New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation
Bureau of Hazardous Site Control

738012

ADDITIONS/CHANGES TO REGISTRY: SUMMARY OF APPROVALS

SITE NAME: Columbia Mills DEC I.D. NUMBER 738012

Current Classification 2

Activity: ☐ Add as Class ___ ☑ Reclassify to 4 ☐ Delist Category ___ ☐ Modify ___

Approvals:

Regional Hazardous Waste Engineer	Yes	☐	No	☐	
BEEI of NYSDOH	Yes	☐	No	☐	
DEE	Yes	☐	No	☐	
___ Remediation Action Bureau Director [Class 2]	Yes	☐	No	☐	
BHSC: a. Investigation Section	Yes	☐	No	☐	
b. O&M Section [Class 4]	Yes	☑	No	☐	
c. Site Control Section					Date ___
d. Director					Date 5/22/97

ROD RECLASSIFICATION

Completion Checklist		Completed By: Initials	Date
OWNER NOTIFICATION LETTER?	☑	___	6/16/97
ADJACENT PROPERTY OWNER NOTIFICATION LETTER?	☑	___	7/2/97
ENB/LEGAL NOTICE SENT? (For Deletion Only)	☐	___	___
COMMENTS SUMMARIZED/PLACE IN REPOSITORY	☐	___	___
FINAL NOTIFICATION SENT TO OWNER? (For Deletion Only)			

(For proposed Class 2a sites only) Planned investigative activities & dates: ___

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION

8/23/94

SITE INVESTIGATION INFORMATION

1. SITE NAME	2. SITE NUMBER	3. TOWN/CITY/VILLAGE	4. COUNTY
Columbia Mills	7-38-012	Town of Minetto	Oswego

5. REGION	6. CLASSIFICATION		
7	CURRENT 2	PROPOSED 4	MODIFY Boundaries

7. LOCATION OF SITE (Attach U.S.G.S. Topographic Map showing site location)

a. Quadrangle Oswego

b. Site Latitude 43 ° 24' 2" Site Longitude 76° 28' 34"

c. Tax Map Numbers 183.00 Section 02 Parcel No. 03.100

d. Site Street Address Route 48 in Minetto

8. BRIEFLY DESCRIBE THE SITE (Attach site plan showing disposal/sampling locations)

This is the former site of a coated cloth and vinyl products manufacturer. The plant operated from 1887 until 1976. The on-site disposal of wastes reportedly occurred throughout the plant's active period.

a. Area 11 acres b. EPA ID Number NYD000285478

c. Completed (X)Phase I (X)Phase II ( ) PSA (X)RI/FS ( )PA/SI (X)Other Remedial Action

9. Hazardous Waste Disposed (Include EPA Hazardous Waste Numbers)

Lead and chromium (D008 and D007), PCBs
various VOC's and semi VOC's

10. ANALYTICAL DATA AVAILABLE

a. ( )Air (X)Groundwater (X)Surface Water (X)Sediment (X)Soil ( )Waste ( )Leachate ( )EPTox ( )TCLP
b. Contravention of Standards or Guidance Values

Metals, VOC's and semi VOC's in soils, groundwater and surface water(s); Metals in sediments

11. CONCLUSION

All work required in ROD is complete. A long-term operation and maintenance plan is being developed and implemented. Periodic sampling of the groundwater monitoring wells and leachate discharge for baseline and routine groundwater parameters is included in the O&M for the site. Site boundaries are being modified to encompass only the remediated landfill, other areas are being excluded.

12. SITE IMPACT DATA

a. Nearest Surface Water: Distance on-site	Direction N/A		Classification D		
b. Nearest Groundwater: Depth 5 ft.	Flow Direction north		( )Sole Source ( )Primary ( )Principal		
c. Nearest Water Supply: Distance 1500 ft.	Direction south		Active (X)Yes ( )No		
d. Nearest Building: Distance 1000 ft.	Direction south		Use residential		
e. In State Economic Development Zone?	( )Y	(X)N	i. Controlled Site Access? Partial	(X)Y	( )N
f. Crops or livestock on site?	( )Y	(X)N	j. Exposed hazardous waste?	( )Y	(X)N
g. Documented fish or wildlife mortality?	( )Y	(X)N	k. HRS Score below listing for NPL, <28.5		
h. Impact on special status fish or wildlife resource?	( )Y	(X)N	l. For Class 2: Priority Category 1		

13. SITE OWNER'S NAME	14. ADDRESS	15. TELEPHONE NUMBER
Town of Minetto and Oswego County	Minetto, New York 13115	unknown

16. PREPARER	17. APPROVED
Signature 5/22/97 Date	X Signature Date
Michael Cinda Project Manager NYSDEC	Earl H. Barcomb, Director, RHSC, DER
Name, Title, Organization Project Manager, DER, BCS	Name, Title, Organization

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION 5/27/97
INACTIVE HAZARDOUS WASTE DISPOSAL REPORT

CLASSIFICATION CODE: 4 REGION: 7 SITE CODE: 738012
EPA ID: NYD000285478

NAME OF SITE : Columbia Mills Company
STREET ADDRESS: Route 48

TOWN/CITY:	COUNTY:	ZIP:
Minetto	Oswego	13115

SITE TYPE: Open Dump- X Structure-X Lagoon- Landfill- Treatment Pond-
ESTIMATED SIZE: 11 Acres

SITE OWNER/OPERATOR INFORMATION:
CURRENT OWNER NAME....: Town of Minetto & Oswego County
CURRENT OWNER ADDRESS.: Minetto, NY
OWNER(S) DURING USE...: Columbia Mills Company
OPERATOR DURING USE...: Columbia Mills Corp.
OPERATOR ADDRESS.....: Route 48, Minetto, NY
PERIOD ASSOCIATED WITH HAZARDOUS WASTE: From 1887 To 1977

SITE DESCRIPTION:
Columbia Mills was a factory that manufactured vinyl window shades & coverlets, that closed in 1977. Wastes stored in the buildings have been removed. Organic contamination from buried tanks has been confirmed. High levels of heavy metal contamination has been confirmed in the drum disposal area at the back of the plant property by the swamp. Several underground storage tanks (USTs) were removed by August 1988. Asbestos had been found on site and the USEPA initiated an emergency response to remove it. The EPA also took down the huge on-site chimney. An Order for an Interim Remedial Measure (IRM) & a Remedial Investigation/Feasibility Study (RI/FS) was signed in March 1989 by the PRPs (Columbia Mills, Inc.). The RI/FS was completed in early 1992. A Record of Decision (ROD) was signed on March 31,1992. The ROD calls for the consolidation and capping of wastes and site sediments in the drum disposal area, the removal of sediments in the plant sewers, and the treatment of groundwater in a contaminated "hot spot" area near a former underground storage tank. The IRM consisted of three activities. The first part consisted of excavating, drumming & disposing PCB contaminated soil in the area of the old boilerhouse. The work was completed in December of 1989. The second part consisted of treatment of the solvent contaminated soil from excavations of the USTs and was conducted in July and August 1990. The third part consisted of remediation of the contaminated soil near test pit No. 3 by vacuum extraction. This task has been completed. A Consent Order for a Remedial Design/Remedial Action (RD/RA) was been signed. By April 1994, all RD had been completed. Construction related to the sewers & activities for UST area No. 1 were complete in May 1994. Landfill capping has been completed, and the site has moved into the O&M Phase. The site boundaries have been modified to encompass only the capped landfill.

