using a methanol extraction. Dilutions were required to bring target compounds into the calibration range for quantification. The final analyses were one to two days outside the required seven-day holding time. Sample OHTB-7 was also analyzed at medium level and one day past the required holding time; a medium-level matrix spike/matrix spike duplicate (MS/MSD) (OHTB-7 MS/MSD) was processed seven days beyond the required holding time. As the methanol extraction was performed for all these samples within the required holding time, concentrations of target compounds analyzed one to two days outside the prescribed holding time are not likely to have been significantly compromised and are usable without qualification. However, target compounds in the MS/MSD do show some losses in

comparison with OHTB-7. Spike recoveries were acceptable with the exception of toluene, where recoveries were -249 and -320%. The MS/MSD data are usable as estimated concentrations that confirm the presence and concentration of target analytes in OHTB-7. Poor toluene matrix spike recoveries that may have been a result of sample nonhomogeneity or spike losses require the reported toluene concentration in OHTB-7 to be qualified as estimated and likely biased low.

A less dilute volatile organic compound (VOC) reanalysis performed on drum sample OHTB-9-D1 was one day beyond the required holding time, and a diluted reanalysis performed sample OHTB-15-D1 was performed four days beyond the required holding time. The violation in holding time has no significant bearing on the elevated levels of toluene detected in these samples. The laboratory qualified the elevated level in OHTB-9-D1 with a "b" to indicate detection of a low level of toluene in the associated method blank, likely due to the elevated levels in the samples; the low levels in the associated blank are insignificant compared to the toluene level in the sample and should not be misconstrued as indicating a laboratory contaminant. The data for both analyses are usable without qualification.

Soil samples OHTB-7, -7MS, and -7MSD and drum samples OHTB-9-D1, -14-D1, and -15-D1 were not in compliance because they were not associated with a matrix spike blank. The reported data are unaffected by this noncompliance and are usable without qualification.

The volatile toxicity characteristic leaching procedure (TCLP) reanalysis of OHTB-7 was performed two days outside the prescribed holding time (14 days) following the initial TCLP extraction, causing the analysis to be in noncompliance. The initial analysis was analyzed at a 1:26 dilution within the holding time. A reanalysis was performed at 1:20 dilution. No TCLP volatile components were reported in either analyses. The reported detection limits were well below the TCLP regulatory limits for both analyses. The reported data are usable to indicate that elevated levels of volatile components are not present in the original TCLP extract.

The volatile TCLP analyses for drum samples OHTB-9-D1 and -14-D1 were outside the required holding time by several hours; the reported results are unaffected by this noncompliance and usable without qualification.

The semivolatile analysis for OHTB-13 was not in compliance because it was performed minutes outside the calibration time frame. The reported data are unaffected by this noncompliance and are usable without qualification.

Two samples (OHTB-15 and -16) were received at the laboratory four days after the date of sampling due to shipping problems (the shipping label apparently was removed from the cooler during handling and the cooler was returned to LMS). The four-day holding time violation of the analyses impacts the results. The reported concentrations for these samples may reflect a loss of analytes, particularly for the volatile fraction.

The pesticide/PCB analysis of sample OHTB-16 was not in compliance due to a nine-day violation in extraction holding time. This sample was also delayed for four days prior to laboratory receipt, resulting in a total of 13 days before the sample was extracted. Low levels of several pesticides were reported in this analysis. Although pesticides generally exhibit low volatility, an extended holding time may have compromised the results of this analysis. The data are qualified to indicate that the reported concentrations are biased low due to an extension in holding time, but are usable to indicate elevated levels of pesticides are not present in this sample.

The validator found the remaining data to be in compliance with NYSDEC ASP (December 1991); however, several issues affecting data usability are discussed and summarized below.

Sample OHTB-11 was reanalyzed for VOCs because of an initial elevated surrogate recovery of bromofluorobenzene (BFB) of 119%, above the 113% limit. The high level of toluene in the reanalysis is qualified with an "e" to indicate that the toluene response is above the calibration range and the reported concentration is estimated. The outlying surrogate response in the initial analysis does not affect the usability of the reported data; both analyses are usable without qualification.

The acetone and methylene chloride levels reported in the medium-level and diluted volatile analyses should not be regarded as "elevated" because they incorporate dilution effects and errors; the reported concentrations are estimated and should not be regarded as sample components.

The laboratory case narrative indicates that the 1,1,1-trichloroethane (1,1,1-TCA) present in the sample taken from OHTB-13 is likely due to carryover from an unrelated sample processed immediately before OHTB-13 that contained elevated levels of 1,1,1-TCA. The validator agreed with the laboratory and recommended rejecting the reported 1,1,1-TCA concentration. The reported 1,1,1-TCA concentration in OHTB-13 was rejected and is not reported.

Several semivolatile tentatively identified compounds (TICs) were qualified with a "b" and should not be considered sample components as they were detected in similar concentrations in the associated method blank.

The TCLP semivolatile fraction for sample OHTB-15-D1 was not in compliance due to a 10-day method extraction holding time following the initial TCLP extraction. Low levels of methylphenol (cresol) compounds were found, but were not reported in the target compound list (TCL) analysis. The violation in holding time does not significantly affect the reported results as the initial TCLP extraction was performed within the required holding time. The data are usable without qualification.

With the exception of OHTB-15 and -16, which were analyzed under a separate sample delivery group, all the reported lead concentrations for the remaining soil and drum samples are unreliable due to negative spike recoveries for samples analyzed by inductively coupled plasma (ICP), elevated spike recoveries for samples analyzed by graphite furnace atomic absorption (GFAA), and poor duplicate correlation for both methods (134% difference (D) and 151%D by ICP and GFAA, respectively). As all the samples contained detectable levels of lead, the poor spike performance may reflect sample nonhomogeneity. The lead data are usable, with the qualification that all the reported concentrations qualified with an "R" or "N"

can be used only to indicate the presence of lead and do not reliably convey the actual concentration in the samples.

Antimony and selenium matrix spike recoveries were slightly depressed (40 and 65%, respectively). These values are not excessively low, especially for soil samples where sample nonhomogeneity and interferences are common. The data do not require qualification and are usable as reported.

Overall, the results of the LMS usability review concluded that, with the exception of the reported concentration of 1,1,1-TCA in sample OHTB-13, which was rejected as a laboratory contaminant, the data submitted for the Old Halfmoon Landfill site are usable with the appropriate qualifications discussed in this usability report.

APPENDIX C

PERTINENT FILES OR RECORDS

REFERENCE 13

CORPS OF ENGINEERS

U. S. ARMY

U. S. LAKE SURVEY

CHART NO. 180

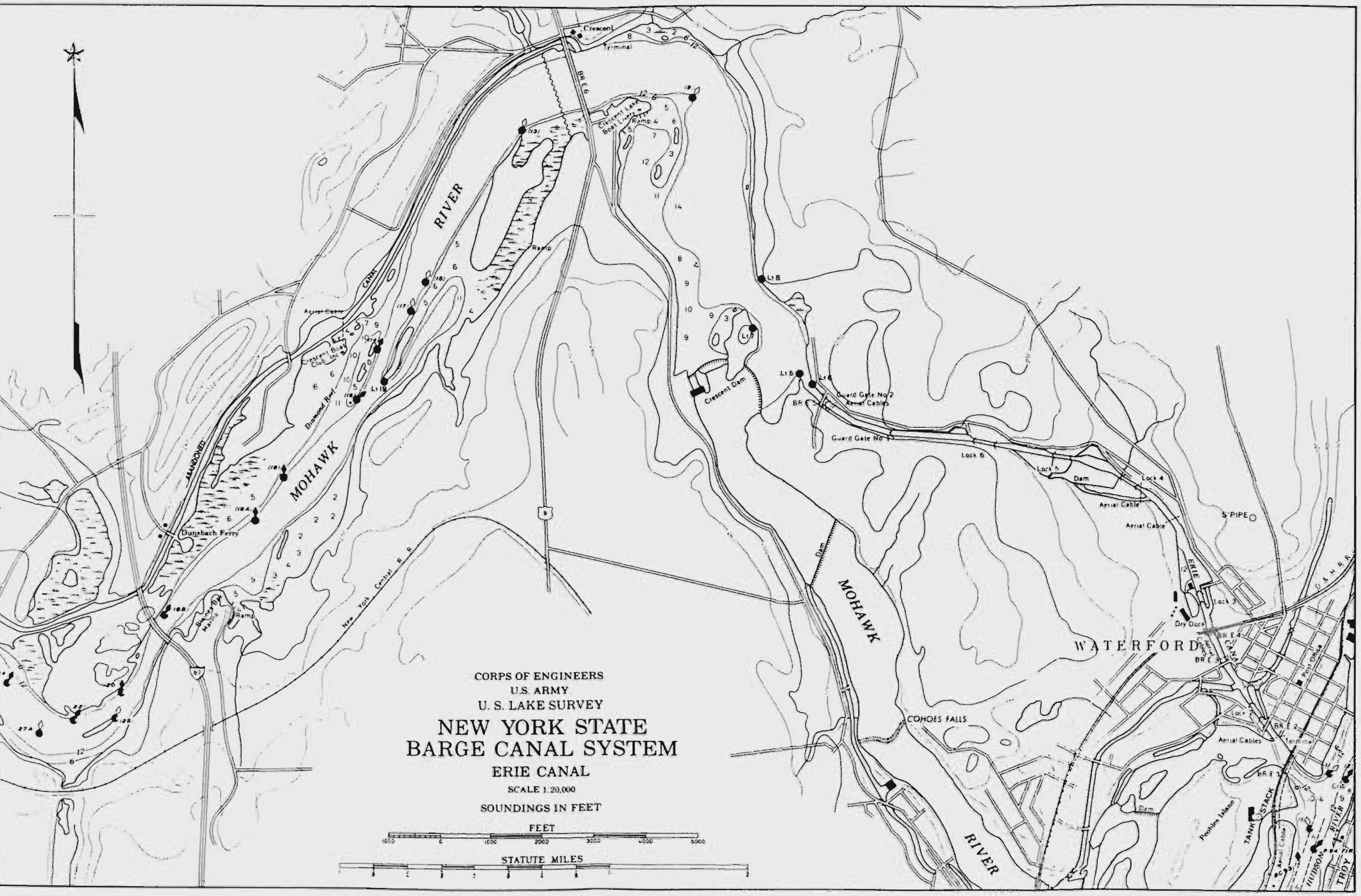
NEW YORK STATE
BARGE CANAL SYSTEM

CAYUGA-SENECA, OSWEGO, ERIE AND CHAMPLAIN CANALS

Published and sold by
U.S. ARMY ENGINEER DISTRICT, LAKE SURVEY
CORPS OF ENGINEERS
630 Federal Building, Detroit, Michigan 48226 20 JAN 1967
AIDS TO NAVIGATION CORRECTED TO

