02-8710-95-PA
REV. No. 0

PRELIMINARY ASSESSMENT
COLUMBUS MCKINNON CORPORATION

PREPARED UNDER

TECHNICAL DIRECTIVE DOCUMENT NO. 02-8710-95
CONTRACT NO. 68-01-7346

FOR THE

ENVIRONMENTAL SERVICES DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

DECEMBER 4, 1987

NUS CORPORATION
SUPERFUND DIVISION

SUBMITTED BY:

Donna J. Restivo for
PAULINE DOHERTY
PROJECT MANAGER

REVIEWED/APPROVED BY:

RONALD M. NAMAN
FIT OFFICE MANAGER

NUS CORPORATION

POTENTIAL HAZARDOUS WASTE SITE

PRELIMINARY ASSESSMENT

02-8710-95-PA
Rev. No. 0

Columbus McKinnon Corporation	NYD002105534
Site Name	**EPA Site ID Number**
Fillmore and Freemont Street Tonawanda, NY 14150	02-8710-95
Address	**TDD Number**

Date of Site Visit: November 09, 1987

SITE DESCRIPTION

Columbus McKinnon Corporation, an active facility located in Tonawanda, Erie County, New York, manufactures chains. From 1930 to 1965, the site was used to dispose of 27,000 gallons of water-soluble waste cutting oils. Hazardous wastes generated during manufacturing processes are stored in drums on site and shipped to a secure landfill. During an inspection in 1982, the storage of many corroding drums of waste on a gravel and dirt yard was noted.

Ellicott Creek is adjacent to the site and is used for recreational purposes. It flows into the Niagara River approximately 1 mile west of the site. Drinking water intakes for Tonawanda, North Tonawanda, and Lockport are within 3 stream miles of the site. Groundwater is not used for drinking purposes.

A NYSDEC Consent Order was drafted in October 1986 but has not yet been signed by Columbus McKinnon.

PRIORITY FOR FURTHER ACTION: High __ Medium X No Further Action__

RECOMMENDATIONS

A medium priority for further action is recommended. There is a potential for contamination of the Ellicott Creek which is used for recreational purposes. Ellicott Creek flows into the Niagara River approximately 1 mile west, where the drinking water intakes for Tonawanda, North Tonawanda, and Lockport are located.

Prepared by: Pauline Doherty
of NUS Corporation

Date: December 4, 1987

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	000210553 4

II. SITE NAME AND LOCATION

01 SITE NAME *(Legal, common, or descriptive name of site)*	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Columbus McKinnon Corporation	Fillmore and Freemont Street

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Tonawanda	NY	14150	Erie	029	33

09 COORDINATES LATITUDE	LONGITUDE
43° 01′ 03″ N	078° 52′ 16″ W

10 DIRECTIONS TO SITE *(Starting from nearest public road)*

From Youngmann Expressway (Rte. 290) heading west take Twin Cities Memorial Highway north. Continue for approximately 1 mile. Take a left onto Fillmore Street

III. RESPONSIBLE PARTIES

01 OWNER *(if known)*	02 STREET *(Business, mailing, residential)*
Columbus McKinnon Corporation	One Freemont Street

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
Tonawanda	NY	14150	(716) 696-3200

07 OPERATOR *(if known and different from owner)*	08 STREET *(Business, mailing, residential)*
Same as above.	

09 CITY	04 STATE	11 ZIP CODE	12 TELEPHONE NUMBER

13. TYPE OF OWNERSHIP *(Check one)*

x A. PRIVATE _ B. FEDERAL: _____ *(Agency name)* _ C. STATE _ D COUNTY _ E. MUNICIPAL

_ F OTHER: _____ *(Specify)* _ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE *(Check all that apply)*

_ A. RCRA 3001 DATE RECEIVED: _____ MONTH DAY YEAR _ B. UNCONTROLLED WASTE SITE *(CERCLA 103c)* DATE RECEIVED: _____ MONTH DAY YEAR x C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

x YES DATE: 05/09/86 MONTH DAY YEAR

_ NO

BY *(Check all that apply)*

_ A. EPA _ B. EPA CONTRACTOR _ C. STATE x D. OTHER CONTRACTOR

_ E. LOCAL HEALTH OFFICIAL _ F OTHER: _____ *(Specify)*

CONTRACTOR NAME(S): Advanced Environmental Systems and Conestoga-Rovers and Associates

02 SITE STATUS *(Check one)*

x A. ACTIVE _ B. INACTIVE _ C. UNKNOWN

03 YEARS OF OPERATION

_____ / _____ BEGINNING YEAR ENDING YEAR x UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

The Columbus McKinnon Site was used from 1930 to 1965 to dispose of 27,000 gallons of water-soluble waste cutting oils. Analysis of environmental samples (See Attachment A)

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

The local population could be exposed through the ingestion of contaminated surface water, the direct contact with contaminated surface water and soil, and/or (See Attachment A)

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION *(Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)*

_ A. HIGH *(Inspection required promptly)* x B. MEDIUM *(Inspection required)* _ C. LOW *(Inspect on time available basis)* _ D. NONE *(No further action needed, complete current disposition form)*

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF *(Agency/Organization)*	08 TELEPHONE NUMBER
Diana Messina	U.S. EPA Region 2, Edison, NJ	(201) 321-6776

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Pauline Doherty	U.S. EPA	NUS Corp., FIT 2	(201) 225-6160	12/04 87

ATTACHMENT A

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN OR ALLEGED

has indicated the presence of PCBs, volatile organics, and metals.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

the inhalation of contaminated air. There is also a potential for contamination of flora and fauna.

EPA

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	9302105534

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES *(Check all that apply)*

- x A. SOLID
- _ B. POWDER, FINES
- x C. SLUDGE
- _ D. OTHER _____ *(SPECIFY)*
- _ E. SLURRY
- x F. LIQUID
- _ G. GAS

02 WASTE QUANTITY AT SITE

(Measures of waste quantities must be independent)

- TONS: Unknown
- CUBIC YARDS: _____
- NO. OF DRUMS: Unknown

03 WASTE CHARACTERISTICS *(Check all that apply)*

- x A. TOXIC
- x B. CORROSIVE
- _ C. RADIOACTIVE
- x D. PERSISTENT
- _ E. SOLUBLE
- _ F. INFECTIOUS
- _ G. FLAMMABLE
- _ H. IGNITABLE
- _ I. HIGHLY VOLATILE
- _ J. EXPLOSIVE
- x K. REACTIVE
- _ L. INCOMPATIBLE
- _ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE	27,000	gal	Columbus McKinnon manufactures chains. From
SOL	SOLVENTS			1930 to 1965, waste oil was disposed of on site
PSD	PESTICIDES			Hazardous wastes are stored in drums and shipped
OCC	OTHER ORGANIC CHEMICALS	220	gal/year	to a secure landfill. An inspection in 1982 noted the
IOC	INORGANIC CHEMICALS	4.5	tons/year	storage of many corroding drums of waste on a
ACD	ACIDS	374	tons/year	gravel and dirt yard.
BAS	BASES			
MES	HEAVY METALS	174	metric tons/year	

IV. HAZARDOUS SUBSTANCES *(See Appendix for most frequently cited CAS Numbers)*

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
IOC	Sulfuric Acid	7664-93-9	Tank	Unknown	
OCC	Tetrachloroethene	127-18-4	Drum	Unknown	
IOC	Iron Sulfate	7720-78-7	Drum	Unknown	
MES	Chromium	7440-47-3	Drum	Unknown	
OLW	PCB	1336-36-3	Land Disposal	>50	ppm

V. FEEDSTOCKS *(See Appendix for CAS Numbers)*

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION *(Cite specific references, e.g. state files, sample analysis, reports)*

RCRA Inspection Form, Columbus McKinnon, NYSDEC, June 15, 1983.