HAZARDOUS WASTE DISPOSED:

TYPE	QUANTITY (units)
Solvents	unknown
Heavy metals	unknown
PCBs	unknown

SITE CODE: 738012

ANALYTICAL DATA AVAILABLE:
Air- Surface Water-X Groundwater-X Soil-X Sediment-X

CONTRAVENTION OF STANDARDS:
Groundwater-X Drinking Water- Surface Water-X Air-

LEGAL ACTION:

TYPE..: C.O., RI-FS and IRMs State- X Federal-
STATUS: Negotiation in Progress- Order Signed- X

REMEDIAL ACTION:

Proposed- Under design- In Progress- Completed-X
NATURE OF ACTION: Soil removal and remediation

GEOTECHNICAL INFORMATION:
SOIL TYPE:
GROUNDWATER DEPTH: 5 ft.

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

Groundwater contamination has been confirmed in the main plant area and to a lesser degree in the drum disposal area. Metal contamination is present in the drum area and pond sediment.
Due to the remedial measures conducted, hazardous waste has been placed in a capped landfill, eliminating exposure potential.

ASSESSMENT OF HEALTH PROBLEMS:

Direct contact and inhalation concerns arose because this site was heavily trespassed by recreational users allowing for exposures to soils containing heavy metals and asbestos. Measures to cap the heavy metals area and eliminate access as requested by DOH were implemented. Sampling of private wells did not detect site-related impacts and a drinking water survey found that private wells are upgradient of the site. The surface water ponds onsite are contaminated. The site is fences and no additional exposure concerns have been identified. The ROD incorporates a variety of measures which will remove, treat or encapsulate the wastes in a manner which will permanently eliminate exposures.

15 (12-75)

New York State Department of Environmental Conservation

MAR 2 6 1997

MEMORANDUM

TO: Earl Barcomb, Director, Bureau of Hazardous Site Control
FROM: George Harris, Chief, Western Field Services Section
SUBJECT: THRU: H. Richard Koelling, Director, Bureau of Construction Services
DATE: Site Reclassification - Columbia Mills, Oswego County, Site No. 7-38-012

MAR 2 5 1997

Remedial work at the Columbia Mills Landfill was performed in accordance with the Record of Decision and the approved Contract Documents and is now considered complete. The landfill was the last part of the overall remedial work to be performed on the site.

It is proposed to reclassify the site from a class 2 "significant threat to the public health or environment - action required" to a class 4 "site properly closed - requires continued management".

This proposal is based on the fact that the landfill has been properly capped, extraction and treatment of groundwater in UST Area 1 with vapor extraction of soil hot spots is complete and the former plant sewers have been abandoned. Additionally, the PRP completed a number of IRMs including fencing of the main plant area, removal of over 100 containers of chemicals, removal of 8 underground storage tanks, placement of a six inch soil cover over the former drum disposal area, removal of building 8 soils contaminated with PCBs, spreading/aerating stockpiled soils and vapor extraction of test pit 3 soils. Also, USEPA is conducting a response action to address asbestos contamination which includes demolition and removal of the former plant buildings.

This reclassification should include modifications to the "site" boundaries to include the landfill area only. The remaining areas of the property are now considered remediated and require no continued management. Refer to the "as-builts" attached to the Final Remediation Report for the surveyed boundary of the cap system and associated components (i.e., the area fenced and the frog pond).

A summary of previous reports describing the completed work follows:

Operable Unit	Work	Report
A1	Tank Pull	Oct'88 RI Report (pages 3-1 to 3-9)
B1	Soil Tanks	Treatment of VOC contaminated soils from UST excavations by Malcolm Pirnie 12/90
B1	PCBs	Removal of PCB contamination in Bldg. 8 Area by Malcolm Pirnie 1/90
C1	UST Area 3	Attached

Operable Unit	Work	Report
02	UST Area 1	Attached
01	Sewer Cleaning	Sewer Decommissioning Project by Malcolm Pirnie 1/94
03	Landfill	Attached

Reports for operable units A1 and 01 can be found in the non-administrative record (D. Camp). Operable Unit B1 reports are included in the formal administrative record (T. Bennett).

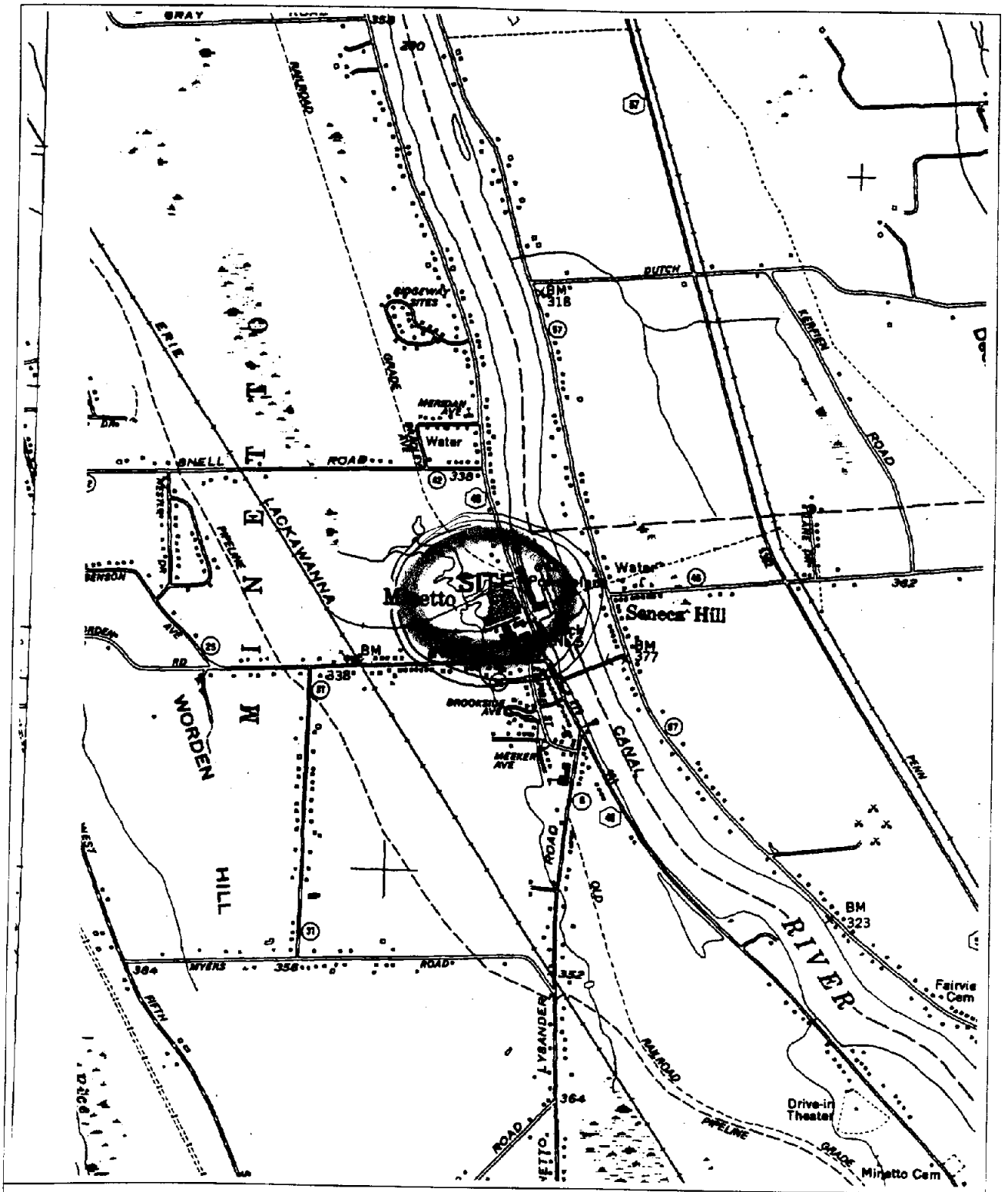
A copy of the Post Closure Operations, Maintenance and Monitoring Plan is also attached for your information.