EDITION OF 1964

PRICE $2.0


Crescent
Terminal
BR E 6
RIVER
CANAL
ABANDONED
MOHAWK
Dunsbach Ferry
Diamond Reef
Crescent Boat Club Inc
Crescent Lake Boat Livery
Ramp
Crescent Dam
Guard Gate No 2
Aerial Cables
Guard Gate No 1
Lock 6
Lock 5
Dam
Lock 4
Aerial Cable
S'PIPE
ERIE
Lock 3
Dry Dock
WATERFORD
Post Office
Lock 2
Terminal
Aerial Cables
COHOES FALLS
MOHAWK
RIVER
Peebles Island
TANK
STACK
HUDSON RIVER
TROY
New York Central R.R.
CORPS OF ENGINEERS
U.S. ARMY
U. S. LAKE SURVEY
NEW YORK STATE
BARGE CANAL SYSTEM
ERIE CANAL
SCALE 1:20,000
SOUNDINGS IN FEET
FEET
STATUTE MILES

REFERENCE 16

CORPS OF ENGINEERS
U. S. ARMY

U. S. LAKE SURVEY

CHART NO. 180

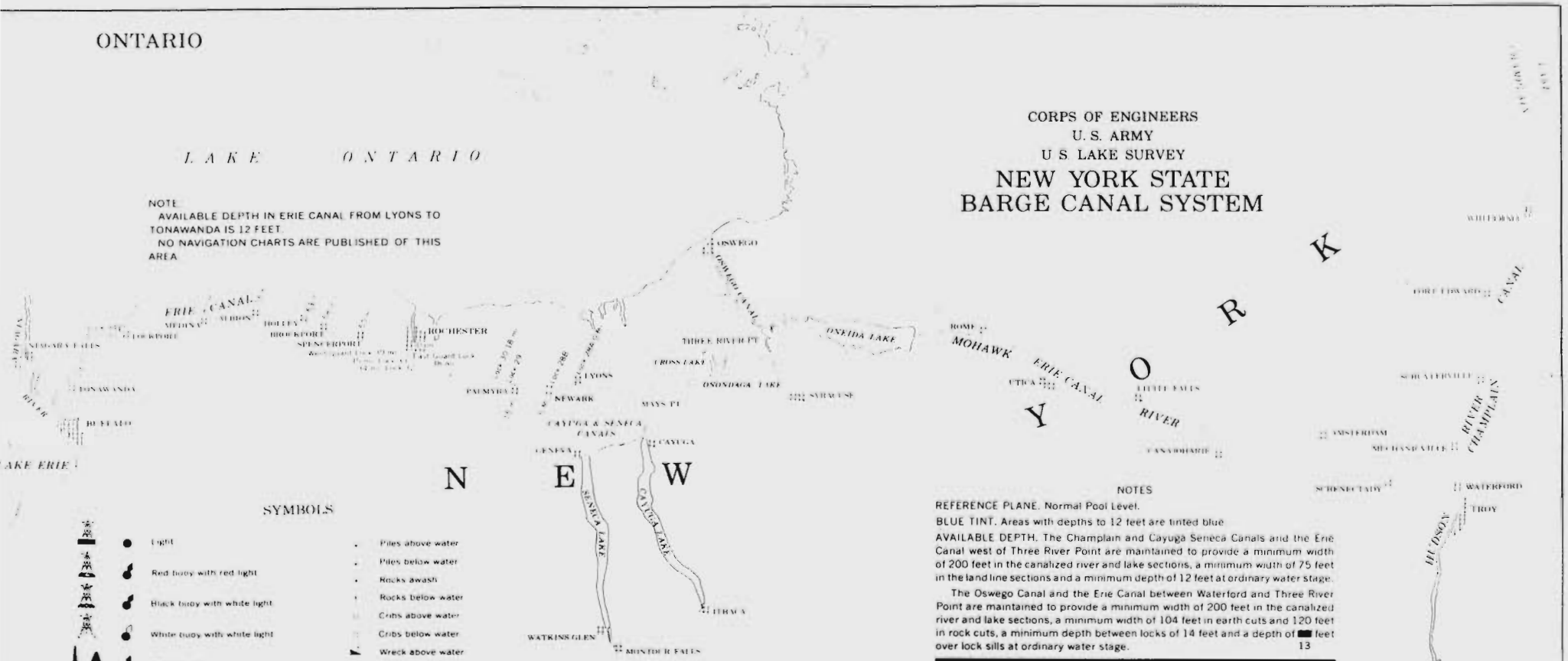
NEW YORK STATE
BARGE CANAL SYSTEM

Published and sold by
DEPARTMENT OF THE ARMY
LAKE SURVEY DISTRICT, CORPS OF ENGINEERS
630 Federal Building and U. S. Courthouse, Detroit, Michigan 48226

AIDS TO NAVIGATION CORRECTED TO
17 MARCH 1970

EDITION OF 1969

PRICE $2.00



For complete list of symbols and abbreviations see Chart No. 1.

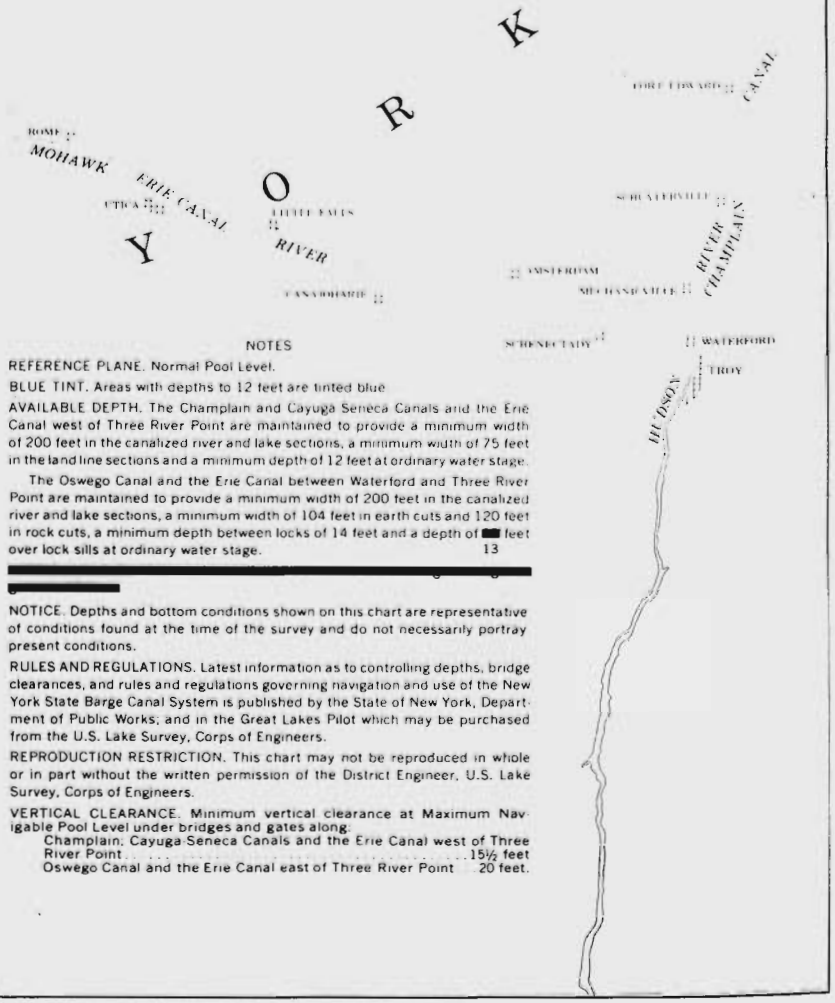
All lighted aids to navigation, stationary and floating, on Oswego and Cayuga-Seneca Canals and on the Erie Canal west of Sylvan Beach display a 1 second flash every 4 seconds.

REQUEST FOR INFORMATION

Mariners are urged to report promptly to the U. S. Lake Survey any conditions found to differ from or to be additional to those shown on this chart in order that they may be fully investigated and proper corrections made. In some instances, a section of the chart should be submitted to illustrate the reported conditions, in which event, a new chart will be issued to replace the used copy, providing the revised chart is the current edition and not an obsolete copy.

CORPS OF ENGINEERS
U. S. ARMY
U S. LAKE SURVEY

NEW YORK STATE BARGE CANAL SYSTEM



NOTES

REFERENCE PLANE. Normal Pool Level.

BLUE TINT. Areas with depths to 12 feet are tinted blue

AVAILABLE DEPTH. The Champlain and Cayuga Seneca Canals and the Erie Canal west of Three River Point are maintained to provide a minimum width of 200 feet in the canalized river and lake sections, a minimum width of 75 feet in the land line sections and a minimum depth of 12 feet at ordinary water stage.