Potential Hazardous Waste Site Identification and Preliminary Assessment, U.S. EPA, November 16, 1981

Columbus McKinnon Site Investigation, Conestoga-Rovers and Associates Limited and Advanced Environmental Systems, July 23, 1986.

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	8002125534

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 x A. GROUNDWATER CONTAMINATION — 02 x OBSERVED (DATE: 1/14/85) — _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION

On January 14, 1985, Advanced Environmental Systems, Inc. collected a groundwater sample from an on-site monitoring well. Analysis revealed contamination with volatile organics; however, groundwater is not used for drinking purposes.

01 x B. SURFACE WATER CONTAMINATION — 02 x OBSERVED (DATE: 10/8/82) — _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Approx. 90,000 — 04 NARRATIVE DESCRIPTION

Sediment samples collected from Ellicott Creek on October 8, 1982, revealed PCB contamination. Ellicott Creek is used for recreational purposes. Ellicott Creek flows into the Niagara River approximately 1 mile west of the site. The drinking water intakes for Tonawanda, North Tonawanda and Lockport are located downstream in the Niagara River within 3 stream miles of the site.

01 x C. CONTAMINATION OF AIR — 02 _ OBSERVED (DATE: _____) — x POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 150,755 — 04 NARRATIVE DESCRIPTION

There is potential for air contamination through the volatilization of compounds from the soil or surface water.

01 _ D. FIRE/EXPLOSIVE CONDITIONS — 02 _ OBSERVED (DATE: _____) — _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

There is no potential for fire or explosive conditions due to the nature of the wastes.

01 x E. DIRECT CONTACT — 02 _ OBSERVED (DATE: _____) — x POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Unknown — 04 NARRATIVE DESCRIPTION

There is potential for direct contact through contaminated surface water. The Ellicott Creek lies adjacent to the site and is used for recreational purposes.

01 x F. CONTAMINATION OF SOIL — 02 x OBSERVED (DATE: 5/9/86) — _ POTENTIAL _ ALLEGED
03 AREA POTENTIALLY AFFECTED: < 1 (Acres) — 04 NARRATIVE DESCRIPTION

A site inspection was conducted on May 9, 1986 by Advanced Environmental System and Conestoga-Rovers & Associates. Analysis of soil samples indicated the presence of volatile organic compounds and metals.

01 xG. DRINKING WATER CONTAMINATION — 02 _ OBSERVED (DATE: _____) — x POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Approx. 90,000 — 04 NARRATIVE DESCRIPTION

The contaminants detected in Ellicott Creek could potentially migrate to the Niagara River which is used as a source of drinking water. The intakes for the community water systems of Tonawanda, North Tonawanda and Lockport are within 3 stream miles of the site.

01 x H. WORKER EXPOSURE/INJURY — 02 _ OBSERVED (DATE: _____) — x POTENTIAL _ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: Unknown — 04 NARRATIVE DESCRIPTION

The potential for worker exposure exists through the inhalation of contaminated air and direct contact with contaminated soil.

01 x I. POPULATION EXPOSURE/INJURY — 02 _ OBSERVED (DATE: _____) — x POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Unknown — 04 NARRATIVE DESCRIPTION

The local population could be exposed through the ingestion of contaminated surface water, the direct contact with contaminated surface water and soil, or the inhalation of contaminated air.

EPA POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	0002105534

II. HAZARDOUS CONDITIONS AND INCIDENTS *(CONTINUED)*

01 x J. DAMAGE TO FLORA — 02 _ OBSERVED (DATE. _____) — x POTENTIAL — _ ALLEGED

04 NARRATIVE DESCRIPTION

There is potential for damage to flora. Contaminants could affect the vegetation along and in Ellicott Creek.

01 x K. DAMAGE TO FAUNA — 02 _ OBSERVED (DATE: _____) — x POTENTIAL — _ ALLEGED

04 NARRATIVE DESCRIPTION *(Include name(s) of species)*

There is potential for damage to fauna. Contaminants could affect the large mouth bass, northern pike, and various species of pan fish and carp that reportedly inhabit Ellicott Creek.

01 x L. CONTAMINATION OF FOOD CHAIN — 02 _ OBSERVED (DATE: _____) — x POTENTIAL — _ ALLEGED

04 NARRATIVE DESCRIPTION

There is potential for food chain contamination through the ingestion of possibly contaminated plants or animals. Ellicott Creek is used for recreational fishing.

01 x M. UNSTABLE CONTAINMENT OF WASTES *(Spills, Runoff, Standing liquids, Leaking drums)* — 02 x OBSERVED (DATE: 9/22/82) — _ POTENTIAL — _ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 14,678

04 NARRATIVE DESCRIPTION

A NYSDEC inspection conducted on September 22, 1982, revealed the storage of corroding waste drums on a gravel and dirt yard. There is also no known containment system for the waste oils disposed of on the site.

01 x N. DAMAGE TO OFF-SITE PROPERTY — 02 x OBSERVED (DATE: 10/8/82) — _ POTENTIAL — _ ALLEGED

04 NARRATIVE DESCRIPTION

Sediment samples collected on October 8, 1982 by the Erie County Department of Environment and Planning from Ellicott Creek indicated PCB contamination.

01 x O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 _ OBSERVED (DATE: _____) — x POTENTIAL — _ ALLEGED

04 NARRATIVE DESCRIPTION

There is potential for the contamination of the city sewer system through surface runoff of PCB-contaminated soils.

01 _ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 _ OBSERVED (DATE: _____) — _ POTENTIAL — _ ALLEGED

04 NARRATIVE DESCRIPTION

There is no potential for illegal or unauthorized dumping; Columbus McKinnon is an active facility and entry is restricted.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

No other known, potential, or alleged hazards.

III. TOTAL POPULATION POTENTIALLY AFFECTED: > 150,000

IV. COMMENTS

No Comments.

V. SOURCES OF INFORMATION *(Cite specific references, e.g. state files, sample analysis, reports)*

Water Quality Management Program, Environmental Inventory. Report 4 Erie and Niagara Counties Regional Planning Board, 1978.