A site registry site classification decision form for the site is attached.

If you have any questions, please call Michael Cruden at 7-7878.

Attachment

cc: w/o Att.: C. Branagh - NYSDEC Region 7
R. Heerkens - NYSDOH



Site Location Map

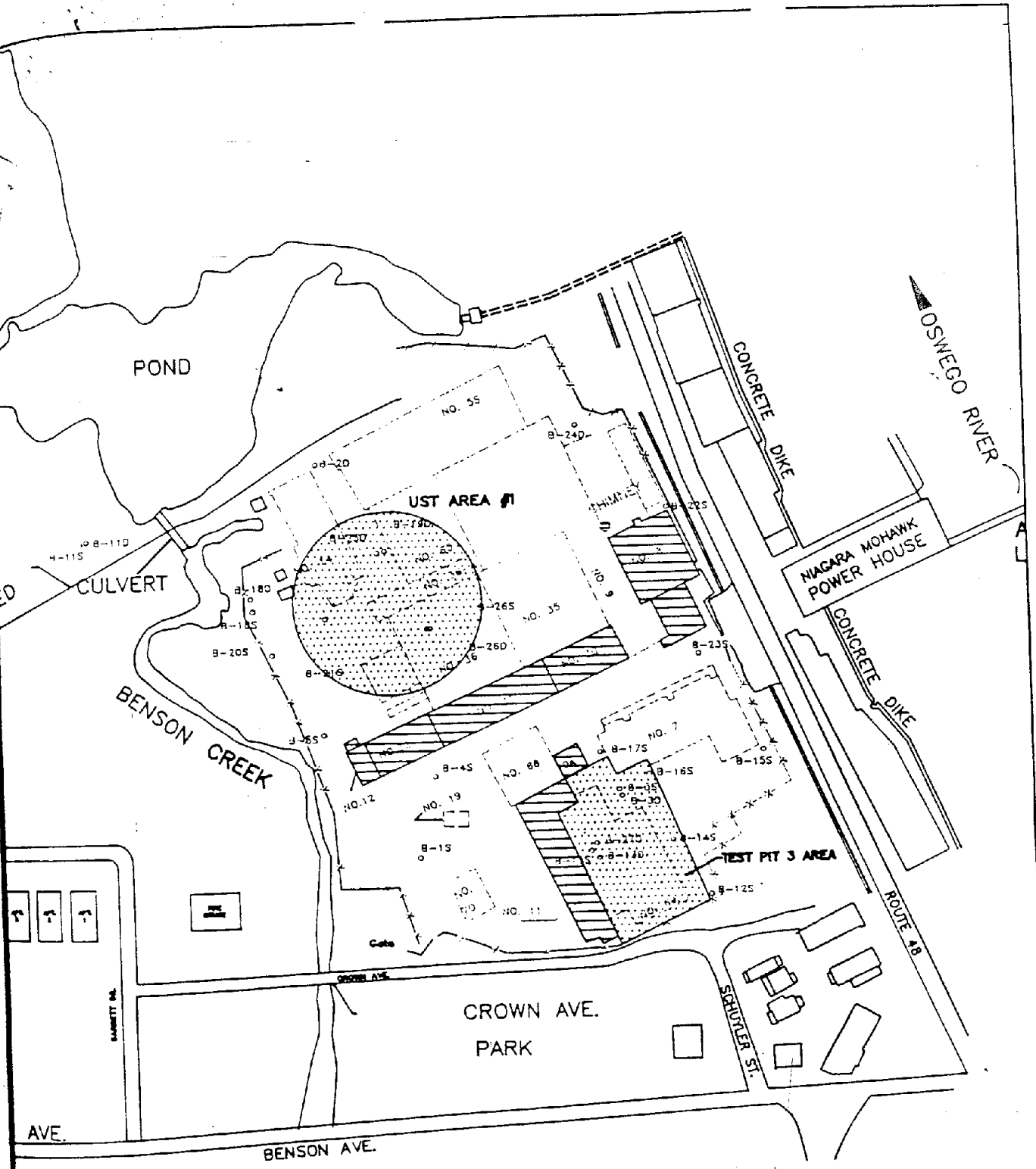
738012 Columbia Mills Company

NYSDOT Planimetric Quadrangle(s):
OSWEGO WEST, OSWEGO EAST

N

0 500 1000 1500 2000
FEET

Scale 1:24,000



MALCOLM PIRNIE

COLUMBIA MILLS

UST AREA#1 & TEST PIT 3 LOCATION MAP

MALCOLM PIRNIE, INC.

FIGURE 1-1

Columbia Mills Site

Minetto (T), Oswego County, New York

Site No. 7-38-012

RECORD OF DECISION

March 1992

Prepared by:
New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation

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

Thomas C. Jorling
Commissioner

DECLARATION STATEMENT - RECORD OF DECISION (ROD)

Columbia Mills Site
Minetto, Oswego County
Site No. 07-38-012

Statement of Purpose

The Record of Decision (ROD) sets forth the selected Remedial Action Plan for the Columbia Mills inactive hazardous waste site. This Remedial Action Plan was developed in accordance with the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986, and the New York State Environmental Conservation Law (ECL). The selected remedial plan complies to the maximum extent practicable with the National Oil and Hazardous Substance Pollution Contingency Plan, 40 CFR Part 300, of 1985.

Statement of Basis

This decision is based upon the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the Columbia Mills site and upon public input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A bibliography of the documents included as a part of the Administrative Record is included in Appendix 5 of the ROD.

Description of Selected Remedy

The selected remedial action plan will control the potential contaminant routes of exposure to human health and the environment through excavation, capping and containment, and treatment of the source waste. The remedy is technically feasible and complies with the statutory requirements. Briefly, the selected remedial action plan includes the following:

A) Stabilize and cap wastes in the former plant disposal area and collected and treat groundwater from the area of capped wastes. Wastes in the landfill area will be

stabilized to prevent leaching of metals followed by containment. Containment will consist of the construction of a single membrane barrier cap in conjunction with a barrier drain to collect and transport for treatment, the leachate from the fill. In addition a second trench system will drain three ponds which currently form the edges of the landfill and will serve to direct surface water and groundwater away from the containment area. The contaminated pond and stream sediments, as well as soils and sediments from the main plant also contaminated with metals will also be included in this on-site containment system.

This containment system will eliminate the infiltration of precipitation into the landfill waste, prevent migration of contaminants into the surrounding environment, and will prevent the direct contact by both people and wildlife with the waste. Leachate will be collected and is expected to be treated on site and discharged to surface water or collected for off-site treatment, as appropriate. Treatment will meet the appropriate permit requirements for its discharge.

A groundwater monitoring program will be implemented to monitor the effectiveness of this system. Since the selected remedy results in hazardous wastes remaining on site, at a minimum, a five-year review of the effectiveness of the remedy is required. This review will be conducted to evaluate whether the implemented remedy continues to provide adequate protection of human health and the environment.

B) Extraction and treatment of the volatile organic compound contaminated groundwater in the UST Area 1 with vapor extraction treatment of soil hot spots. Groundwater treatment will commence first and will control contaminant migration in the aquifer. The vacuum extraction will be used only as necessary to remediate contaminated soil hot spots. Groundwater will be treated as necessary to meet the appropriate permit requirements for its discharge. Treatment is expected to be accomplished with air stripping or carbon absorption, and will be discharged to surface water. Groundwater and soils treatment design will incorporate proper controls so that all air discharge and water quality standards or criteria for discharge will be met.