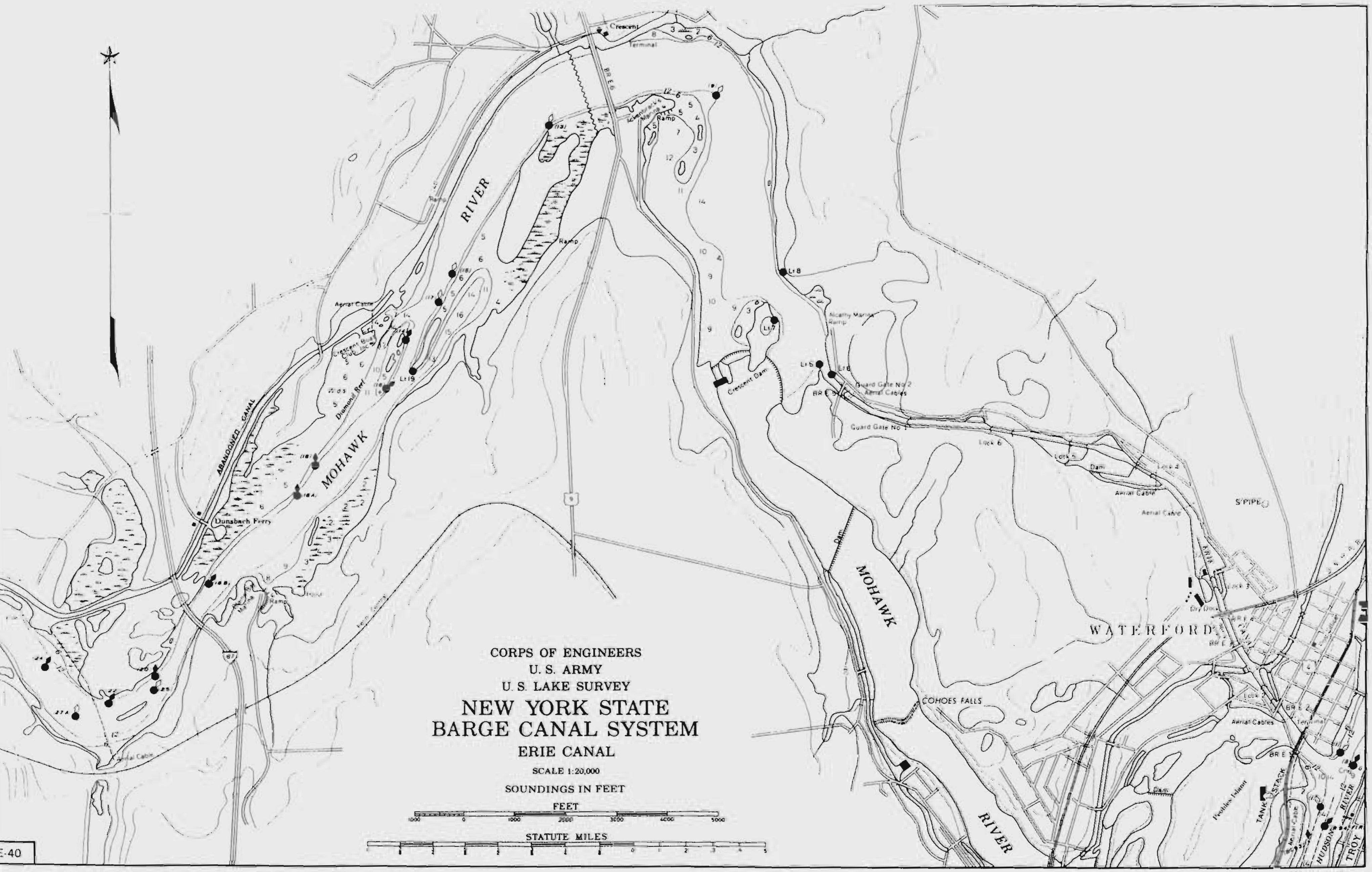
The Oswego Canal and the Erie Canal between Waterford and Three River Point are maintained to provide a minimum width of 200 feet in the canalized river and lake sections, a minimum width of 104 feet in earth cuts and 120 feet in rock cuts, a minimum depth between locks of 14 feet and a depth of [redacted] feet over lock sills at ordinary water stage. 13

NOTICE. Depths and bottom conditions shown on this chart are representative of conditions found at the time of the survey and do not necessarily portray present conditions.

RULES AND REGULATIONS. Latest information as to controlling depths, bridge clearances, and rules and regulations governing navigation and use of the New York State Barge Canal System is published by the State of New York, Department of Public Works, and in the Great Lakes Pilot which may be purchased from the U.S. Lake Survey, Corps of Engineers.

VERTICAL CLEARANCE. Minimum vertical clearance at Maximum Navigable Pool Level under bridges and gates along:

Champlain, Cayuga-Seneca Canals and the Erie Canal west of Three River Point . . . . . 15½ feet
Oswego Canal and the Erie Canal east of Three River Point . . 20 feet.


CORPS OF ENGINEERS
U. S. ARMY
U. S. LAKE SURVEY
NEW YORK STATE
BARGE CANAL SYSTEM
ERIE CANAL
SCALE 1:20,000
SOUNDINGS IN FEET
FEET
STATUTE MILES
MOHAWK RIVER
ABANDONED CANAL
Dunsbach Ferry
Diamond Reef
Crescent
Terminal
Crescent Dam
Guard Gate No 2
Guard Gate No 1
Lock 6
Lock 5
Lock 4
Lock 3
Lock 2
WATERFORD
COHOES FALLS
HUDSON RIVER
TROY
Aerial Cable
Ramp
Dam

E-40

(JOINS C-1)

REFERENCE 17

Formerly LS 180, 1st Ed., Jan. 1948

Nautical Chart Catalog No. 4, Parts E, F

NOAA

NATIONAL OCEAN SERVICE

UNITED STATES - GREAT LAKES;

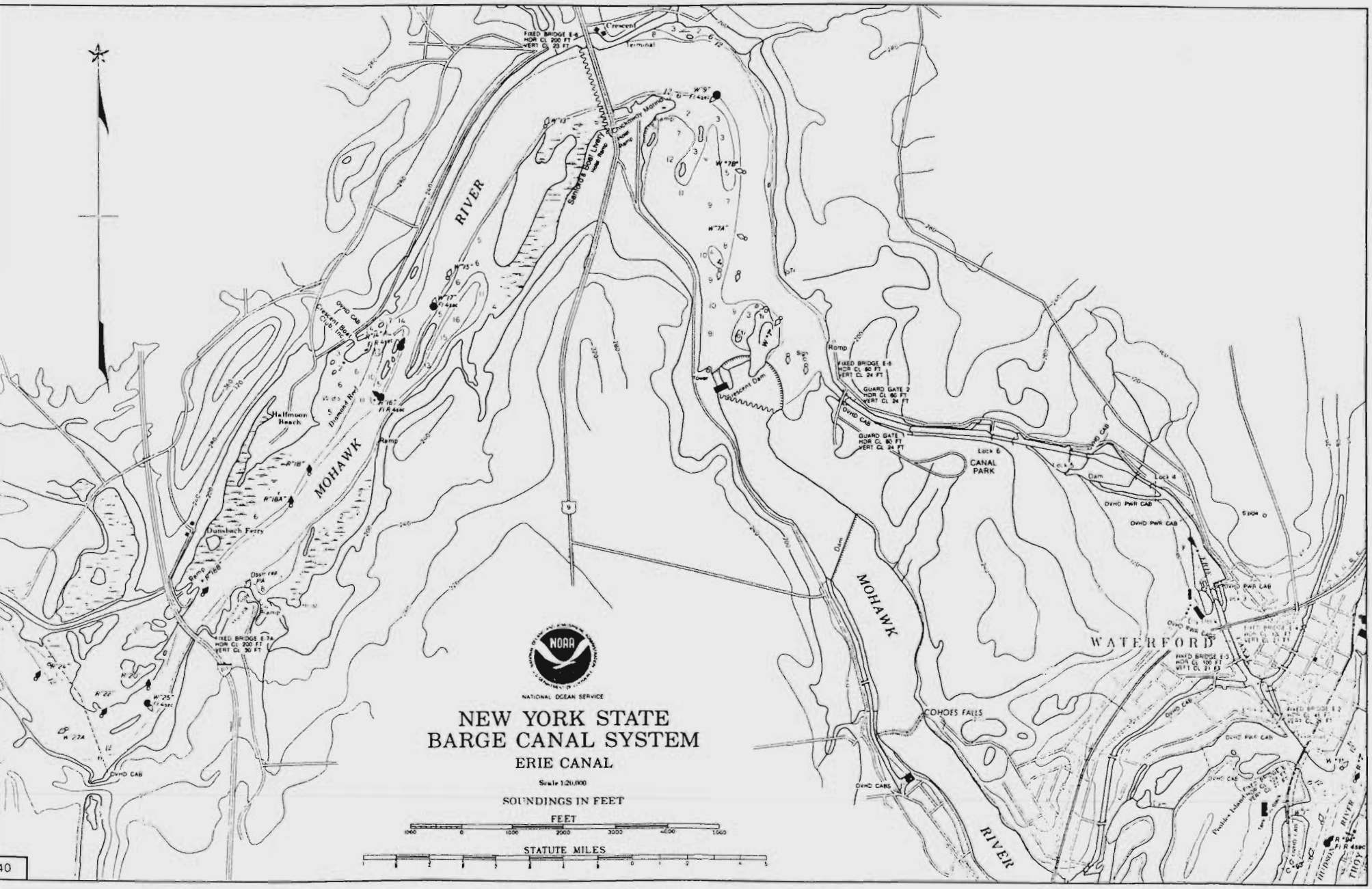
NEW YORK

NEW YORK STATE BARGE CANAL SYSTEM

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

CAUTION

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Director, Charting and Geodetic Services (N/CG22), National Ocean Service, NOAA, Rockville, Maryland 20852


NATIONAL OCEAN SERVICE
NEW YORK STATE
BARGE CANAL SYSTEM
ERIE CANAL
Scale 1:20,000
SOUNDINGS IN FEET
FEET
STATUTE MILES
MOHAWK RIVER
Halfmoon Beach
Diamond Reef
Dunsbach Ferry
Crescent Terminal
Crescent Dam
Lock 6
CANAL PARK
Lock 4
Dam
COHOES FALLS
WATERFORD
Peebles Island
OVHD CAB
OVHD PWR CAB
OVHD CABS
Ramp
FIXED BRIDGE E-6
HOR CL 60 FT
VERT CL 24 FT
GUARD GATE 2
HOR CL 60 FT
VERT CL 24 FT
GUARD GATE 1
HOR CL 60 FT
VERT CL 24 FT
FIXED BRIDGE E-74
HOR CL 200 FT
VERT CL 30 FT
FIXED BRIDGE E-3
HOR CL 100 FT
VERT CL 21 FT

REFERENCE 28

Interviewees No. 1, 2, and 3 remembered each other and worked at the dump early in its operations. Interviewee's No. 4, 5, and 6 were also familiar with each other and likely worked at or carted to the dump at a later period. Generally, the residents were not familiar with the dump's equipment operators and were only familiar with the dumping which occured near their residences. A few residents did remember the name of the original company, who operated the dump, and its president. Generally, the biggest difficulty the interviewees had was remembering exact dates or years or the exact sequence of events.

FINDINGS:

A number of consistencies developed from the information obtained during the interviews and file reviews. Some of these are as follows:

1. HISTORY

The dump's operation began in early 1962 and possibly as early as the late 1950's. Filling of the old canal bed occured in lifts which were compacted and covered when appropriate material could be obtained. Operations apparently initiated in the area of Clam Steam Road and moved generally in a easterly direction to approximately the area of Stone Road. There was apparently a constant moving of the working face up and down the canal as additional lifts were added. Early in the operation the lifts in the area west of Beach Road brought the fill above the canal bed and the dump extended beyond the Town property and onto adjoining parcels. In late 1964 or early 1965 the filling of the canal bed from Route 9 west was initiated. This was most likely a result of a car accident which resulted in the drowning of three occupants in the canal and to prevent further incidents. No one interviewed could remember exact dates of where dumping occured during a particular period, which is understandable after 25 years or more. Generally the fill is limited to the original canal bed in the area east of Beach Road and is at much greater depths in the area approximately 1/2 mile west of Beach Road to Clam Steam Road and beyond. Pictures in the Town of Halfmoon files taken from approximately Clam Steam Road looking east depict the dump operation extending well above the Mohawk River water surface. Considerable settling has occured over time.