OW-2 Groundwater Sample Split with the DEC and Analyzed for Volatiles and PCBs, Columbus McKinnon Corporation, Advanced Environmental Systems, Inc., February 18, 1985

County of Erie D.E.P Memorandum from E.J Sciascia to P. Buechi, NYSDEC, Subject Columbus McKinnon Sediment Sampling Results, October 7, 1985 (See Attachment B)

ATTACHMENT

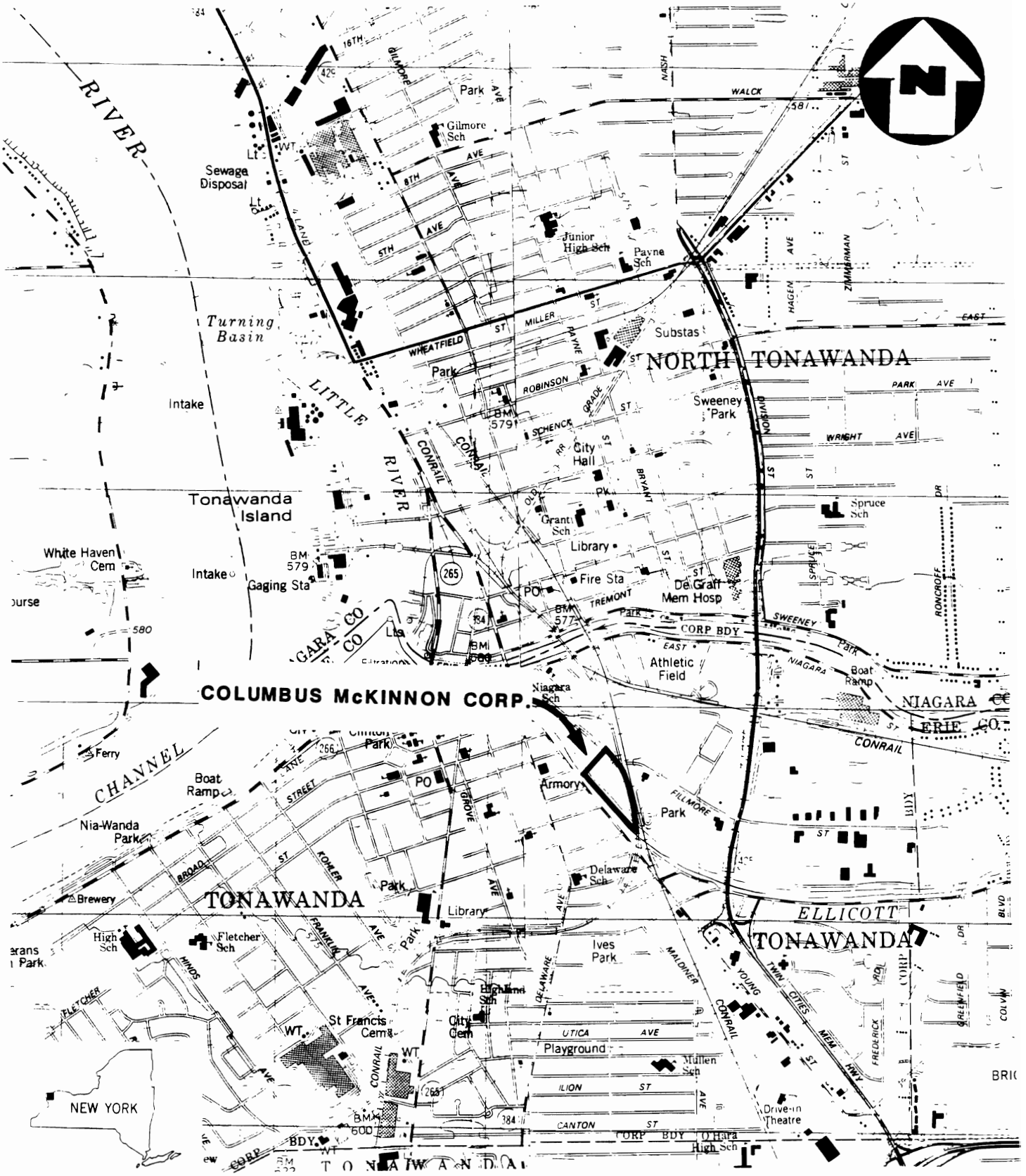
POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

V. SOURCES OF INFORMATION *(Cite Specific references, e.g. state files, sample analysis, reports)*

General Science Corporation, Graphical Exposure Modelling System, Landover, MD. 1986.

APPENDIX A

MAPS AND PHOTOGRAPHS



(QUAD) TONAWANDA EAST, N.Y.