C) Remove the sediments from the plants sewers and dispose of in the on-site landfill or off-site facility followed by the abandonment of sewer lines. This remedy will project the public health by eliminating the possibility of future contact with these materials and will eliminate current discharges to the Oswego River. It is expected that most sediments will be disposed of on the on-site landfill. However, any sediments which test as characteristic hazardous waste or contain high levels of organic contamination will be disposed of in an off-site facility.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs with the remedy selected for this site as being protective of human health.

3.3 VAPOR EXTRACTION SYSTEM

Air Monitoring and Sampling

Vapor extraction system air monitoring and sampling were performed during 1994 to ensure air discharge limits were being met and to monitor vapor phase carbon performance. Periodic monitoring of the air stream was conducted by Malcolm Pirnie with a Foxboro Century OVA (Model 108) flame ionization meter during system operation. Monitoring was conducted in accordance with the schedules contained in the Test Pit 3 Area Treatment Trailer Operations 1993 Annual Report, revised May 1994, and the July 1994 New York State Superfund Standby Contract Project Work Plan. A summary of OVA meter results is provided in Table 2.

Air samples of the primary carbon unit influent (the stream entering the first in the series of two carbon adsorbers) and the primary carbon effluent (the stream exiting the first adsorber and entering the second adsorber) were also obtained by Upstate Laboratories, Inc. (Upstate), East Syracuse, New York following each month-long period of operation. This was done in accordance with the schedules contained in the report and work plan mentioned above. The air samples were analyzed for USEPA 8240 VOCs. Analysis for phenol was performed during the first part of the year; however, this compound was dropped from the monitoring requirements since it was not normally detected and did not appear to be a Test Pit 3 Area contaminant. The requirement of analyzing the effluent stream from the secondary carbon unit (the air being discharged to the atmosphere) was also dropped during 1994 since discharge limits for the system apply to the effluent from the first carbon. The second carbon unit is meant to serve only as a back-up. Upstate's analytical results are summarized in Table 3.

Carbon Treatment System Performance - Comparison of Monitoring/Sampling Results to Discharge Limits

As previously mentioned, the air discharge limits for the system are applicable to the primary carbon effluent stream, or the stream entering the secondary carbon unit. Concentration limits and efficiency criteria have been set for each target compound, while a normalized removal efficiency of 70 percent must be met by the primary carbon unit for total hydrocarbons (as measured with the OVA meter). The normalized percent removal

Declaration

The selected Remedial Action Plan is protective of human health and the environment. The remedies selected will meet the substantive requirements of the Federal and State laws, regulations and standards that are applicable or relevant and appropriate to the remedial action. The remedies will satisfy, to the maximum extent practicable, the statutory preference for remedies that employ treatment that reduce toxicity, mobility or volume as a principal element. This statutory preference will be met in the landfill by eliminating the mobility of contaminant pathways of exposure to human health and the environment through the installation of a containment system for the source waste at this site. In UST Area 1, the toxicity, mobility and volume of contaminants in the soil and groundwater will be reduced by the treatment system to be implemented, while in the sewer systems, the mobility of the contaminants will be addressed by their removal from an area of active migration on the sewers and contained either on or off site.

3/25/92
DATE

Edward O. Sullivan
Deputy Commissioner

2.2 VAPOR EXTRACTION SYSTEM

A schematic of the vapor extraction system is included in Figure 3. At the end of 1993, all Test Pit 3 Area vacuum wells had been shut down (December 23, 1993) and arrangements had been made for the changeout of the carbon in both vapor phase adsorbers. Both adsorbers were changed out on January 12, 1994, and the vapor extraction system was restarted on January 13, 1994. Listed below are the start-up and shut-down dates for the vapor extraction system during 1994. These dates refer to the periods of operation of the vacuum wells, or the actual vapor extraction system. The vacuum pump does also operate during groundwater treatment, serving to capture vapors from the first and last tanks in the groundwater treatment system for vapor carbon treatment.

Days of System Operation	Notes
Jan 13 - Jan 28	All VWs turned off Jan 28 - low contaminant concentrations in vapors, system turned off to allow contaminant vapors to build back up in Test Pit 3 Area soil
Feb 4 - Mar 17	All VWs turned off Mar 17 - low contaminant concentrations in vapors and relatively low removal efficiency being achieved by primary carbon adsorber, system turned off to allow vapors to build back up in soil
Mar 21 & Apr 1	Tried to start vacuum wells; however, low contaminant concentrations in vapors and elevated groundwater levels in vacuum wells did not permit startup at this time
May 31 - Jun 30	All VWs turned off Jun 30 - normalized treatment efficiency of primary carbon dropped below 70%, VWs had been shut down for a few days during this time period for groundwater system modification

Jul 15 - Jul 25	All VWs shut down on July 25 (following a power failure in the Town) for system maintenance
Aug 2 - Aug 11	All VWs except VW-5 in operation; VWs shut down for approx. 2 days during this period of time due to power failure in Town; all VWs turned off Aug 11 for transition of operations from The Columbia Mills, Inc. to the NYSDEC
Nov 9 - Nov 23	Vacuum wells VW-1, 3, 4, and 9 turned on Nov 9; VWs 2 and 5 turned on Nov 15; VW-7 turned on Nov 18; all VWs turned off Nov 23 - low contaminant concentrations in vapors, system turned off to allow contaminant vapors to build back up in Test Pit 3 Area soil

When the vacuum wells were shut off on November 23, it was planned to restart them during the following week and cycle them on and off during December. However, the wells remained off through the end of December. Buildup of pressure in the vapor extraction system raised concern regarding the increased load placed on the vacuum pump's motor. Malcolm Pirnie investigated possible causes and solutions to this problem; however, no cause could be determined.

Operation of the vapor extraction system during 1994 was affected by the level of the groundwater table in the Test Pit 3 Area. Groundwater levels began to increase during March due to the snow melt and amount of precipitation received, and levels remained high during April and May. Because of this increase in elevation of the water table, the vacuum wells could not be put into operation during this period of time.

The vacuum wells operated for a total of approximately 113 days during 1994.

TABLE 2
COLUMBIA MILLS – TEST PIT 3 AREA
VAPOR EXTRACTION SYSTEM
RESULTS OF OVA METER MONITORING – 1994

Date	Time	Primary Influent (ppm)+	Primary Effluent (ppm)+	Secondary Effluent (ppm)+	Normalized Primary % Removal+	Active Wells	Dilution Valve
01/13/94	7:30	Turned on vacuum wells					
	8:00	630	170	150	96	All	Closed
	9:00	600	145	115	94	All	Closed
	10:00	510	130	110	95	All	Closed
01/14/94*	9:30	330	50	40	97	All	Closed
01/17/94	8:00	290	50	30	92	All	Closed
01/18/94	8:00	280	40	25	94	All	Closed
01/19/94	8:00	270	40	30	96	All	Closed
01/28/94	9:00	40	38	37	67	All	Closed
	9:15	Turned off vacuum wells					
02/04/94	8:55	Turned on vacuum wells					
	9:00	270	42	40	99	All	Closed
02/09/94	10:00	100	46	26	73	All	Closed
02/14/94*	8:30	125	25	22	97	All	Closed
03/01/94	8:00	70	35	23	74	All	Closed
03/15/94*	8:30	100	56	28	61	All	Closed
03/17/94	8:00	Turned off vacuum wells					
03/21/94	11:20	Turned on vacuum wells					
	11:30	49	44	38	45	All	Closed
	12:00	38	36	32	33	All	Closed
	12:00	Turned off vacuum wells					
04/01/94	7:30	Turned on vacuum wells					
	8:00	38	34	33	80	All	Closed
	8:15	Turned off vacuum wells					
05/31/94	12:53 PM	Turned on vacuum wells					
	12:55 PM	520	180	140	89	All	Closed
	1:40 PM	490	160	110	87	All	Closed
	2:50 PM	285	98	65	82	All	Opened
06/08/94	8:00	190	56	36	87	All	Opened
06/30/94	10:00	110	80	30	38	All	Opened
	10:10	Turned off vacuum wells					
07/15/94	10:45	Turned on vacuum wells					
	10:45	800	215	140	89	All	Closed
	10:55	770	205	135	89	All	Closed
07/20/94*	8:30	280	100	44	76	All	Closed
07/25/94	Vacuum wells shut off						
08/02/94	11:20	Turned on vacuum wells					
	11:30	>1000	500	360	78	All but VW-5	Closed
	11:45	>1000	500	360	78	All but VW-5	Closed
08/11/94	10:25	500	330	180	53	All but VW-5	Closed
	10:30	Turned off vacuum wells					