2. OPERATIONS

The dump was operated under contract with the Town of Halfmoon by a series of differently named companies who had some of the same officers. Copies of contracts between the Town and two of these firms are attached. It is reported that the Town of Halfmoon had little, if any, involvement in the day to day operation of the dump. The firms operating the dump received waste materials from a host of municipalities, commercial establishments and some industries. A few of the municipalities which were reported to have used the dump during various time periods included the cities of Troy, Cohoes, Watervliet, Green Island, and Schenectady, and the Town's of Waterford, Colonie, North and East Greenbush, and Halfmoon.

It was reported that the dump was basically a regional facility open to anyone who paid the tipping fee or entered into a contract with the operators. Operational controls were minimal and there was continuous

friction between the operators, the Town,the State Health Department, and residents over the dumps operations.

3. NATURE OF WASTES

As reported by the interviewee's,the bulk of the wastes dumped were from residential or commercial sources. The dump operator sold the picking rights and recycleables at the time (paper, metal, etc.) were presumably removed. Some residents also reported medical wastes being dumped from City of Troy hospitals. Finally, numerous local industries were reported to have used the dump with their own trucks or by using a commercial carter. These wastes were reported to include relatively inert materials as well as liquid organic chemical wastes from a few of the industries.

4. 6 NYCRR Part 371 Hazardous Waste

Of the industries which were reported to have disposed of liquid organic chemical wastes at this dump, Behr Manning was mentioned by 10 of 12 individuals interviewed. A couple of others were mentioned by only one or two individuals and reportedly were sighted only occassionally.

a. **Behr Manning Company (purchased by the Norton Company, Coated Abrasive Division in approximately 1968).** Of the ten individuals who reported seeing Behr Manning trucks at the dump, seven reported that in addition to mixed refuse being disposed of (tape, sandpaper, grit) they saw drummed liquid wastes regularly disposed of. This waste was described either as a viscous, volatile material; liquid waste with pronounded odor; liquid waste with solvent odor; barrels with glue wastes; or simply, liquid waste in 55 gallon drums. The disposal of this waste stream was reported over a period of several years. Although Behr Manning trucks were reportedly sighted daily, the liquid drummed waste disposal was reported to be less frequently.

   Interviewee No. 1 - the intitial operators manager, reported "drummed material (viscous, volatile material) from Behr Manning dumped off the back of the truck into the canal or fill. Eight to 15 drums dumped approximately every 15 days. Drums possibly unsealed. ...agreement/contract with Behr Manning for them to dump drummed material for a 2-3 year period."

   Interviewee No. 3, an equipment operator at the dump, reported "Behr Manning had their own blue trucks. Garbage truck came up with tape, nylon, etc. approximately twice a week. Rack or panel truck with drums containing different colored liquid chemical waste with a pronounced odor came approximately once a week with 30 or 40 drums per load."

   The other interviewee's reported similar information. It was generally reported that the drums were flattened with a bulldozer or simply dumped into the fill or canal. It was also generally reported that the drummed material was dumped wherever

they were operating at the time. The majority of interviewee's did indicate that the area from the Yacht Club to the Clam Steam Road was the most likely area this material was dumped. This, of course, is an area of approximately one mile in length.

The disposal of 6NYCRR Part 371 defined hazardous wastes at the Old Halfmoon dump by the Behr Manning Company (now Norton) is further substantiated by Norton's Hazardous Waste Disposal Questionnaire (attached) submitted in 1984 under the CRTK program. The form indicated that the Norton Company disposed of 2300 tons of solvent based phenolic and urethane sludges (solvents were toluene, xylene, ethyl alcohol, methyl isobutyl ketone and methyl ethyl ketone), generated from their ongoing operation, at the Town of Colonie Landfill (old section) from 1966-1975. This landfill is located on the south shore of the Mohawk River just over the Route 9 bridge. Filling operation did not begin at this site until 1968, most likely December of that year when it was originally approved to operate as a sanitary landfill.

Apparently Norton did not distinguish between the Old Halfmoon and the Old Colonie Landfills. The description of the hazardous wastes (D001, F003, and F005) disposed of by Norton is similar to the materials described in the interviews. Norton disposed of wastes at the Old Halfmoon dump for a 2-3 year period as reported by the original operation manager. Assuming that the 2300 tons reported by Norton were disposed of at an equal amount each of the nine years (approximately 255 tons/year), then approximately 511 to 766 tons of hazardous wastes were disposed of in the Old Halfmoon Dump by Behr Manning/Norton. This, of course, is a very rough estimate, but based on the information provided by the interviewee's on a numbers of drums disposed of and frequency of disposal, appears reasonable.

In addition to the above waste streams from their active operation, Norton also reportedly disposed of sludge from five latex evaporation ponds in 1966, and previously landfilled fly ash in 1968, at the Colonie Landfill. This material may have, in fact, also gone to the Old Halfmoon dump (see attached references from the Norton Site (401010) Phase I report).

b. **Other sources of Part 371 Hazardous Wastes** - Four of the interviewees reported that materials that may have been or likely were hazardous wastes were received at the Old Halfmoon dump from two other tri-city industries. These reports indicated only infrequent disposal and were not particularly specific about the nature of the material. Confirmation of these industries dumping hazardous wastes at this dump could not be made through review of the CRTK files. One firms CRTK files are missing and the other's CRTK questionnaire was vague (attached). Based on the lack of confirmation, listing of the firms names here would be inappropriate. Please refer directly to the interview forms. The NYS IHW forms do provide a good

profile of the composition of wastes generated by these firms, but not former disposal locations.

CONCLUSIONS

Based on the information presented above, it is clear that consequential amounts of Part 371 hazardous wastes have been disposed of at the Old Halfmoon dump. It is my estimate that 511 to 766 tons of D001, F003, and F005 wastes from the Behr Manning Company were disposed of at the dump for at least a 2 to 3 year period. The disposal of these wastes may have occured over the entire length of the dump, but more likely occured in the area of the current Yacht Club (just east of Beach Road) west to the Clam Steam Road area.

Additional disposal of possible hazardous wastes from other industrial sources were reported on a less frequent basis. The quantity and exact natures of these wastes cannot be determined based on currently available information.

RECOMMENDATIONS

In addition to the completion of the NYSDEC Phase II Investigation, the following actions are recommended.

- To further document additional sources and locations of hazardous waste disposal at this site, attempts should be made to interview individuals not previously contacted on the attached list.

- Attempts should be made to interview Norton employees who may be knowledgeable of the history of Norton's waste disposal at the Old Halfmoon dump.

- Attempts should be made to clarify whether or not other local industries hazardous waste was disposed of at this dump as reported by several of the interviewees.

- Consult with DLA whether it is necessary to take formal depositions from some of the individuals already interviewed or individuals who may be interviewed in the future. This is typically done in the remedial and enforcement programs. If necessary, they should be completed as soon as possible, as a number of the individuals interviewed have serious health problems.

Attachments

cc: D. Corliss
D. Steenberge w/att.
B. Lowe
G. Laccetti
B. Fear

insuring as reasonably as possible that said fill materials are not disposed of or deposited on any lands in the Town other than the areas hereinbefore mentioned.

(3) The Contractor further agrees to pay for any and all expenses of whatever nature which he may incur by reason of the performance of his duties and conditions set forth herein.

(4) The Contractor further agrees to have all necessary tools, equipment, and employees furnished for the proper performance of the duties and conditions herein set forth.

(5) The Contractor shall be responsible for the performance in a proper, neat, and workmanlike manner of all duties and conditions set forth herein.

(6) The Contractor shall assume and bear all risk of damage to, or failure of, the work to be performed hereunder, and all risk of any accident, or accidents, arising at or adjacent to, and caused by the filling operations, until the work, duties, and conditions set forth herein shall have been fully completed and approved and accepted by said Town in accordance with Paragraph "14" hereinafter set forth.

(7) That the Contractor shall save or hold harmless the Town from and against all suits, or claims, that may be placed for any alleged injuries to any person, or property, that may occur, or that may be alleged to have occurred, in the course of the performance of this Agreement by the Contractor, whether such claim shall be made by an employee of the Contractor or by a third person, and whether or not it shall be claimed that the alleged injury was caused through a negligent act, or omission, of the Contractor; and the Contractor shall, at his own expense, pay all charges of attorneys, and all costs and other expenses, arising therefrom, or incurred in connection therewith; and, if any judgment shall be rendered against the Town in any such action, or actions, the Contractor shall, at his own expense, satisfy and discharge the same.

(8) That the Contractor shall provide all labor and

materials that may be required for the performance of this Agreement and may contract with third parties for same.

(9) Notwithstanding any provision to the contrary herein contained, that if the Contractor shall fail to perform or provide performance of any of the terms and agreements contained herein, then, and in any such event, the Town may, at its election forthwith terminate this agreement, by giving a ten day notice in writing thereof to the Contractor.

(10) The Contractor further agrees not to assign, sublet, or transfer this agreement or any part thereof without the written consent of the Town.

(11) That this Agreement shall bind the parties hereto, and their respective heirs, executors, administrators, successors, and assigns.

(12) The Contractor further agrees as follows:

(a) All fill deposited in the canal shall be kept continuously and constantly covered with dirt or gravel, which dirt or gravel shall be furnished by the Contractor without cost to the said Town.

(b) The canal shall be filled to the contour of the surrounding lands and the said fill shall be topped with at least six (6) inches of top soil, which top soil shall be furnished by the Contractor without cost to the said Town.

(c) All trees and ornamental shrubbery shall be saved where feasible.

(d) The burning of any fill used in the bed of the said Canal is prohibited and if any fire should start, the fire shall be immediately and completely extinguished.

(e) All reasonable precautionary measures shall be taken that are necessary to keep all rodents and vermin in the vicinity of the fill operations under control.

(f) For fire protection, equipment shall be kept near the scene of the filling at all times and there shall be

personnel available to man the same at all times.

(g) Copies of all insurance policies with minimum limits of coverage of $100,000/ $300,000 covering the Contractor and the Town from any and all liabilities arising out of and in connection with the execution of this contract and further showing that the employees of the Contractor are covered by Workmen's Compensation Insurance, shall be filed with the Town Clerk of the Town of Halfmoon prior to the commencement of work.

(h) No drains presently emptying into the canal shall be cut off by reason of the filling of the canal bed. Where necessary the Contractor shall, at no cost to the Town, lengthen the said drains with additional pipe or culverts, as the case may be, to a point where the drains may continue to operate satisfactorily. The Town shall furnish said pipe or culverts to the Contractor at no cost to the Contractor.

(13) The work being performed by the Contractor shall be open to inspection by the Town Board, its agents, servants, or employees at all times.

(14) The Town and individual residents of the Town shall not be charged a fee or other consideration by the Contractor for dumping in said canal.

(14) 15 As work is completed by the Contractor, the Town Board, its agents, servants, or employees shall inspect the same and if found by the said Town Board to be satisfactory in all ways, then the said Town Board shall release the Contractor from all liabilities that might thereafter arise on said completed lands.