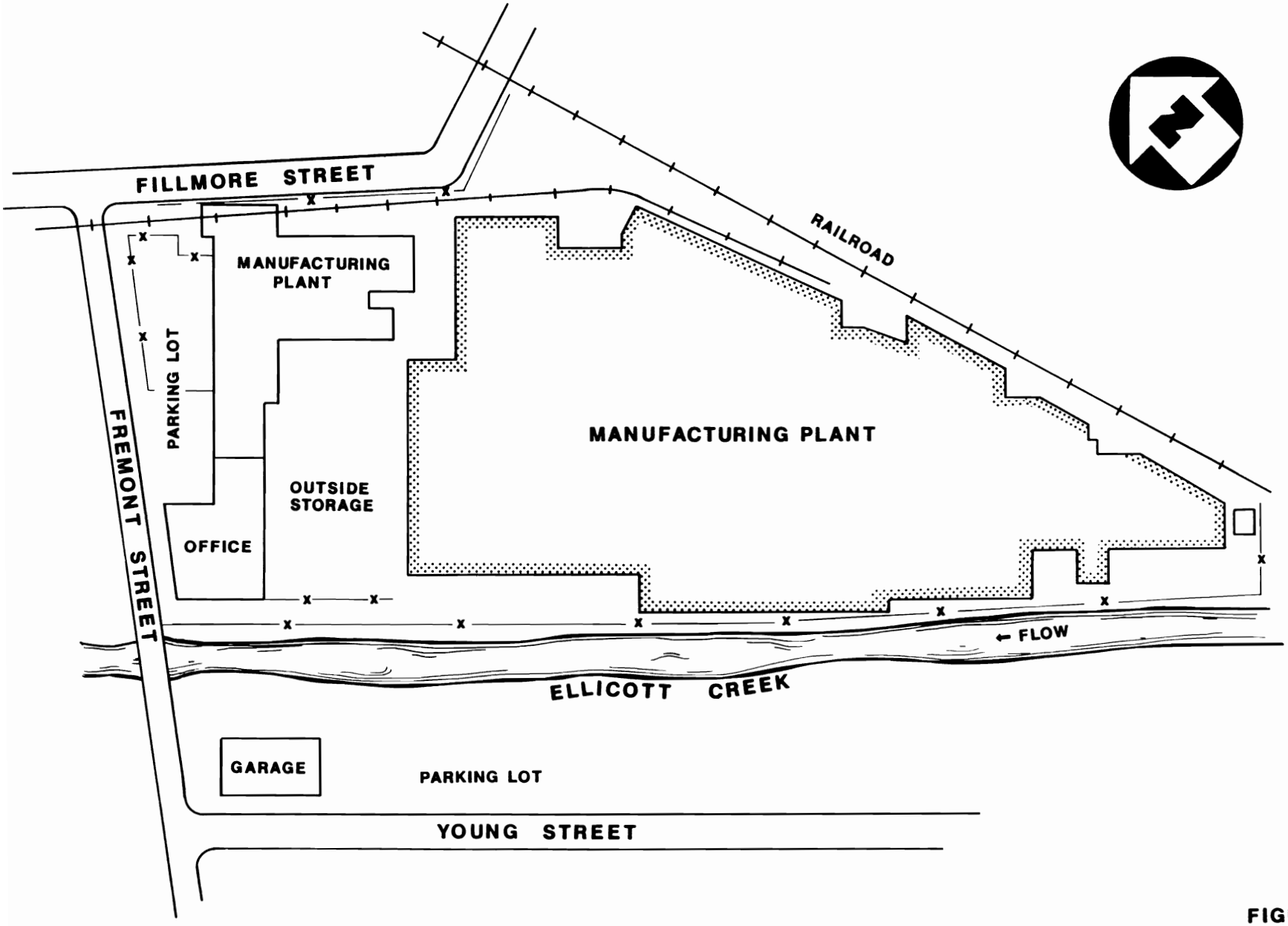
FIGURE 1

SITE LOCATION MAP

COLUMBUS McKINNON CORP., TONAWANDA, N.Y.

SCALE: 1"= 2000'

NUS CORPORATION



SITE MAP

COLUMBUS McKINNON CORP., TONAWANDA, N.Y.

(NOT TO SCALE)

FIGURE 2

NUS CORPORATION

02-8710-95-PA
Rev. No. 0

PHOTOGRAPH LOG

COLUMBUS MCKINNON CORPORATION
TONAWANDA, NEW YORK

OFF SITE RECONNAISSANCE - NOVEMBER 9, 1987

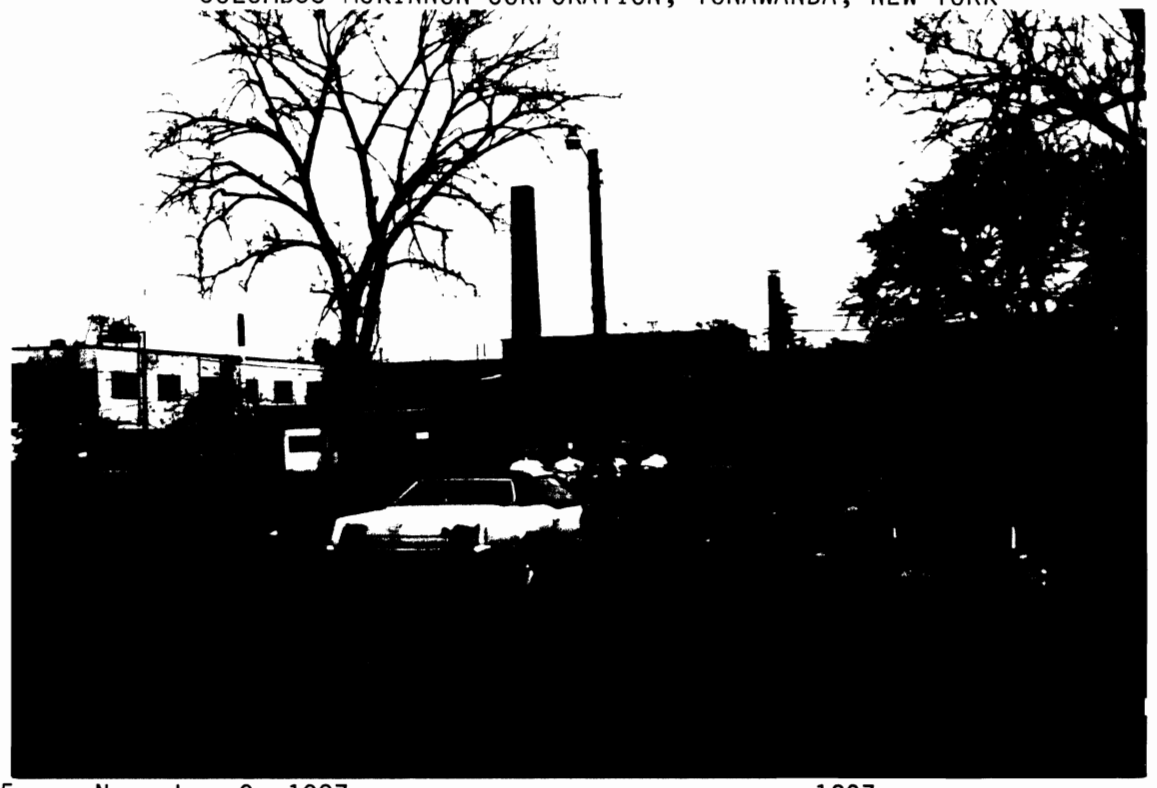
COLUMBUS MCKINNON CORPORATION
TONAWANDA, NEW YORK
TDD NO. 02-8710-95
NOVEMBER 9, 1987

PHOTOGRAPH INDEX

ALL PHOTOGRAPHS TAKEN BY DONNA RESTIVO

Photo Number	Description	Time
1P-15	View from Young Street facing north at the site.	1207
1P-16	View from Young Street facing northwest at the complex.	1209
1P-17	View from the corner of Young and Freemont Sts. facing north.	1213
1P-18	View from the corner of Young and Freemont Sts. facing northeast.	1214