No operation due to high water table

TABLE 2
COLUMBIA MILLS – TEST PIT 3 AREA
VAPOR EXTRACTION SYSTEM
RESULTS OF OVA METER MONITORING – 1994

Date	Time	Primary Influent (ppm)+	Primary Effluent (ppm)+	Secondary Effluent (ppm)+	Normalized Primary % Removal+	Active Wells	Dilution Valve
1/09/94	AM	Turned on vacuum wells					
	AM	600	310	240	81	1,3,4,9	Closed
1/15/94	AM	82	38	28	81	1-5,9	Closed
1/18/94	AM	120	68	50	74	1-5,7,9	Closed
1/22/94	AM	72	24	22	96	1-5,7,9	Closed
1/23/94	AM	42	12	10	94	1-5,7,9	Closed
	AM	Turned off vacuum wells					

NOTES: Total air flow rate = 210-220 cfm

* – Upstate Labs at site to obtain air samples for lab analysis

\+ – Definitions:

The primary influent concentration is the concentration of contaminants, as measured with the OVA meter, in the air stream entering the first in the series of two carbon adsorbers.

The primary effluent concentration is the concentration of contaminants, as measured with the OVA meter, in the air stream after the air has passed through the first carbon adsorber. This is the concentration of contaminants entering the second carbon adsorber.

The secondary effluent concentration is the concentration of contaminants, as measured with the OVA meter, in the air stream after the air has passed through both carbon adsorbers. This is the concentration being discharged to the atmosphere.

The normalized percent removal takes into account the effluent concentration of the secondary carbon. To calculate this removal, the secondary effluent concentration was first subtracted from each of the two readings for the primary unit. The percent removal was then calculated. This assumes that what is passing through the secondary unit cannot be treated with carbon in general (e.g. methane).

No OVA readings were taken between August 11, 1994 and September 30, 1994 since the entire facility was shut down. No readings were taken during October because all vacuum wells remained off.

No OVA readings were taken during the month of December, as all vacuum wells remained off.

TABLE 3
COLUMBIA MILLS – TEST PIT 3 AREA SYSTEM
ROUTINE VAPOR EXTRACTION SYSTEM SAMPLING
SUMMARY OF ANALYTICAL RESULTS – 1994
TARGET COMPOUNDS DETECTED OR PREVIOUSLY DETECTED

PARAMETER / DATE	OVA Reading ppm	USEPA 8240 Volatile Organics: Ethylbenzene µg/m3	Ethylbenzene ppm	Toluene µg/m3	Toluene ppm	Xylenes µg/m3	Xylenes ppm	Phenol µg/m3	Phenol ppm
Primary Vapor Carbon Influent									
01/14/94	330	<50	<0.0115	<50	<0.0133	100	0.0230	<77	<0.0200
02/14/94	125	<75	<0.0173	<75	<0.0199	110	0.0253	<77	<0.0200
03/15/94	100	<50	<0.0115	<50	<0.0133	52	0.0120	<77	<0.0200
07/20/94	280	<210	<0.0484	<210	<0.0557	<210	<0.0484	--	--
Primary Vapor Carbon Effluent									
01/14/94	50	<5	<0.0012	<5	<0.0013	<5	<0.0012	<77	<0.0200
02/14/94	25	<5	<0.0012	<5	<0.0013	<5	<0.0012	<77	<0.0200
03/15/94	56	<5	<0.0012	<5	<0.0013	<5	<0.0012	<77	<0.0200
07/20/94	100	<100	<0.0230	<100	<0.0265	<100	<0.0230	--	--
Secondary Vapor Carbon Effluent									
01/14/94	40	<5	<0.0012	<5	<0.0013	<5	<0.0012	<77	<0.0200
02/14/94	22	<5	<0.0012	<5	<0.0013	<5	<0.0012	<77	<0.0200
03/15/94	28	<5	<0.0012	<5	<0.0013	<5	<0.0012	<77	<0.0200
Max Allowable Discharge Limit for the Primary Vapor Carbon	--	278098	64.0	278098	73.8	278098	64.0	--	--
Control/Media Blank									
01/14/94	--	<0.04 µg	--	<0.04 µg	--	<0.04 µg	--	<5 µg	--
02/14/94	--	<0.025 µg	--	<0.025 µg	--	<0.025 µg	--	<5 µg	--
03/15/94	--	<0.05 µg	--	<0.05 µg	--	<0.05 µg	--	<5 µg	--
07/20/94*	--	<0.2 µg	--	0.3 µg	--	<0.2 µg	--	--	--

Notes:

-- = not applicable or not analyzed

* = indicates methylene chloride also detected at 0.6 ug, and acetone detected at 1.4 ug.

A known volume of air was collected for each sample then passed through two carbon adsorbant tubes in series. The VOCs adsorb onto the carbon; the carbon is then analyzed for VOCs.

Conversion from $\mu g/m^3$ to ppm assumes T = 77°F and V = 24.45.

$ppm = [(\mu g/m^3)(V)]/[(\text{molecular weight})(1000)]$

1069079\VE1994.

17-Jan-95

takes into account the effluent concentration of the secondary carbon; the secondary effluent concentration is first subtracted from each of the two readings for the primary unit before calculating the percent removal. This assumes that what is passing through the secondary unit cannot be treated with carbon in general (eg., methane); this assumption is based on results of air sampling conducted since system start-up in 1993.

As is apparent from the OVA meter data in Table 2, contaminant concentrations in the vapor removed from the Test Pit 3 Area soil were initially high each time the vacuum wells were started. Concentrations and, subsequently, the removal efficiency of the carbon then dropped over time. Once the efficiency of the primary carbon dropped to near 70 percent, the system was shut off, and contaminant vapors were allowed to build back up in the soil. The system was then restarted, and this cycling continued through the year.

Results of air sampling performed by Upstate after each month of vacuum well operation indicated that the only target compound present in the air stream from the vacuum wells was xylene. This compound was detected at very low concentrations going into the primary carbon and was not detected coming out. No other target compounds were detected. Thus, discharge limits were met for all target compounds.