IN WITNESS WHEREOF, the Contractor has hereunto set his hand and seal, and the Town has signed this Agreement, by its Supervisor, thereunto duly authorized, and its corporate seal to be hereunto affixed, the day and year first above written.

Town of Halfmoon

By [illegible]
Supervisor

/s/ [illegible]
Doing Business as Brookwood
Engineering Co.

WHEREAS, a certain agreement was heretofore made and entered into dated October 23, 1962, by and between the parties hereto, namely Paul Taglione, residing at 216 North Third Avenue, Mechanicville, New York, doing business as Brookwood Engineering Co. and the Town of Halfmoon, a municipal corporation duly created and existing under and by virtue of the laws of the State of New York, and having its principal place of business in the Town Hall in the Town of Halfmoon, Saratoga County, State of New York, and

WHEREAS, the subject of said agreement concerned the dumping of fill materials into the bed of the former New York State Canal adjacent to the Mohawk River in the Town of Halfmoon, and

WHEREAS, subsequent to the execution of the agreement aforesaid the said Paul Taglione did in fact dump certain fill materials into the bed of the former New York State Canal in the Town of Halfmoon, and

WHEREAS, the parties to the aforesaid agreement dated October 23, 1962 are the parties herein and they each desire to terminate the said agreement dated October 23, 1962:

NOW, THEREFORE, in consideration of the mutual promises, terms and agreements herein and other good and valuable consideration, it is mutually agreed as follows:

(1) The aforesaid agreement dated October 23, 1962, and any and all renewals thereof, is hereby terminated.

(2) The parties hereto, simultaneously with the execution of this agreement and forming a part hereof with the

KENIRY and KENIRY
ATTORNEYS AT LAW
35 North Main Street
Mechanicville, N. Y.

same force and effect as though set forth in full herein, shall execute and are executing general releases, each to the other.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals the 1st day of February, 1966.

Paul Taglione

Paul Taglione, d/B/a Brookwood Engineering Co.

George C. Hartley

Supervisor of the Town of Halfmoon

KENIRY and KENIRY
ATTORNEYS AT LAW
35 North Main Street
Mechanicville, N. Y.

To all to Whom these Presents shall Come, or may concern:

Greeting: **Know Ye,** *That* PAUL TAGLIONE, now or formerly residing at 216 North Third Avenue, Mechanicville, New York, doing business as Brookwood Engineering Co.,

for and in consideration of the sum of One and 00/100 - *dollars* (*$* 1.00), *lawful money of the United States of America to* me *in hand paid by* the Town of Halfmoon, Saratoga County, State of New York, and other good and valuable consideration, *the receipt whereof is hereby acknowledged, have remised, released, and forever discharged, and by these presents do for* myself, my *heirs, executors and administrators, remise, release and forever discharge the said* Town of Halfmoon, its successors and assigns ~~heirs, executors and administrators~~, *of and from all, and all manner of action and actions, cause and causes of action, suits, debts, dues, sums of money, accounts, reckoning, bonds, bills, specialties, covenants, contracts, controversies, agreements, promises, variances, trespasses, damages, judgments, extents, executions, claims and demands whatsoever, in law or in equity, which against the said* Town of Halfmoon, I *ever had, now ha*ve *or which* I or my *heirs, executors or administrators, hereafter can, shall or may have for, upon or by reason of any matter, cause or thing whatsoever from the beginning of the world to the day of the date of these presents.* And more particularly for any and all claims or causes of action of any nature whatsoever arising out of, stemming from or in any way connected with, including the termination thereof, of a certain contract, and work done thereunder, between myself, d/b/a Brookwood Engineering Co., and the Town of Halfmoon, dated October 23, 1962, and any renewals thereof.

In Witness Whereof, I *have hereunto set* my *hand and seal the* 1st *day of* February *in the year Nineteen Hundred and* Sixty-six

In Presence of

Paul Taglione

Paul Taglione, d/b/a
Brookwood Engineering Co.

To all to Whom these Presents shall Come,

or may concern:

Greeting: Know Ye, *That* the Town of Halfmoon, Saratoga County, State of New York,

for and in consideration of the sum of One and 00/100 - *dollars (*$1.00 *),*
lawful money of the United States of America to it *in hand paid by* Paul Taglione, d/b/a Brookwood Engineering Co., and other good and valuable consideration,

the receipt whereof is hereby acknowledged, have remised, released, and forever discharged, and by these presents does *for* itself, its successors and ~~xxxx~~ assigns ~~xxxxxxxxxxxxxxxxxxxxxxxxxxx~~, *remise, release and forever discharge the said* Paul Taglione, d/b/a Brookwood Engineering Co., his

heirs, executors and administrators, of and from all, and all manner of action and actions, cause and causes of action, suits, debts, dues, sums of money, accounts, reckoning, bonds, bills, specialties, covenants, contracts, controversies, agreements, promises, variances, trespasses, damages, judgments, extents, executions, claims and demands whatsoever, in law or in equity, which against the said Paul Taglione, d/b/a Brookwood Engineering Co., it *ever had, now ha*s *or which* it or its successors or assigns ~~xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx~~, *hereafter can, shall or may have for, upon or by reason of any matter, cause or thing whatsoever from the beginning of the world to the day of the date of these presents.*

And more particularly for any and all claims or causes of action of any nature whatsoever arising out of, and stemming from or in any way connected with, including the termination thereof, of a certain contract, and work done thereunder, between Paul Taglione, d/b/a Brookwood Engineering Co., and the Town of Halfmoon, dated October 23, 1962, and any renewals thereof.

In Witness Whereof, I *have hereunto set* my *hand and* the of the Town of Halfmoon */seal/ the* 1st *day of* February *in the year Nineteen Hundred and* Sixty-six

In Presence of

George W. Hatlee [signature]
Supervisor of the Town of Halfmoon

AGREEMENT

THIS AGREEMENT made this 2nd day of May, 1967, between the TOWN OF HALF MOON, a municipal corporation (hereinafter referred to as "the Town" and CHIARELLO LAND FILL AND DISPOSAL, INC., having its principal office and place of business at 136 Everett Road, Colonie, New York, (hereinafter referred to as Chiarello.)

WITNESSETH:

That in consideration of the sum of One ($1.00) Dollar paid by the Town to Chiarello, receipt of which is hereby acknowledged, and other good and valuable consideration ,Chiarello hereby agrees to operate a Sanitary Land Fill in accordance with the New York Public Health Law and State Sanitary Code and the regulations of the Saratoga County Health Department and the Board of Health of the Town of Halfmoon on premises now owned by the Town, which lands were formerly part of the New York State Canal System adjacent to the Mohawk River in said Town on the following terms and conditions:

1. The Town shall license Chiarello to operate said sanitary land fill upon the described premises.

2. The Town shall by its licensing of the premises to Chiarello give Chiarello full control over the premises for the purposes of operating a sanitary land fill but reserves the right to use said premises for other municipal purposes not interfering with Chiarello's use upon written notice given to Chiarello.

3. Chiarello shall operate a sanitary land fill upon the premises in accordance with the laws, codes and regulations above mentioned for the disposal of all trash, garbage, ashes, refuse, waste paper, wooden boxes and demolition material arising out of the Town, with the exception of explosives or other inherently

dangerous substances, without cost to the Town or its residents in consideration for the use of the premises to service other municipalities, corporations, partnerships or individuals with which Chiarello may have contracts for collection or disposal.

4. The Town shall allow access to the premises to all corporations, firms and individuals doing business with Chiarello, so long as the vehicles bearing rubbish for disposal shall be suitably covered to prevent spillage and littering.

5. Chiarello shall assume control of the premises and shall assume and bear all risk of damage to, or failure of, the work to be performed hereunder, and all risk of any accident, or accidents, arising at or adjacent to, and caused by or in connection with the work.

6. Chiarello shall save or hold harmless the Town from and against all actions or claims which may be instituted or made for any and all alleged injuries to any person or property that may occur, or that may be alleged to have occurred in the course of the performance of this Agreement by Chiarello whether such action or claim shall be made by an employee of Chiarello or by a third person and whether or not it shall be claimed that the alleged injury or damage was caused by or through a negligent act or omission of Chiarello or otherwise; and Chiarello shall, at his (or its) own expense pay all charges of attorneys and all costs and other expenses arising therefrom or incurred in connection therewith; and if any judgment shall be rendered against the Town in any such action or actions Chiarello shall at his (or its) own own expense, satisfy and discharge the same. Chiarello shall at all times and at his expense carry liability insurance coverage

for the entire operation including the premises and all men and equipment, in an amount not less than $100,000.00 for personal injury or death to any one person and not less than $300,000.00 for any one accident and not less than $50,000.00 for property damage covering Chiarello and the Town from any and all liability arising out of or in connection with the execution of this agreement and the work performed thereunder. Chiarello shall deposit with the Town Clerk of the Town a certificate of insurance in such amounts. Chiarello shall carry Workmen's Compensation Insurance upon all of his employees and shall provide the Town Clerk of the Town with proof of such insurance.

7. Chiarello reserves any and all rights to salvage any materials brought upon the premises for disposal by any person or corporation whatsoever, provided said salvaging may be done without violating the New York State Sanitary Code.

8. Chiarello reserves the right to exclude from the premises any persons not upon the premises for the purpose of bringing in trash or rubbish and to prevent and prohibit any person from salvaging upon the premises , except that the site shall at all times be open to inspection by the Town Board, its agents, servants or employees.

9. The Town shall issue to Chiarello any necessary permits for the operation of a Sanitary Land Fill as contemplated by this Agreement. This agreement is conditioned upon the issuance and continued grant to the Town by the Department of Health of the State of New York of the necessary permit to conduct the operation contemplated herein. Chiarello shall do nothing to cause the

revocation of any such permit by said Department of Health.

10. Notwithstanding any provision to the contrary herein contained, if Chiarello shall fail to perform or provide performance of any of the terms and agreements contained herein, and particularly but not limited to those in connection with the standards of quality of the work, or if Chiarello shall fail during any period of four consecutive weeks to perform work at the site for the entire day of ten working days, then, and in any such event, the Town may, at its election forthwith terminate this agreement by giving a ten day notice in writing to Chiarello by sending such notice by regular mail to the address of Chiarello recited herein. The Town shall not be liable for damages or penalities for any such termination of this agreement.

11. At the expiration of this Agreement or any renewals thereof, Chiarello shall deliver up the premises to the Town in a clean condition free from any loose trash or rubbish.

12. This Agreement may not be modified without the written consent of both parties hereto.

13. This Agreement shall not be assigned by Chiarello without the written consent of the Town.

14. This contract is for the term of five years or until the completion of the sanitary land fill of the subject premises, whichever is earlier.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals on the day and year first above written.