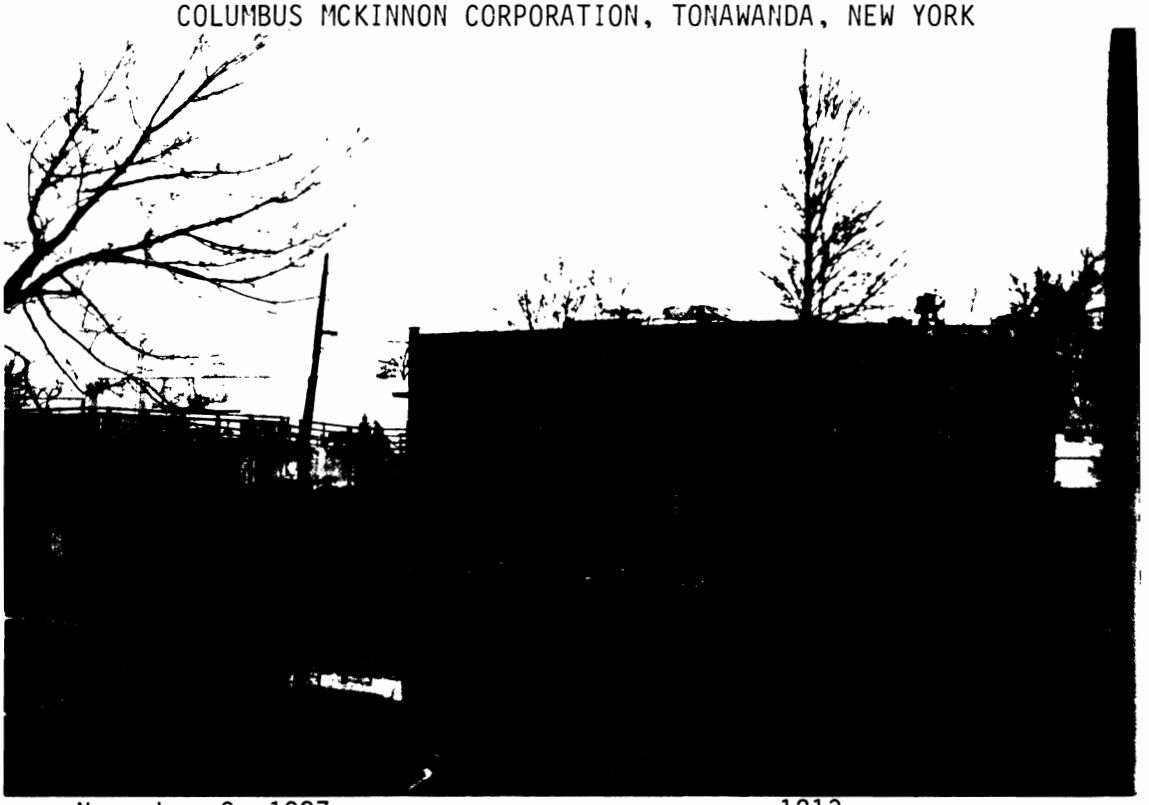
COLUMBUS MCKINNON CORPORATION, TONAWANDA, NEW YORK



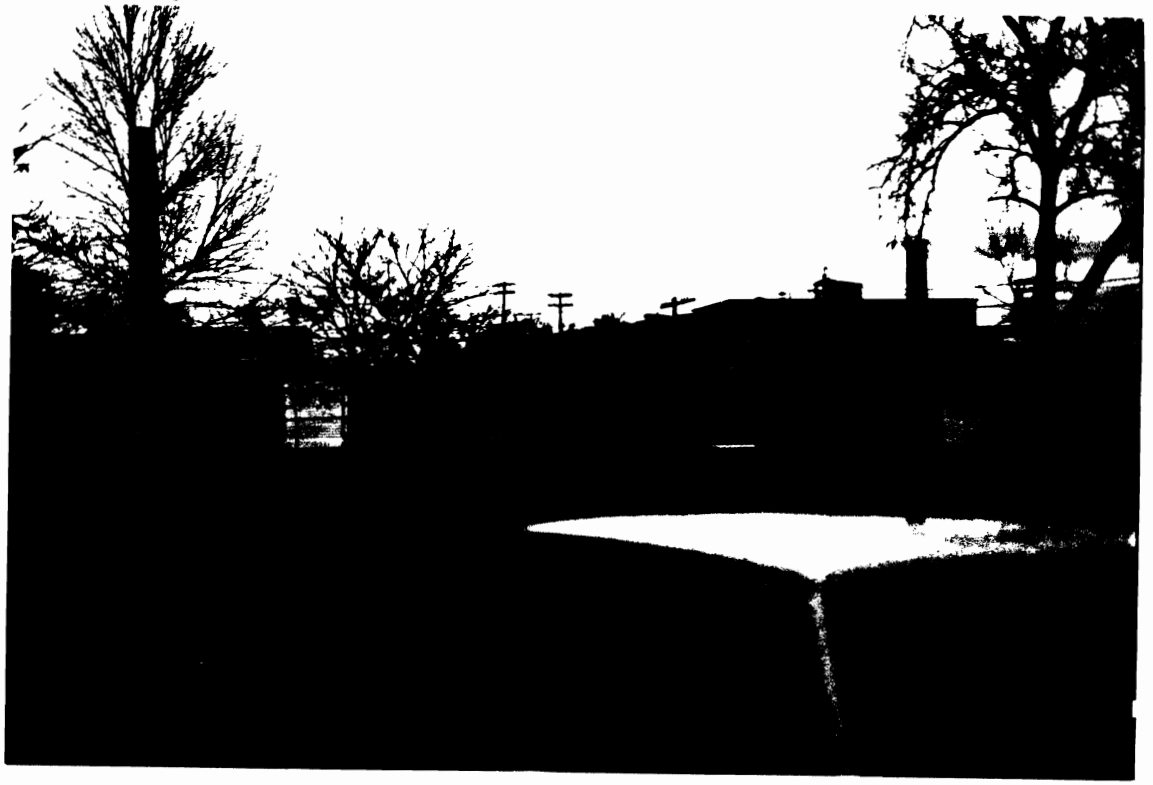
1P-15 November 9, 1987 1207
View from Young Street facing north at the site.
Photographer: Donna Restivo.

1P-16 November 9, 1987 1209
View from Young Street facing northwest at the complex.
Photographer: Donna Restivo.

COLUMBUS MCKINNON CORPORATION, TONAWANDA, NEW YORK



1P-17 November 9, 1987 1213
View from the corner of Young and Freemont Sts. facing north.
Photographer: Donna Restivo.



1P-18 November 9, 1987 1214
View from the corner of Young and Freemont Sts. facing northeast.
Photographer: Donna Restivo.

APPENDIX B

BACKGROUND INFORMATION

02-8710-95

COLUMBUS MCKINNON

Lat: 43°01'03"N Long: 78°52'16"W

Data List of Dataset: NYCC Number of Records = 6

REC #	POP	HOUSE	DISTANCE	SECTOR
1	592	250	0.400000	
2	3,641 3049	1180	0.5 0.810000	
3	14,648 11007	4156	1 1.60000	
4	47,721 33073	12271	2 3.20000	
5	92,218 44497	15397	3 4.80000	
6	150,755 58537	21459	4 6.40000	

→ cumulative Total

C 0 0 4 . F
C - 2 8 7 1 0 - 9 5

PRELIMINARY ASSESSMENT
OFF SITE RECONNAISSANCE
INFORMATION REPORTING FORM

DR 11/12
Date: ~~11/9/87~~ 11/9/87

Site Name: Columbus McKinnon Corp TDD: 02-8710-95

Site Address: Fillmore and Fremont St.
Street, Box, etc.