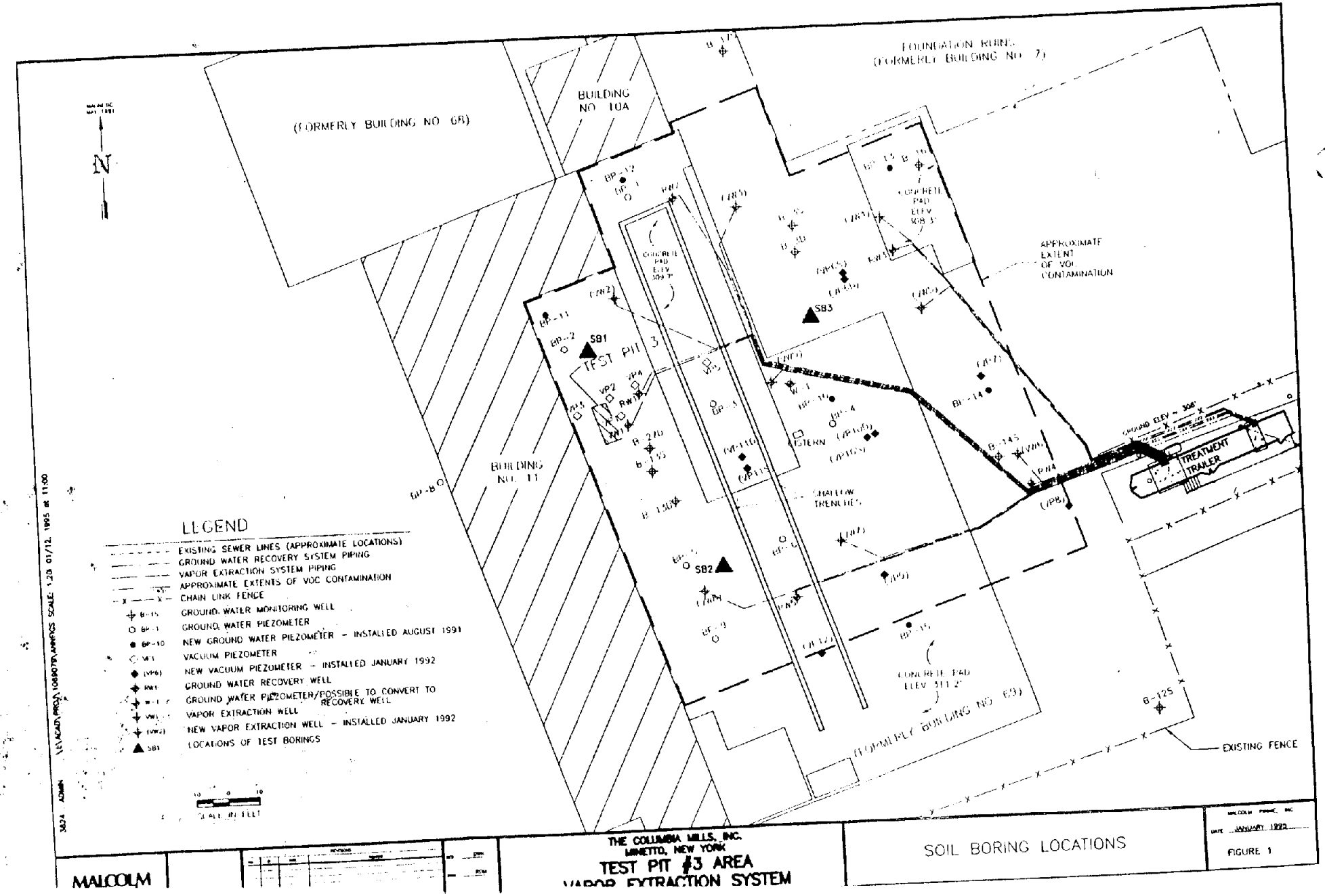
Attachment 4

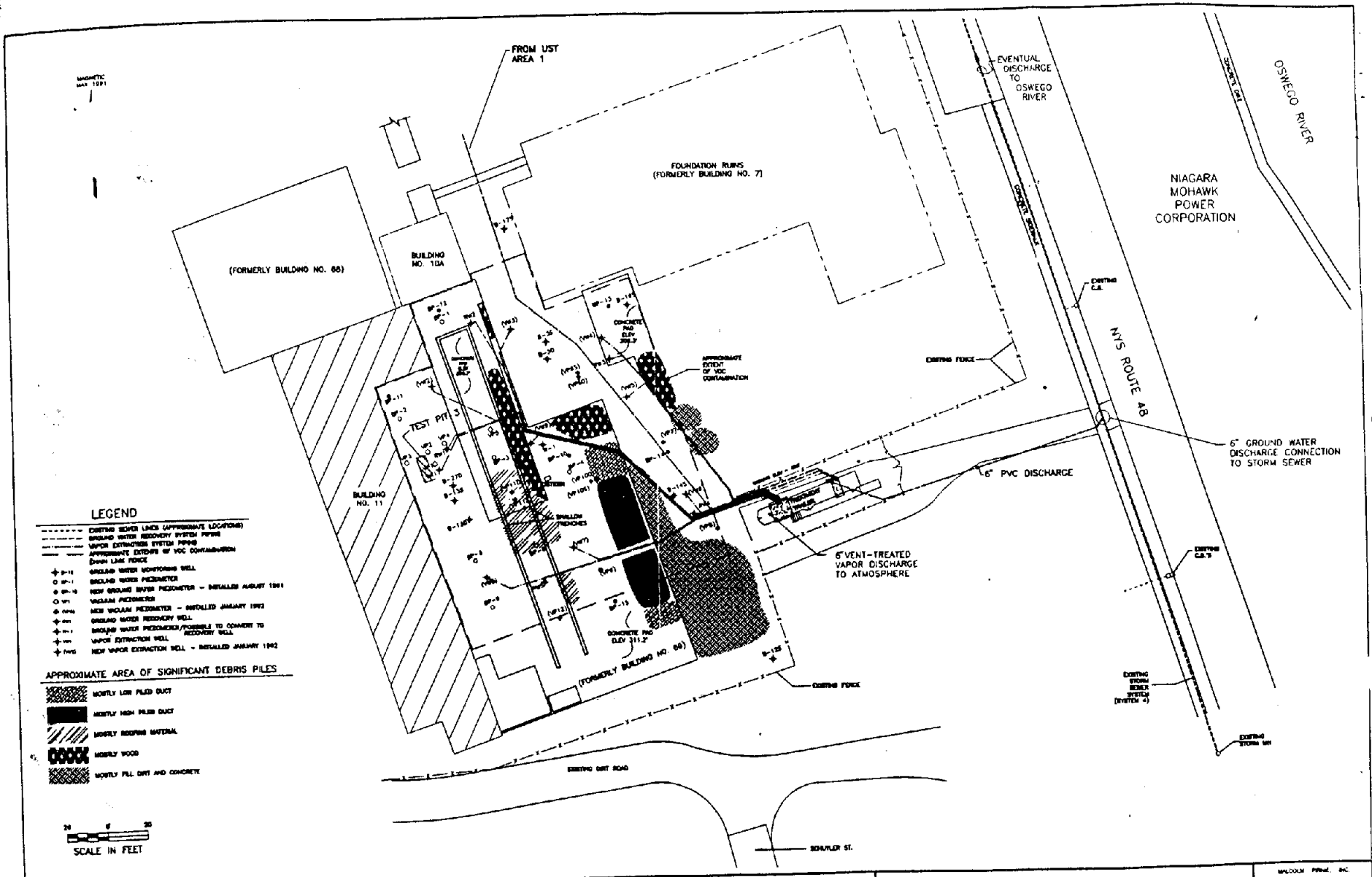
TABLE 4
COLUMBIA MILLS – TEST PIT 3 AREA
DEC. 13, 1994 SOIL SAMPLING
SUMMARY OF ANALYTICAL RESULTS