TOWN OF HALF MOON

By George A. Hatlee

CHIARELLO SANITARY LAND FILL AND DISPOSAL, INC.

By Harold W Chiarello
President

STATE OF NEW YORK) ss:-
COUNTY OF SARATOGA)

On the 2nd day of MAY , 1967, before me personally came GEORGE A. HATLEE , to me known and being by me duly sworn did depose and say that he resides at RD #2 MECHANICVILLE, NEW YORK , that he is the SUPERVISOR of the Town of Half Moon, a municipal corporation, the corporation described in and which executed the instrument, that he knows the seal of said Town, and the seal affixed to said instrument is such corporate seal; that it was affixed by order of the TOWN BOARD of said Town, and that he signed his name thereto by like order.

William W Keniry
Notary Public-State of New York

STATE OF NEW YORK) ss:-
COUNTY OF SARATOGA)

On the 2nd day of May 1967 before me came Harold W.Chiarello, the subscribing witness to the foregoing instrument, withwhom I am personally acquainted, who, being by me duly sworn, did depose and say that he resides at 136 Everett Road, Town of Colonie, New York, and he is the President of CHIARELLO SANITARY LAND FILL AND DISPOSAL, INC., the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation; and that he signed his name thereto by like order.

Notary Public-State of New York

REFERENCE 29

GENERATOR FORM
PART - I

50 WOLF ROAD
ALBANY, NEW YORK 12233

HAZARDOUS WASTE DISPOSAL QUESTIONNAIRE

PLEASE COMPLETE AND RETURN TO THE ABOVE ADDRESS, ATTENTION: RTK PROCESSING UNIT, ROOM 525

ICS #: 4166816
NORTON CO.(COATED ABRASIVE DIV.
GARY WOOD
10TH AVE.& 25TH ST.
WATERVLIET NY 12189
mail

ICS CODE 4166816 / EPA ID NUMBER NYD - 002083954			
	CITY	STATE	ZIP CODE
	CONTACT NAME		TELEPHONE
MAILING ADDRESS (if different) STREET P.O. Box 808	CITY Troy	STATE N.Y.	ZIP CODE 12181

PRINCIPAL BUSINESS OF PLANT
Manufacture of coated abrasives

PLEASE ANSWER THE FOLLOWING QUESTIONS:

CHECK ONE

1. SINCE JANUARY 1, 1952 THRU DECEMBER 31, 1981, HAVE YOU OR ANY PREVIOUS OWNERS/OPERATORS OF THIS FACILITY GENERATED ANY HAZARDOUS WASTE (SEE INSTRUCTIONS) AT YOUR PRESENT FACILITY, PLANT, PROPERTY, ETC?

☒ YES
☐ NO

IF THE ANSWER IS **YES** COMPLETE QUESTIONS **1, 2, 3, 4** AND **GENERATOR FORM PART - II**
IF THE ANSWER IS **NO** COMPLETE QUESTIONS 1 AND 4 AND RETURN THIS FORM

2. HAS THE FACILITY AT THIS LOCATION CHANGED ITS NAME OR IDENTIFICATION BECAUSE THERE WAS A CHANGE IN OWNERSHIP, CORPORATE NAME OR OPERATOR NAME, ETC. IF YES LIST THE NAMES BY WHICH THIS FACILITY HAS BEEN IDENTIFIED SINCE JANUARY 1, 1952 TO THE PRESENT.

☒ YES
☐ NO

NAME, ADDRESSES, AND TELEPHONE NUMBERS	DATES
Behr Manning Company	1952-1967
Norton Company Coated Abrasive Division	1968 - present
10th Ave. & 25th Street	
Watervliet, New York 12189	
(518) 273-0100	

3. DESCRIBE THE DOCUMENTS FROM WHICH DATA THAT IS INCLUDED ON PART-II WAS OBTAINED (SEE INSTRUCTIONS).

DOCUMENT DESCRIPTION	DATES
Hazardous waste manifests	1980-81
No other documents are available. Data is estimated based on employee interviews and current disposal volumes.	

4. I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT INFORMATION SUPPLIED IS TRUE AND COMPLETE. FALSE STATEMENTS SUBMITTED ON THIS DOCUMENT ARE PUNISHABLE PURSUANT TO SECTION 210.45 OF THE PENAL LAW.

Thomas A. O'Brien - Mgr. Facilities Engineering — TITLE — 8/16/84 DATE
NAME OF OWNER/OPERATOR, PARTNER OFFICER OR AUTHORIZED REPRESENTATIVE

Thomas A. O'Brien — (518) 273-0100
SIGNATURE — BUSINESS PHONE

NAME	ICS NUMBER - EPA ID NUMBER
Norton Company	4166816-NYD-002083954
ADDRESS: 10th Ave. & 25th Street	
CITY: Watervliet	STATE: N.Y. ZIP: 12189

GENERATOR FORM
PART - II

DATE 8/1

1. HAZARDOUS WASTE DISPOSAL SITE (SEE INSTRUCTIONS)	2. DESCRIPTION OF HAZARDOUS WASTES DEPOSITED AT THIS LOCATION (SEE INSTRUCTIONS)	3. EPA WASTE CODE	4. WASTE DISPOSED OF QUANTITY OF WASTE (TONS)	FORM LIQUID	FORM SOLID	FORM DRUMS	5. WASTE DISPOSAL DATES	6. TRANSPORTER HAZARDOUS W/ (SEE INSTRUCTI
1. Norton Company Landfill, Elm Street - Town of Colonie Albany County, N.Y. 12205	Solvent based phenolic & ure thane sludges. Solvents were toluene, xylene	D001 F003 F005 (1)	Estimated to be 2200	x	x	x	1955-1966	Norton Company 4A-02
Waste was landfilled	Ethyl alcohol, methyl isobutyl, ketone, methyl ethyl ketone, material landfilled							
2. Town of Colonie Landfill Rt. 9 Town of Colonie Albany County, N.Y.12205	Same as above Material landfilled	D001 F003 F005	Estimated to be 2300 (2)	x	x	x	1966-1975	Norton Company 10th Ave. & 25 Watervliet, N.
						(3) (4)	1976-1977 1979- Present	Browning-Ferri 136 Sicker Roa Latham, N.Y. 4A-015
						(5)	1978	A. Pedone Disp Schenectady, N.
Frontier Chemical Waste Process Inc. 4626 Rayal Avenue Niagara Falls, N.Y.14304	Same as above Solids - Landfilled Liquids - blended	D001 F003 F005	Estimated to be 200 (6)	x	x	x	1980-81	Frontier Chemic Process Inc. 4626 Royal Aven Niagara Falls, 9A-078

PHASE I INVESTIGATION REPORT
NORTON COMPANY LANDFILL
COLONIE (T), ALBANY COUNTY, NEW YORK
SEPTEMBER 1984

401010

NEW YORK ST. ... DEPARTMENT OF ENVIRONMENTAL CONSERVATION

4171C

Priority Code: A
Site Code: 401010
Name of Site: Norton Company Region: 4
County: Albany Town/City Colonie (T)
Street Address: Elm Street, Colonie, NY

Status of Site Narrative:

The toxics substances in New York's Environment Report had indicated that Norton Company had owned 15 inactive sites, but subsequent investigations indicate that this was in error. The Norton Company, however, does own an inactive landfill located adjacent to their plant. This site was used beginning in 1955 mainly to deposit fly ash and excavation material. Other materials deposited include junk tape, coated abrasives, phenolics, some settling basin sludge and liquid wastes in drums. Volume estimates are not available. Five trenches were constructed as latex evaporation ponds on the site. In 1966, the sludge from the settling basins was transported for disposal to the Colonie landfill, and in 1968, fly ash was also transferred to the Colonie landfill. The on-site landfill is used now only for construction and demolition debris. A comprehensive field inspection was made; no hazards were visible, and an extensive amount of vegetation is present on site.

Type of Site: Open Dump ☐ Landfill ☒ Structure ☐ Treatment Pond(s) ☐ Lagoon(s) ☒ Number of Ponds ____ Number of Lagoons 5

Estimated Size 20.9 Acres

Hazardous Wastes Disposed? Confirmed ☒ Suspected ☐

*Type and Quantity of Hazardous Wastes:

TYPE	QUANTITY (Pounds, drums, tons, gallons)
Fly ash (1966-78)	unknown
Junk Tape	
Coated Abrasives	
Non-woven abrasives	
phenolics	

*Use additional sheets if more space is needed.

Address of Current Owner or Site: Box 808, Troy,

Time Period Site Was Used for Hazardous Waste Disposal:
1955 To 1966

Is site Active ☐ Inactive ☒
(Site is inactive if hazardous wastes were disposed of at this site and site was closed prior to August 25, 1979)

Types of Samples: Air ☐ Groundwater ☐ None ☒
Surface Water ☐ Soil ☐

Remedial Action: Proposed ☐ Under Design ☐
In Progress ☐ Completed ☐ None
Nature of Action:

Status of Legal Action: none State ☐ Federal ☐

Permits Issued: Federal ☐ Local Government ☐ SPDES ☐ none
Solid Waste ☐ Mined Land ☐ Wetlands ☐ Other ☐

Assessment of Environmental Problems:

Little or no sampling has been completed at this site. A preliminary assessment needs to be done of the various media, including groundwater, surface water, air, and flora and fauna to determine if any environmental impact exists.

Assessment of Health Problems:

None known, further investigation is necessary.

Persons Completing this Form:

Ken Griggs
Irv Bonsel
G. David Knowles
New York State Department of Environmental Conservation
Date 4/8/80

Ron Tramontano
New York State Department of Health
Date 4/8/80

1/18/80
GDK:cl

June 30, 1980

SUMMARY

Norton Company
Elm Street
Town of Colonie
Albany County, New York 12205

This is a 21 acre site, adjacent to the Norton Plant, which manufactures coated abrasives and abrasive paper. One part of the site is an active landfill used only for construction and demolition debris. The other part is inactive, it was used from 1955 to 1966. Fly ash, excavation material, junk tape, coated abrasives, phenolics, settling basin sludge and liquid wastes, in drums, were deposited. Quantities are unknown. There were five trenches, used as latex evaporation ponds. In 1966 the sludge from the settling basins was removed and disposed at the Colonie Landfill. In 1968 fly ash was also completely removed and transferred to the Colonie Landfill.

The site is located in a suburban area. Drinking water is obtained from the public water supply. Soil data may be obtained soon from NYSDOT, which made soil borings from alternate Route 7, adjacent to the Norton property.

The nearest surface water body, the Hudson River, is more than one mile away. The site is patrolled and partly fenced.

There is no apparent public health threat or environmental hazard known at the present time. DEC site inspection revealed no visible hazard. Extensive vegetation is present on site. No test data were available at the Regional DEC.