Tonawanda
Town

Erie
County

New York
State

NUS Personnel:	Name	Discipline
	Donna Restivo	Toxicologist
DR 11/5/87	~~Gerry Gilliland~~ Bob Nies	Geologist

Weather Conditions (clear, cloudy, rain, snow, etc.):
Slightly cloudy

Estimated wind direction and wind speed: 0-2 mph East

Estimated temperature: 40°-45°

Signature: Robert F. Nies Date: 11/9/87

Countersigned: Donna J. Restivo Date: 11/9/87

PRELIMINARY ASSESSMENT

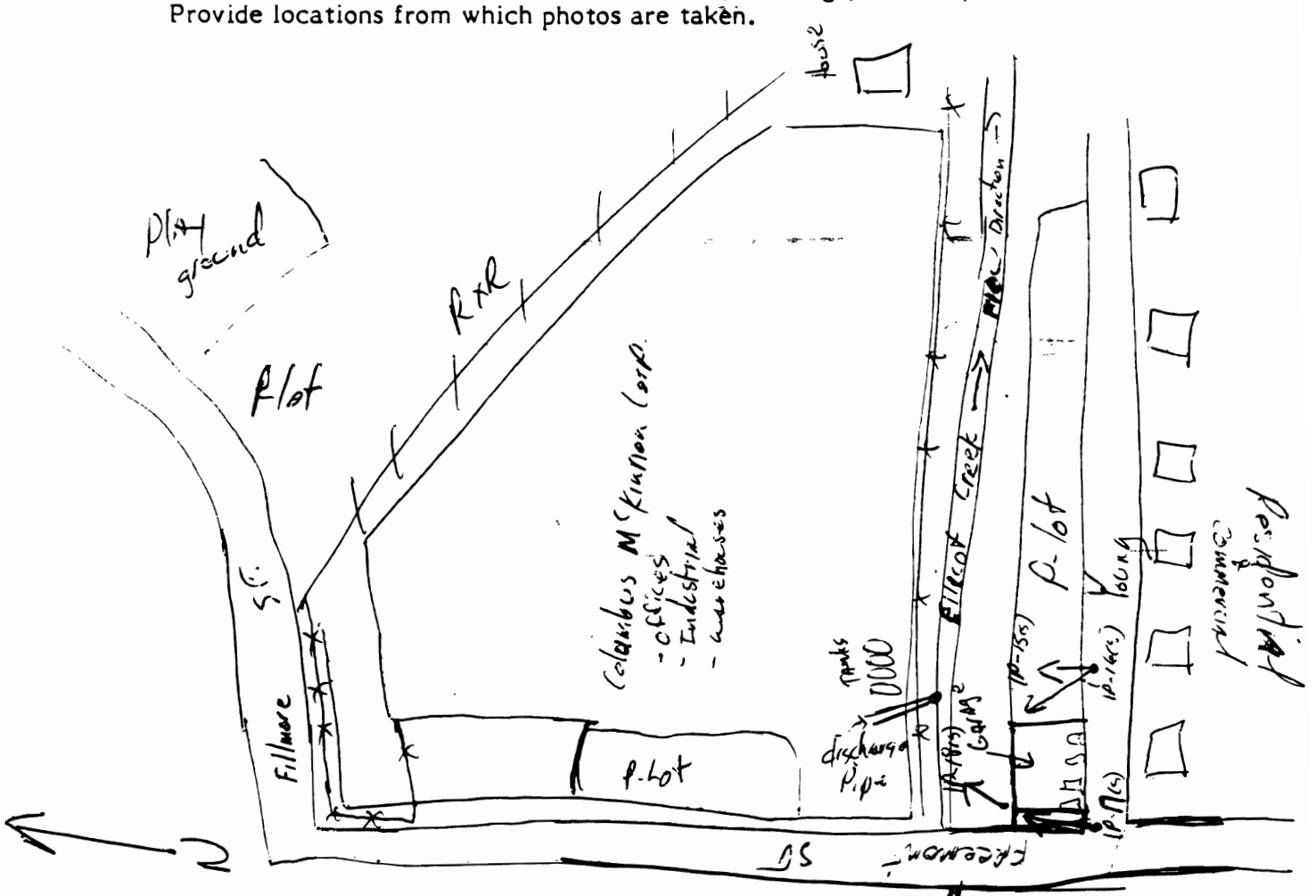
INFORMATION REPORTING FORM

Date: 11/9/87

Site Name: Columbus McKinnon Corp TDD: 02-8710-95

Site Sketch:

Indicate relative landmark locations (streets, buildings, streams, etc.). Provide locations from which photos are taken.



Signature: Robert F. Nici Date: 11/9/87

Countersigned: Donna J. Restivo Date: 11/9/87

PRELIMINARY ASSESSMENT

INFORMATION REPORTING FORM

Date: 11/9/87

Site Name: Columbus McKinnon Corp. TDD: 02-8710-95

Notes (Periodically indicate time of entries in military time):

~~Col~~ RN Columbus McKinnon Corp appears to be a large industrial park. The area used offices, industrial & warehouses for lease. I think McKinnon owns the property but many companies are involved in the properties operations. Elliott creek borders the site the South ~~side of the site~~ RN. Sewers are not present on streets. The Niagara River is approx. .5-1 mile west of the site. The site is located in a mix of industrial, residential & commercial properties. The Elliott creek flows in the eastern direction.

Signature: Robert M. Nies Date: 11/9/87

Countersignature: Donna J. Restivo Date: 11/9/87

PRELIMINARY ASSESSMENT

INFORMATION REPORTING FORM

Date: _____

Site Name: Columbus McKinnon Corp. TDD: 02-8710-95

Notes (Cont'd):

Attach additional sheets if necessary. Provide site name, TDD number, signature, and countersignature on each.

Signature: _____ Date: _____

Countersignature: _____ Date: _____

PRELIMINARY ASSESSMENT

INFORMATION REPORTING FORM

Date: 11/9/87

Site Name: Columbus McKinnon Corp TDD: 02-8710-95

Photolog:

Frame/Photo Number	Date	Time	Photographer	Description
IP-15(S)	1207	11/9	D.R	view off of Young St. looking North at site.
IP-16(S)	1209		D.R.	View off of Young St. looking North west At complex.
IP-17(S)	1213		D.R.	View off of corner of Young & Fremont looking North
IP-18(S)	1214	↓	D.R.	View off of corner of Young & Fremont looking North East at site.

Attach additional sheets if necessary. Provide site name, TDD number, signature, and countersignature on each.

Signature: Robert M. Ries Date: 11/9/87

Countersignature: Donna J. Restivo Date: 11/9/87

POTENTIAL HAZARDOUS WASTE SITE
IDENTIFICATION AND PRELIMINARY ASSESSMENT

EPA

REGION	SITE NUMBER (to be assigned by Hq)
2	NY0000202360

NOTE: This form is completed for each potential hazardous waste site to help set priorities for site inspection. The information submitted on this form is based on available records and may be updated on subsequent forms as a result of additional inquiries and on-site inspections.