Sample Location/Depth		VOLATILE ORGANICS (ug/kg)					TPH (mg/kg)
		Xylenes	Toluene	Methylene Chloride	Acetone	2-Butanone (MEK)	
SB1	5-7 ft.	<11	<11	6JB	13	<11	290
	9-11 ft	<11	<11	6JB	<11	<11	<10
SB2	5-7 ft	1800E	<11	6JB	30	<11	<10
	5-7 ft (DL)	1200D	<57	66BD	51JD	11JBD	—
	7-9 ft	2600E	<55	15JB	14JB	<55	<10
	7-9 ft (DL)	2600D	<1300	910JD	<1300	<1300	—
SB3	6-8 ft.	16	1J	11JB	11J	<12	<10
	10-12 ft	14	2J	11JB	9J	<11	<10
Soil Clean-Up Level*		1200	1500	100	200	300	—

NOTES: TPH = Total Petroleum Hydrocarbons
J = Indicates an estimated value.
B = Indicates compound was found in the associated blank as well as the sample.
E = Indicates compound whose concentration exceeded the calibration range of the analytical instrument.
D = Indicates compound was detected in an analysis at a secondary dilution factor.
(DL) = Indicates diluted sample. The concentrations of xylenes (which initially exceeded the calibration range for both SB2 samples) should be taken from this more dilute analysis.
* = Clean-up levels from NYSDEC TAGM on determination of soil clean-up levels. A soil organic carbon content of 1% was assumed for the calculations.

The soil clean-up goal was also defined in the April 1991 IRM report "Evaluation of Alternatives for Treatment of VOC Contaminated Subsurface Soils In Test Pit 3 Area" as reducing total target VOC concentrations to approximately 1 ppm, or 1000ug/kg.


(FORMERLY BUILDING NO. 6B)
BUILDING NO. 10A
FOUNDATION REMAINS (FORMERLY BUILDING NO. 7)
BUILDING NO. 11
APPROXIMATE EXTENT OF VOC CONTAMINATION
TEST PIT 3
SB1
SB2
SB3
CONCRETE PAD ELEV. 309.7'
CONCRETE PAD ELEV. 309.5'
CONCRETE PAD ELEV. 311.2'
CISTERN
SHALLOW TRENCHES
TREATMENT TRAILER
GROUND ELEV. ~ 308'
(FORMERLY BUILDING NO. 6J)
EXISTING FENCE
B-125
LEGEND
EXISTING SEWER LINES (APPROXIMATE LOCATIONS)
GROUND WATER RECOVERY SYSTEM PIPING
VAPOR EXTRACTION SYSTEM PIPING
APPROXIMATE EXTENTS OF VOC CONTAMINATION
CHAIN LINK FENCE
GROUND WATER MONITORING WELL
GROUND WATER PIEZOMETER
NEW GROUND WATER PIEZOMETER - INSTALLED AUGUST 1991
VACUUM PIEZOMETER
NEW VACUUM PIEZOMETER - INSTALLED JANUARY 1992
GROUND WATER RECOVERY WELL
GROUND WATER PIEZOMETER/POSSIBLE TO CONVERT TO RECOVERY WELL
VAPOR EXTRACTION WELL
NEW VAPOR EXTRACTION WELL - INSTALLED JANUARY 1992
LOCATIONS OF TEST BORINGS
SCALE IN FEET
3624 ADMIN \ELACAD\PROJ\10690\PLANFIGS SCALE 1.20 01/12, 1995 at 11:00
MALCOLM
THE COLUMBIA MILLS, INC.
MINETTO, NEW YORK
TEST PIT #3 AREA
VAPOR EXTRACTION SYSTEM
SOIL BORING LOCATIONS
DATE JANUARY 1992
FIGURE 1



MALCOLM PIRNIE

THE COLUMBIA MILLS, INC.
MINETTO, NEW YORK

TEST PIT #3 AREA IRM VAPOR EXTRACTION SYSTEM

SITE PLAN

DATE JULY 1994

FIGURE 1-2

Attachment 5

Attachment 6

Columbia Mills - Test Pit 3 Area
Vapor Extraction System

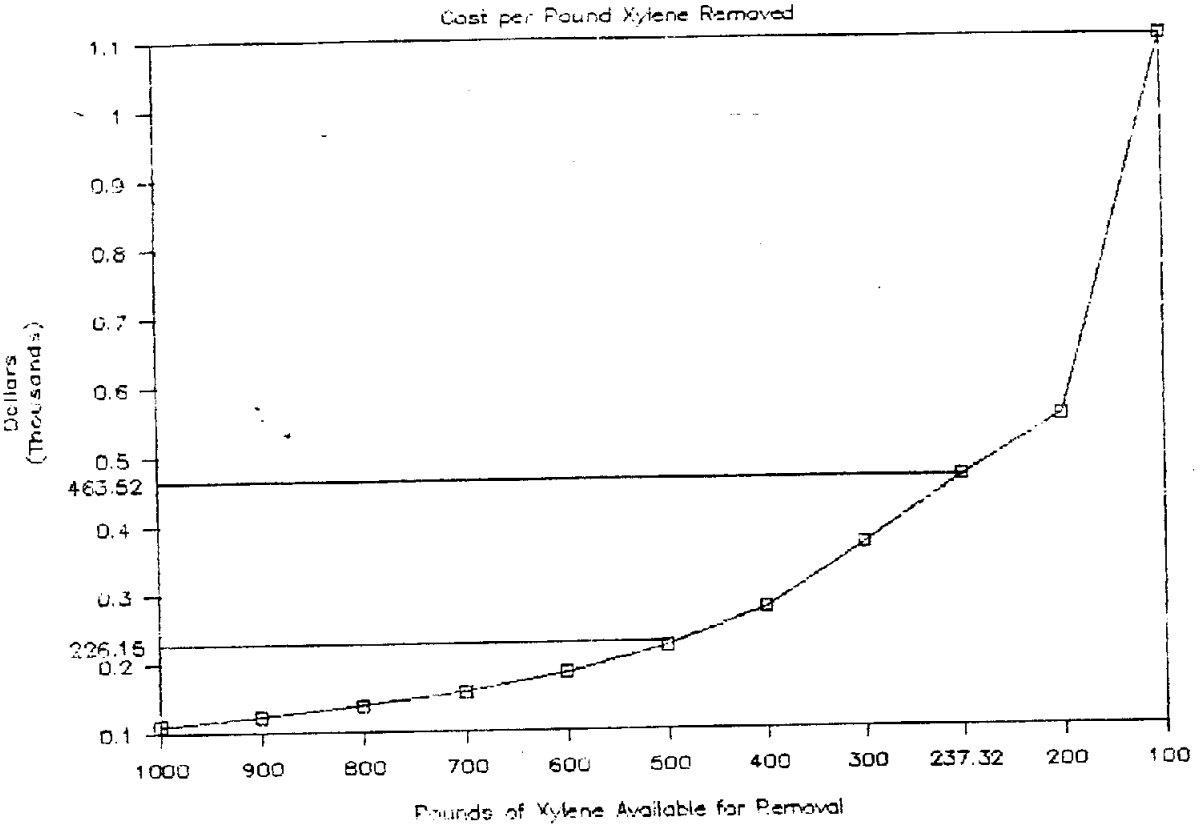
Date	No. of Days	Primary Influent (ppm)	Xylene Removal Rate (lb./hr.)	Xylene Removal Rate (lb./day)	Xylene Removed/ Period (lb.)	Xylene Removed To Date (lb.)	
1/13/94	-	630	2.23	-	0	0.00	
	1 hr	600	2.13	-	2.18	2.18	
	1 hr	510	1.81	-	1.97	4.15	
1/14/94	1	330	1.17	34.98	34.98	39.13	
1/17/94	3	290	1.03	25.82	77.46	116.58	
1/18/94	1	280	0.99	24.24	24.24	140.83	
1/19/94	1	270	0.96	23.39	23.39	164.22	
1/28/94	9	40	0.14	13.25	119.21	283.43	- All VWs turned off - low contaminant
2/4/94	-	270	0.96	0.00	0.00	283.43	concentrations in vapors. System
2/9/94	5	100	0.35	15.87	79.34	362.76	turned off to allow contaminant vapors
2/14/94	5	125	0.44	9.45	47.25	410.01	to build back up in Test Pit Area 3.
3/1/94	15	70	0.25	8.28	124.23	534.24	
3/15/94	14	100	0.35	7.24	101.37	635.61	
3/21/94	-	49	0.17	-	0.00	635.61	- Elevated GW levels. Low concentrations
	0.5 hr	38	0.13	-	0.08	635.68	
4/1/94	-	38	0.13	-	0.00	635.68	- Elevated GW levels. Low concentrations
5/31/94	60	520	1.84	0.00	0.00	635.68	- System turned back on.
	1 hr	490	1.74	-	1.34	637.03	
	1 hr	285	1.01	-	1.65	638.67	
6/8/94	8	190	0.67	20.20	161.61	800.29	
6/30/94	22	110	0.39	12.81	281.76	1082.05	- System shut down for maintenance.
7/15/94	-	800	2.84	-	0.00	1082.05	- System turned back on.
	10 min	770	2.73	-	0.56	1082.60	
7/20/94	5	280	0.99	43.73	218.63	1301.23	
8/2/94	12	500	1.77	0.00	0.00	1301.23	- System shut down 7/25 due to power fai
	15 min	500	1.77	-	0.44	1301.67	
8/11/94	9	500	1.77	42.33	381.00	1682.67	- System shut down for transfer to NYSDE
11/9/94	-	600	2.13	-	0.00	1682.67	- System turned back on.
11/15/94	6	82	0.29	29.01	174.03	1856.70	
11/18/94	3	120	0.43	8.59	25.77	1882.47	
11/22/94	4	72	0.26	8.17	32.66	1915.14	
11/23/94	1	42	0.15	4.85	4.85	1919.99	