There are no known past or present regulatory actions. DEC has no remedial plans at this time.

From information obtained it appears that no hazardous materials are left on site. However no test data exist to verify this.

The Task Force recommends a site visit, with some sampling, on a "Medium Priority" basis.

SCHENECTADY CHEMICALS, INC.

P.O. Box 1046 • Schenectady, N.Y. 12301 • (518) 370-4200 • Telex No. 145-457 • Cable Schenvar

August 30, 1984

New York State Department of
Environmental Conservation
RTK Processing Unit
Room 525
50 Wolf Road
Albany, New York 12233

Dear Sirs:

Enclosed please find our response to the Community Right to Know survey of hazardous wastes disposal records. This letter is intended to explain Schenectady Chemicals, Inc (SCI's) response with respect to required reporting of disposal activities.

Schenectady Chemicals, Inc. has indicated on the enclosed questionnaires that it has no records of shipment of hazardous waste off-site for disposal. This response is based upon the following considerations. We have records of the shipment for treating of wastes or materials, part of whose hazardous or non-hazardous nature is currently subject to review by EPA. They involve a site in New York State (NYS) and certain other sites outside of New York State. With respect to those sites outside of New York State, we believe that this information is beyond the scope of the survey and, therefore, we are not providing such information at this time.

The New York State site is the Pollution Abatement Services (PAS) site near Oswego, New York. We believe that all material that its records indicate was transported by an independent hauler or the site operator (not SCI) to the PAS site was sent there for legally authorized burning and that such burning falls outside of the definition of disposal under the Resource Conservation and Recovery Act (RCRA). The PAS site is currently under investigation by EPA and DEC and as of yet has not been the subject of formal legal action by either the United States of America or New York State. Documents relating to these activities at this site have been made available to DEC through EPA.

At another site in New York State, known as the Loeffel Site in Rensselaer County, some of SCI's industrial wastes are alleged to have been taken there by an independent hauler. SCI maintains that this material within reclamation context was not a hazardous waste. This position has been disputed by DEC and the matter is currently in litigation. For that reason additional data are not available, pending outcome of this litigation.

It is emphasized that with the exception of the two above-mentioned sites, Schenectady Chemicals has no records of shipments of material that is a hazardous waste under RCRA to any other site in New York State. Moreover, SCI has no records of any disposal at any of its own facilities within New York State. It also should be stressed that SCI has on several occasions in the past provided DEC with extensive information regarding off-site shipments of hazardous materials for treatment and non-hazardous materials for landfill. Please refer to letters dated February 15, 1980 and July 2, 1980 from John Greene, SCI's Vice President - Manufacturing to Charles Goddard of DEC.

Additionally, SCI is claiming as CONFIDENTIAL BUSINESS INFORMATION the chemicals presented on the enclosed Industrial Chemical Survey (ICS). SCI has submitted such claims and substantiation of same to DEC in the past for the ICS information required for its SPDES discharge permits. We trust DEC will comply with and honor our request.

If you have any questions, please feel free to contact me.

Very truly yours,

SCHENECTADY CHEMICALS, INC.

H. G. Wertz
Manager-Regulatory Affairs

HGW/cbd

Enc.

GENERATOR FORM
PART - I

50 WOLF ROAD
ALBANY, NEW YORK 12233

HAZARDOUS WASTE DISPOSAL QUESTIONNAIRE

PLEASE COMPLETE AND RETURN TO THE ABOVE ADDRESS, ATTENTION: RTK PROCESSING UNIT, ROOM 525

COMPANY NAME

ICS CODE
EPA ID NUMBER
NYD00818799

ICS #: ?
SCHENECTADY CHEMICALS INC.(SCHE

CITY | STATE | ZIP CODE

PLANT 797 Broadway

CONTACT NAME | TELEPHONE

SCHENECTADY NY 12305
STREET

CITY | STATE | ZIP CODE

PRINCIPAL BUSINESS OF PLANT

PLEASE ANSWER THE FOLLOWING QUESTIONS:

CHECK ONE

1. SINCE JANUARY 1, 1952 THRU DECEMBER 31, 1981, HAVE YOU OR ANY PREVIOUS OWNERS/OPERATORS OF THIS FACILITY GENERATED ANY HAZARDOUS WASTE (SEE INSTRUCTIONS) AT YOUR PRESENT FACILITY, PLANT, PROPERTY, ETC?

☒ YES
☐ NO

IF THE ANSWER IS YES COMPLETE QUESTIONS 1, 2, 3, 4 AND GENERATOR FORM PART - II
IF THE ANSWER IS NO COMPLETE QUESTIONS 1 AND 4 AND RETURN THIS FORM

2. HAS THE FACILITY AT THIS LOCATION CHANGED ITS NAME OR IDENTIFICATION BECAUSE THERE WAS A CHANGE IN OWNERSHIP, CORPORATE NAME OR OPERATOR NAME, ETC. IF YES LIST THE NAMES BY WHICH THIS FACILITY HAS BEEN IDENTIFIED SINCE JANUARY 1, 1952 TO THE PRESENT.

☒ YES
☐ NO

NAME, ADDRESSES, AND TELEPHONE NUMBERS	DATES
Mica Insulator Co.	? -1955
3M-Dielectric Materials	1955-1973
Schenectady Chemicals, Inc.	1973-

3. DESCRIBE THE DOCUMENTS FROM WHICH DATA THAT IS INCLUDED ON PART-II WAS OBTAINED (SEE INSTRUCTIONS).

DOCUMENT DESCRIPTION	DATES
Shipping Records	1973-1981

4. I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT INFORMATION SUPPLIED IS TRUE AND COMPLETE. FALSE STATEMENTS SUBMITTED ON THIS DOCUMENT ARE PUNISHABLE PURSUANT TO SECTION 210.45 OF THE PENAL LAW.

NAME OF OWNER/OPERATOR, PARTNER OFFICER OR AUTHORIZED REPRESENTATIVE | TITLE | DATE

[signature] (518)370-4200

SIGNATURE | BUSINESS PHONE

NAME	ICS NUMBER - EPA ID NUMBER	
ADDRESS		
CITY	STATE	ZIP

GENERATOR FORM

PART - II

G

DATE _____

1. HAZARDOUS WASTE DISPOSAL SITE (SEE INSTRUCTIONS)	2. DESCRIPTION OF HAZARDOUS WASTES DEPOSITED AT THIS LOCATION (SEE INSTRUCTIONS)	3. EPA WASTE CODE	4. WASTE DISPOSED OF QUANTITY OF WASTE (TONS)	FORM			5. WASTE DISPOSAL DATES	6. TRANSPORTER O HAZARDOUS WAST (SEE INSTRUCTION
				LIQUID	SOLID	DRUMS		
All Hazardous Wastes Were Treated -Not Disposed	-	D005-D008	-		X	X	-	-

GENERATOR FORM PART - I

50 WOLF ROAD
ALBANY, NEW YORK 12233

HAZARDOUS WASTE DISPOSAL QUESTIONNAIRE

PLEASE COMPLETE AND RETURN TO THE ABOVE ADDRESS, ATTENTION: RTK PROCESSING UNIT, ROOM 525

COMPANY NAME			ICS CODE / EPA ID NUMBER	
ICS #: 4166205 SCHENECTADY CHEMICALS INC.(RESE	CITY	STATE	ZIP CODE	
2750 BALLTOWN RD.	Schenectady	N.Y.	12309	
SCHENECTADY NY 12309		CONTACT NAME	TELEPHONE	
		H. G. Wertz	370-4200	
LAST ADDRESS (If different) STREET	CITY	STATE	ZIP CODE	

PRINCIPAL BUSINESS OF PLANT
Synthetic Resins Research

PLEASE ANSWER THE FOLLOWING QUESTIONS:

CHECK ONE

1. SINCE JANUARY 1, 1952 THRU DECEMBER 31, 1981, HAVE YOU OR ANY PREVIOUS OWNERS/OPERATORS OF THIS FACILITY GENERATED ANY HAZARDOUS WASTE (SEE INSTRUCTIONS) AT YOUR PRESENT FACILITY, PLANT, PROPERTY, ETC?

☒ YES
☐ NO

IF THE ANSWER IS **YES** COMPLETE QUESTIONS **1, 2, 3, 4** AND **GENERATOR FORM PART - II**
IF THE ANSWER IS **NO** COMPLETE QUESTIONS **1** AND **4** AND RETURN THIS FORM

2. HAS THE FACILITY AT THIS LOCATION CHANGED ITS NAME OR IDENTIFICATION BECAUSE THERE WAS A CHANGE IN OWNERSHIP, CORPORATE NAME OR OPERATOR NAME, ETC. IF YES LIST THE NAMES BY WHICH THIS FACILITY HAS BEEN IDENTIFIED SINCE JANUARY 1, 1952 TO THE PRESENT.

☐ YES
☒ NO

NAME, ADDRESSES, AND TELEPHONE NUMBERS — DATES

3. DESCRIBE THE DOCUMENTS FROM WHICH DATA THAT IS INCLUDED ON PART-II WAS OBTAINED (SEE INSTRUCTIONS).

DOCUMENT DESCRIPTION	DATES
Shipping Logs	1973-81

4. I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT INFORMATION SUPPLIED IS TRUE AND COMPLETE. FALSE STATEMENTS SUBMITTED ON THIS DOCUMENT ARE PUNISHABLE PURSUANT TO SECTION 210.45 OF THE PENAL LAW.

NAME OF OWNER/OPERATOR, PARTNER OFFICER OR AUTHORIZED REPRESENTATIVE — TITLE — DATE

Harrison Gurley
SIGNATURE — BUSINESS PHONE

	ICS NUMBER - EPA ID NUMBER
STATE	ZIP

GENERATOR FORM
PART - II

G

DATE _____

IDOUS WASTE DISPOSAL SITE (SEE INSTRUCTIONS)	2. DESCRIPTION OF HAZARDOUS WASTES DEPOSITED AT THIS LOCATION (SEE INSTRUCTIONS)	3. EPA WASTE CODE	4. WASTE DISPOSED OF QUANTITY OF WASTE (TONS)	FORM LIQUID	FORM SOLID	FORM DRUMS	5. WASTE DISPOSAL DATES	6. TRANSPORTER OF HAZARDOUS WASTE (SEE INSTRUCTIONS)
Hazardous tes Were Treated-- Disposed	None	D001	-	x	x	x	1973-81	Not Applicable

GENERATOR FORM
PART - I

50 WOLF ROAD County--42
ALBANY, NEW YORK 12233 RTK# 10287

HAZARDOUS WASTE DISPOSAL QUESTIONNAIRE

PLEASE COMPLETE AND RETURN TO THE ABOVE ADDRESS, ATTENTION: RTK PROCESSING UNIT, ROOM 525

COMPANY NAME

ICS #: 4167557

SCHENECTADY CHEMICALS INC.(SCHE
FRANK RUTKEY
TENTH AVE. & CONGRES
SCHENECTADY NY 12303

Field	Entry
ICS CODE / EPA ID NUMBER	
CITY	
STATE	NYD002070100
ZIP CODE	
CONTACT NAME	H. G. Wertz
TELEPHONE	
PLANT STREET	
CITY	
STATE	
ZIP CODE	

PRINCIPAL BUSINESS OF PLANT Synthetic Coatings

PLEASE ANSWER THE FOLLOWING QUESTIONS:

CHECK ONE

1. SINCE JANUARY 1, 1952 THRU DECEMBER 31, 1981, HAVE YOU OR ANY PREVIOUS OWNERS/OPERATORS OF THIS FACILITY GENERATED ANY HAZARDOUS WASTE (SEE INSTRUCTIONS) AT YOUR PRESENT FACILITY, PLANT, PROPERTY, ETC?