GENERAL INSTRUCTIONS: Complete Sections I and III through X as completely as possible before Section II *(Preliminary Assessment)*. File this form in the Regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force *(EN-335)*; 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME: Columbus McKinnon

B. STREET (or other identifier): Fremont St.

C. CITY: Tonawanda

D. STATE: NY

E. ZIP CODE: 14150

F. COUNTY NAME: Erie

G. OWNER/OPERATOR (if known)

1. NAME: Columbus McKinnon Co-p.

2. TELEPHONE NUMBER: (716) 696-3341

H. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☑ 5. PRIVATE ☐ 6. UNKNOWN

I. SITE DESCRIPTION

Less than one acre parcel of plant property used for waste oil disposal from 1930 - 1965. Also about 250 drums with sludges/oils stored on concrete pad

J. HOW IDENTIFIED (e.g., citizen's complaints, OSHA citations, etc.)

K. DATE IDENTIFIED (mo., day, & yr.)

L. PRINCIPAL STATE CONTACT

1. NAME: Peter Buechi

2. TELEPHONE NUMBER: (716) 842-5826

II. PRELIMINARY ASSESSMENT *(complete this section last)*

A. APPARENT SERIOUSNESS OF PROBLEM

☐ 1. HIGH ☐ 2. MEDIUM ☑ 3. LOW ☐ 4. NONE ☐ 5. UNKNOWN

B. RECOMMENDATION

☐ 1. NO ACTION NEEDED *(no hazard)*

☐ 2. IMMEDIATE SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:
b. WILL BE PERFORMED BY:

☐ 3. SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:
b. WILL BE PERFORMED BY:

☑ 4. SITE INSPECTION NEEDED *(low priority)*

C. PREPARER INFORMATION

1. NAME: M. Hauptman

2. TELEPHONE NUMBER: 284-1573

3. DATE (mo., day, & yr.): 11/16/81

III. SITE INFORMATION

A. SITE STATUS

☐ 1. ACTIVE *(Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)*

☑ 2. INACTIVE *(Those sites which no longer receive wastes.)*

☐ 3. OTHER (specify): *(Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)*

B. IS GENERATOR ON SITE?

☐ 1. NO ☑ 2. YES *(specify generator's four-digit SIC Code)*:

C. AREA OF SITE *(in acres)*: less than one

D. IF APPARENT SERIOUSNESS OF SITE IS HIGH, SPECIFY COORDINATES
1. LATITUDE (deg.-min.-sec.)
2. LONGITUDE (deg.-min.-sec.)

E. ARE THERE BUILDINGS ON THE SITE?

☐ 1. NO ☑ 2. YES (specify): oil storage building & shop

Continue On Reverse

Continued From Front

IV. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

'X'	A. TRANSPORTER	'X'	B. STORER	'X'	C. TREATER	'X'	D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION		1. LANDFILL
	2. SHIP		2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY		4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND		5. CHEM./PHYS. TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY	X	8. OTHER (specify): land disposal - seepage
					9. OTHER (specify):		

E. SPECIFY DETAILS OF SITE ACTIVITIES AS NEEDED

V. WASTE RELATED INFORMATION

A. WASTE TYPE

☐ 1. UNKNOWN ☑ 2. LIQUID ☐ 3. SOLID ☑ 4. SLUDGE ☐ 5. GAS

B. WASTE CHARACTERISTICS

☐ 1. UNKNOWN ☐ 2. CORROSIVE ☐ 3. IGNITABLE ☐ 4. RADIOACTIVE ☐ 5. HIGHLY VOLATILE
☑ 6. TOXIC ☐ 7. REACTIVE ☐ 8. INERT ☐ 9. FLAMMABLE

☐ 10. OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

2. Estimate the amount(specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT	AMOUNT 27,000	AMOUNT	AMOUNT	AMOUNT	AMOUNT
UNIT OF MEASURE	UNIT OF MEASURE gal.	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE
'X'	'X'	'X'	'X'	'X'	'X'
☐ (1) PAINT, PIGMENTS	☒ (1) OILY WASTES	☐ (1) HALOGENATED SOLVENTS	☐ (1) ACIDS	☐ (1) FLYASH	☐ (1) LABORATORY PHARMACEUT.
☐ (2) METALS SLUDGES	☐ (2) OTHER(specify):	☐ (2) NON-HALOGNTD. SOLVENTS	☐ (2) PICKLING LIQUORS	☐ (2) ASBESTOS	☐ (2) HOSPITAL
☐ (3) POTW		☐ (3) OTHER(specify):	☐ (3) CAUSTICS	☐ (3) MILLING/ MINE TAILINGS	☐ (3) RADIOACTIVE
☐ (4) ALUMINUM SLUDGE			☐ (4) PESTICIDES	☐ (4) FERROUS SMLTG. WASTES	☐ (4) MUNICIPAL
☐ (5) OTHER(specify):			☐ (5) DYES/INKS	☐ (5) NON-FERROUS SMLTG. WASTES	☐ (5) OTHER(specify):
			☐ (6) CYANIDE	☐ (6) OTHER(specify):	
			☐ (7) PHENOLS		
			☐ (8) HALOGENS		
			☐ (9) PCB		
			☐ (10) METALS		
			☐ (11) OTHER(specify)		

Continued From Page 2

V. WASTE RELATED INFORMATION (continued)

3. LIST SUBSTANCES OF GREATEST CONCERN WHICH MAY BE ON THE SITE (place in descending order of hazard).

PCB

4. ADDITIONAL COMMENTS OR NARRATIVE DESCRIPTION OF SITUATION KNOWN OR REPORTED TO EXIST AT THE SITE.

VI. HAZARD DESCRIPTION

A. TYPE OF HAZARD	B. POTENTIAL HAZARD (mark 'X')	C. ALLEGED INCIDENT (mark 'X')	D. DATE OF INCIDENT (mo., day, yr.)	E. REMARKS
1. NO HAZARD				
2. HUMAN HEALTH				
3. NON-WORKER INJURY/EXPOSURE				
4. WORKER INJURY				
5. CONTAMINATION OF WATER SUPPLY				
6. CONTAMINATION OF FOOD CHAIN				
7. CONTAMINATION OF GROUND WATER				
8. CONTAMINATION OF SURFACE WATER	X			Elliott Creek
9. DAMAGE TO FLORA/FAUNA				
10. FISH KILL				
11. CONTAMINATION OF AIR				
12. NOTICEABLE ODORS				
13. CONTAMINATION OF SOIL				
14. PROPERTY DAMAGE				
15. FIRE OR EXPLOSION				
16. SPILLS/LEAKING CONTAINERS/ RUNOFF/STANDING LIQUIDS				
17. SEWER, STORM DRAIN PROBLEMS				
18. EROSION PROBLEMS				
19. INADEQUATE SECURITY				
20. INCOMPATIBLE WASTES				
21. MIDNIGHT DUMPING				
22. OTHER (specify):				

Continue On Reverse

VII. PERMIT INFORMATION

A. INDICATE ALL APPLICABLE PERMITS HELD BY THE SITE.

☐ 1. NPDES PERMIT ☐ 2. SPCC PLAN ☐ 3. STATE PERMIT *(specify)*: _____
☐ 4. AIR PERMITS ☐ 5. LOCAL PERMIT ☐ 6. RCRA TRANSPORTER
☐ 7. RCRA STORER ☐ 8. RCRA TREATER ☐ 9. RCRA DISPOSER