System operated a total of 113 days during 1994.

Number of days system operated during the month of November 1994:	14	Operation of system impeded by elevated GW
Pounds of xylene removed during this period:	237.32	levels.
Cost per pound of xylene removed: ($53,669.13/237.32 lbs):	$226.15	

Theoretical maximum amount of xylene that could be removed if plant operates approx. 14 days month for 4 months:	949.26 lbs	This assumes that water table can be sufficiently lowered to allow uninterrupted operation of the vapor recovery wells.
Theoretical maximum cost per pound of xylene removed ($110,000/237.32 lbs):	$463.52	This assumes that only 237 pounds of xylene is available for removal.
Theoretical minimum cost per pound of xylene removed ($110,000/949.26 lbs):	$115.88	This assumes that 949 pounds of xylene (theoret. max.) is available for removal.

Figure 2


Cost per Pound Xylene Removed
Dollars (Thousands)
1.1
1
0.9
0.8
0.7
0.6
0.5
463.52
0.4
0.3
226.15
0.2
0.1
1000
900
800
700
600
500
400
300
237.32
200
100
Pounds of Xylene Available for Removal

A. Sylvester

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233-7010

John P. Cahill
Commissioner

JUL 02 1997

This letter was sent to the people on the attached list.

Dear :

The Department of Environmental Conservation (DEC) maintains a Registry of sites where hazardous waste disposal has occurred. Property located at Route 48 in the Town of Minetto and County of Oswego and designated as Tax Map Number 183-02-03.100 was recently reclassified as a Class 4 in the Registry. The name and site I.D. number of this property as listed in the Registry is Site #738012, Columbia Mills Co.

The Classification Code 4 means that the site is properly closed – requires continued management.

We are sending this letter to you and others who own property near the site listed above, as well as the county and town clerks. We are notifying you about these activities at this site because we believe it is important to keep you informed.

If you currently are renting or leasing your property to someone else, please share this information with them. If you no longer own the property to which this letter was sent, please provide this information to the new owner and provide this office with the name and address of the new owner so that we can correct our records.

The reason for this recent classification decision is as follows:

- All work required in Record of Decision is complete. A long-term operation and maintenance plan is being developed and implemented. Periodic sampling of the groundwater monitoring wells and leachate discharge for baseline and routine groundwater parameters is included in the Operation and Maintenance for the site. Site boundaries are being modified to encompass only the remediated landfill, other areas are being excluded.

If you would like additional information about this site or the inactive hazardous waste site remedial program, call:

DEC's Inactive Hazardous Waste Site Toll-Free Information Number **1-800-342-9296** or New York State Health Department's Health Liaison Program (HeLP) **1-800-458-1158, ext. 402.**

Sincerely,

Robert L. Marino
Chief
Site Control Section
Bureau of Hazardous Site Control
Division of Environmental Remediation

bcc: R. Marino
T. Reamon
S. Miller, R/7
A. Sylvester
A. Carlson
L. Ennist
C. Branagh, R/7

AS/srh

A. Sylvester

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233-7010

John P. Cahill
Acting Commissioner

JUN 16 1997

Town of Minetto
Town Hall
P.O. Box 220
Community Drive
Minetto, NY 13115

Dear Sir/Madam:

As mandated by Section 27-1305 of the Environmental Conservation Law (ECL), the New York State Department of Environmental Conservation (NYSDEC) must maintain a Registry of all inactive disposal sites suspected or known to contain hazardous waste. The ECL also mandates that this Department notify the owner of all or any part of each site or area included in the Registry of Inactive Hazardous Waste Disposal Sites as to changes in site classification.

Our records indicate that you are the owner or part owner of the site listed below. Therefore, this letter constitutes notification of change in the classification of such site in the Registry of Inactive Hazardous Waste Disposal Sites in New York State.

DEC Site No.: 738012
Site Name: Columbia Mills Company
Site Address: Route 48, Minetto, New York 13115

Classification change from 2 to 4

The reason for the change is as follows:

- All work required in Record of Decision is complete. A long-term operation and maintenance plan is being developed and implemented. Periodic sampling of the groundwater monitoring wells and leachate discharge for baseline and routine groundwater parameters is included in the Operation and Maintenance for the site. Site boundaries are being modified to encompass only the remediated landfill, other areas are being excluded.

Enclosed is a copy of the New York State Department of Environmental Conservation, Division of Hazardous Waste Remediation, Inactive Hazardous Waste Disposal Site Report form as it appears in the Registry and Annual Report, and an explanation of the site classifications. The Law allows the owner and/or operator of a site listed in the Registry to petition the Commissioner of the New York State Department of Environmental Conservation for deletion of such site, modification of site classification, or modification of any information regarding such site, by submitting a written statement setting forth the grounds of the petition. Such petition may be addressed to:

John P. Cahill
Acting Commissioner
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-0001

For additional information, please contact me at (518) 457-0747.

Sincerely,

Robert L. Marino
Chief
Site Control Section
Bureau of Hazardous Site Control
Division of Environmental Remediation

Enclosures

bcc: E. Barcomb
R. Marino
T. Reamon
A. Sylvester

w/Enc. (Copy of Site Report form only)
R. Dana
A. Carlson, DOH
J. Sama
S. Ervolina
T. Fucillo, R/7
C. Branagh, R/7
E. Belmore

AS/srh