☒ YES
☐ NO

IF THE ANSWER IS YES COMPLETE QUESTIONS 1, 2, 3, 4 AND GENERATOR FORM PART - II
IF THE ANSWER IS NO COMPLETE QUESTIONS 1 AND 4 AND RETURN THIS FORM

2. HAS THE FACILITY AT THIS LOCATION CHANGED ITS NAME OR IDENTIFICATION BECAUSE THERE WAS A CHANGE IN OWNERSHIP, CORPORATE NAME OR OPERATOR NAME, ETC. IF YES LIST THE NAMES BY WHICH THIS FACILITY HAS BEEN IDENTIFIED SINCE JANUARY 1, 1952 TO THE PRESENT.

☐ YES
☒ NO

NAME, ADDRESSES, AND TELEPHONE NUMBERS	DATES

3. DESCRIBE THE DOCUMENTS FROM WHICH DATA THAT IS INCLUDED ON PART-II WAS OBTAINED (SEE INSTRUCTIONS).

DOCUMENT DESCRIPTION	DATES
Shipping Records	1973-81

4. I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT INFORMATION SUPPLIED IS TRUE AND COMPLETE. FALSE STATEMENTS SUBMITTED ON THIS DOCUMENT ARE PUNISHABLE PURSUANT TO SECTION 210.45 OF THE PENAL LAW.

NAME OF OWNER/OPERATOR, PARTNER OFFICER OR AUTHORIZED REPRESENTATIVE TITLE DATE

Harrison G Wertz (signature)
SIGNATURE

(518) 370-4200
BUSINESS PHONE

NAME	ICS NUMBER - EPA ID NUMBER	
ADDRESS		
CITY	STATE	ZIP

GE[illegible]TOR[illegible]M

PART - II

G

DATE _____

1. HAZARDOUS WASTE DISPOSAL SITE (SEE INSTRUCTIONS)	2. DESCRIPTION OF HAZARDOUS WASTES DEPOSITED AT THIS LOCATION (SEE INSTRUCTIONS)	3. EPA WASTE CODE	4. WASTE DISPOSED OF QUANTITY OF WASTE (TONS)	FORM			5. WASTE DISPOSAL DATES	6. TRANSPORTER OF HAZARDOUS WASTE (SEE INSTRUCTIONS)
				LIQUID	SOLID	DRUMS		
1973-1981 All Records Indicate Waste Sent Off-Site Only for Treatment	None	D001	-	X	X	X	-	-

TRANSPORTER FORM PART - I

NL

50 WOLF ROAD
ALBANY, NEW YORK 12233

HAZARDOUS WASTE DISPOSAL QUESTIONNAIRE

PLEASE COMPLE [illegible] TO THE ABOVE ADDRESS, ATTENTION: RTK PROCESSING UNIT, ROOM 525

COMPANY NAME	SCHENECTADY CHEMICALS INC HAUL #: 4A-008		EPA ID NUMBER: NYD002070100
COMPANY MAILING ADDRESS	PO BOX 1046 SCHENECTADY	STATE	ZIP CODE NY 12301
PLANT NAME (if different)		CONTACT NAME H. G. Wertz	TELEPHONE
PLANT ADDRESS (if different) STREET	CITY	STATE	ZIP CODE

PRINCIPAL BUSINESS OF PLANT: Synthetic Coatings, Resins and Chemicals

PLEASE ANSWER THE FOLLOWING QUESTIONS:

TØ4ØØ88Ø

CHECK ONE

1. DID YOUR COMPANY, INCLUDING PREVIOUS OWNERS/OPERATORS OF YOUR COMPANY, TRANSPORT INDUSTRIAL WASTE. (SEE INSTRUCTIONS) BETWEEN JANUARY 1, 1952-DECEMBER 31, 1981?

☒ YES ☐ NO

IF THE ANSWER IS **YES** COMPLETE QUESTIONS **1, 2, 3, 4 AND TRANSPORTER FORM PART-II.**
IF THE ANSWER IS **NO** COMPLETE QUESTIONS 1 AND 4 AND RETURN THIS FORM

2. HAS THE NAME OF YOUR COMPANY CHANGED DUE TO A CHANGE IN OWNERSHIP, CORPORATE NAME OR OPERATOR NAME, ETC. IF YES, LIST ALL NAMES BY WHICH THE COMPANY HAS BEEN IDENTIFIED SINCE JANUARY 1, 1952 TO THE PRESENT.

☐ YES ☒ NO

NAME, ADDRESSES, AND TELEPHONE NUMBERS	DATES

3. DESCRIBE THE DOCUMENTS FROM WHICH DATA THAT IS INCLUDED ON PART-II WAS OBTAINED (SEE INSTRUCTIONS).

DOCUMENT DESCRIPTION	DATES
Shipping Records	1973-81

4. I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT INFORMATION SUPPLIED IS TRUE AND COMPLETE. FALSE STATEMENTS SUBMITTED ON THIS DOCUMENT ARE PUNISHABLE PURSUANT TO SECTION 210.45 OF THE PENAL LAW.

NAME OF OWNER/OPERATOR, PARTNER OFFICER OR AUTHORIZED REPRESENTATIVE — TITLE — DATE

Harrison H Wertz
SIGNATURE

(518) 370-4200
BUSINESS PHONE

NAME	TRANSPORTER ID	
ADDRESS		
CITY	STATE	ZIP

TRANSPORTER FORM
PART-II

DATE _____

1. HAZARDOUS WASTE DISPOSAL SITE (SEE INSTRUCTIONS)	2. NAME OF FIRM-COMPANY THAT PRODUCED INDUSTRIAL WASTE (SEE INSTRUCTIONS)	3. DATES OF SHIPMENT (MONTH) (YEAR)	4. DESCRIPTION OF HAZARDOUS WASTES DEPOSITED AT THIS LOCATION (SEE INSTRUCTIONS)	5. EPA WASTE CODE	6. WASTE DISPOSED OF QUANTITY OF WASTE (TONS)	FORM LIQUID	FORM SOLID
None	Schenectady Chemicals	-	-	-	-	x	x
	4166705						
	4166703						
	4167557						
	No information due to ~~[illegible]~~ litigation issues.						

NYD-10170

GENERATOR FORM PART - I

50 WOLF ROAD
ALBANY, NEW YORK 12233

HAZARDOUS WASTE DISPOSAL QUESTIONNAIRE

PLEASE COMPLETE AND RETURN TO THE ABOVE ADDRESS, ATTENTION: RTK PROCESSING UNIT, ROOM 525

COMPANY NAME	CITY	STATE	ZIP CODE
ICS #: 4166203 SCHENECTADY CHEMICALS INC.(ROTT			
FRED STEVENS RTE. 5S ROTTERDAM JUNCTION NY 12150		CONTACT NAME H. G. Wertz	TELEPHONE
PLANT ADDRESS (if different) STREET	CITY	STATE	ZIP CODE

ICS CODE
EPA ID NUMBER NYD002070118

PRINCIPAL BUSINESS OF PLANT

PLEASE ANSWER THE FOLLOWING QUESTIONS:

CHECK ONE

1. SINCE JANUARY 1, 1952 THRU DECEMBER 31, 1981, HAVE YOU OR ANY PREVIOUS OWNERS/OPERATORS OF THIS FACILITY GENERATED ANY HAZARDOUS WASTE (SEE INSTRUCTIONS) AT YOUR PRESENT FACILITY, PLANT, PROPERTY, ETC?

☒ YES
☐ NO

IF THE ANSWER IS YES COMPLETE QUESTIONS 1, 2, 3, 4 AND GENERATOR FORM PART - II
IF THE ANSWER IS NO COMPLETE QUESTIONS 1 AND 4 AND RETURN THIS FORM

2. HAS THE FACILITY AT THIS LOCATION CHANGED ITS NAME OR IDENTIFICATION BECAUSE THERE WAS A CHANGE IN OWNERSHIP, CORPORATE NAME OR OPERATOR NAME, ETC. IF YES LIST THE NAMES BY WHICH THIS FACILITY HAS BEEN IDENTIFIED SINCE JANUARY 1, 1952 TO THE PRESENT.

☐ YES
☒ NO

NAME, ADDRESSES, AND TELEPHONE NUMBERS — DATES

3. DESCRIBE THE DOCUMENTS FROM WHICH DATA THAT IS INCLUDED ON PART-II WAS OBTAINED (SEE INSTRUCTIONS).

DOCUMENT DESCRIPTION	DATES
Shipping Records	1973-81

4. I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT INFORMATION SUPPLIED IS TRUE AND COMPLETE. FALSE STATEMENTS SUBMITTED ON THIS DOCUMENT ARE PUNISHABLE PURSUANT TO SECTION 210 45 OF THE PENAL LAW.

NAME OF OWNER/OPERATOR, PARTNER OFFICER OR AUTHORIZED REPRESENTATIVE — TITLE — DATE

Harrison G. Wertz

SIGNATURE — BUSINESS PHONE

NAME	ICS NUMBER - EPA ID NUMBER	
ADDRESS		
CITY	STATE	ZIP

GENERATOR FORM
PART - II

DATE _____

1. HAZARDOUS WASTE DISPOSAL SITE (SEE INSTRUCTIONS)	2. DESCRIPTION OF HAZARDOUS WASTES DEPOSITED AT THIS LOCATION (SEE INSTRUCTIONS)	3. EPA WASTE CODE	4. WASTE DISPOSED OF QUANTITY OF WASTE (TONS)	FORM LIQUID	FORM SOLID	FORM DRUMS	5. WASTE DISPOSAL DATES	6. TRANSPORTER (HAZARDOUS WAS (SEE INSTRUCTIO
All Hazardous Wastes Were Treated - Not Disposed	None	D001	-	x	x	x	1952-81	Not Applicabl