☐ 10. OTHER *(specify)*: _____

B. IN COMPLIANCE?

☐ 1. YES ☐ 2. NO ☑ 3. UNKNOWN

4. WITH RESPECT TO *(list regulation name & number)*: _____

VIII. PAST REGULATORY ACTIONS

☐ A. NONE ☐ B. YES *(summarize below)*

IX. INSPECTION ACTIVITY *(past or on-going)*

☐ A. NONE ☐ B. YES *(complete items 1,2,3, & 4 below)*

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION *(mo., day, & yr.)*	3. PERFORMED BY: *(EPA/State)*	4. DESCRIPTION

X. REMEDIAL ACTIVITY *(past or on-going)*

☐ A. NONE ☐ B. YES *(complete items 1, 2, 3, & 4 below)*

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION *(mo., day, & yr.)*	3. PERFORMED BY: *(EPA/State)*	4. DESCRIPTION

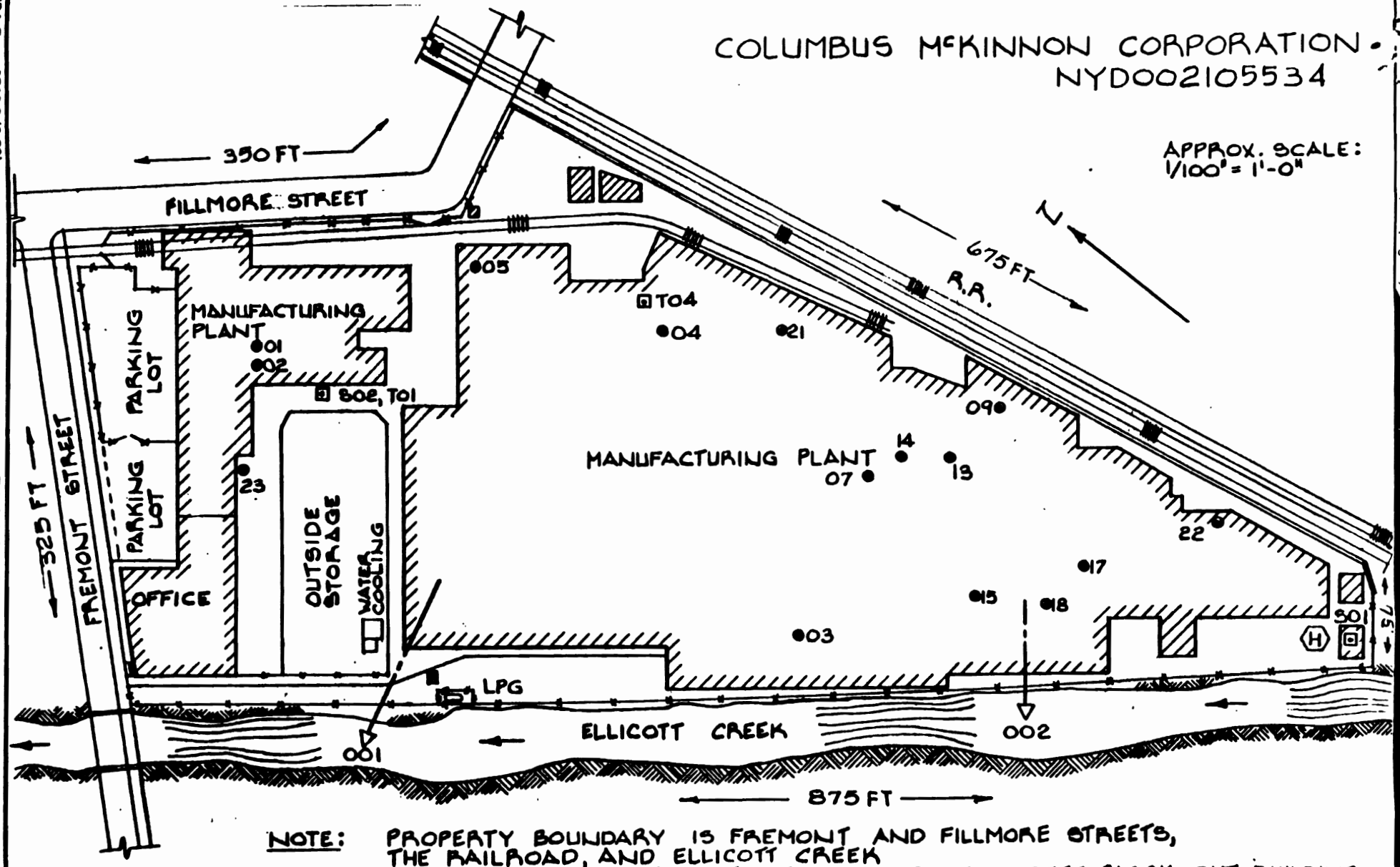
NOTE: **Based on the information in Sections III through X, fill out the Preliminary Assessment *(Section II)* information on the first page of this form.**

Columbus McKinnon has undertaken sampling/analysis of drums, soil borings, & sediment samples of the Creek for PCBs & THO. They will then properly close the site with DEC's agreement.

Continued from page 4.

NYD002105534

COLUMBUS McKINNON CORPORATION
NYD002105534



NOTE: PROPERTY BOUNDARY IS FREMONT AND FILLMORE STREETS, THE RAILROAD, AND ELLICOTT CREEK

LEGEND:
- ▣ 501 CONTAINER STORAGE WITHIN CLOSED, CONCRETE BLOCK OUT-BUILDING
- ▣ 502, T01 STORAGE IN TANK; NEUTRALIZATION WITHIN TANK.
- ▣ T04 SETTLING AND DEWATERING IN GRAVITY SEPARATOR WITH DRAG-OUT.

THE FOLLOWING SYMBOLS DEFINE DISCHARGE POINTS AND (CLOSED) DUMP AS REQUIRED FOR EPA FORM 3510-1, ITEM XI: MAP

- ● 01, ETC. AIR POLLUTION EMISSION POINT
- ▽ 001, ETC. WATER POLLUTION EFFLUENT POINT
- Ⓗ (INACTIVE) HAZARDOUS WASTE DISPOSAL SITE

} SEE ATTACHMENT TO EPA FORM 3510-1

Form Approved OMB No. 158-S80004

FILLMORE AND FREEMONT TONAWANDA
NYD002105534

123. COLUMBUS MCKINNON CORPORATION (Literature review) NYSDEC 915016

General information and chemical-migration potential.--The Columbus McKinnon Corporation site, in the city of Tonawanda, was used during 1930-65 to dispose of 27,000 gallons of water-soluble waste-cutting oils in an open pit 20 ft by 20 ft adjacent to Ellicott Creek (fig. B-17). The area has since been covered with soil and graded.

The geology, direction of ground-water flow, and results of the chemical analyses indicate a major potential for contaminant migration toward Ellicott Creek, but the rate of migration has not been determined. Additional information would be needed to determine the rate of movement in both the saturated and unsaturated zone.

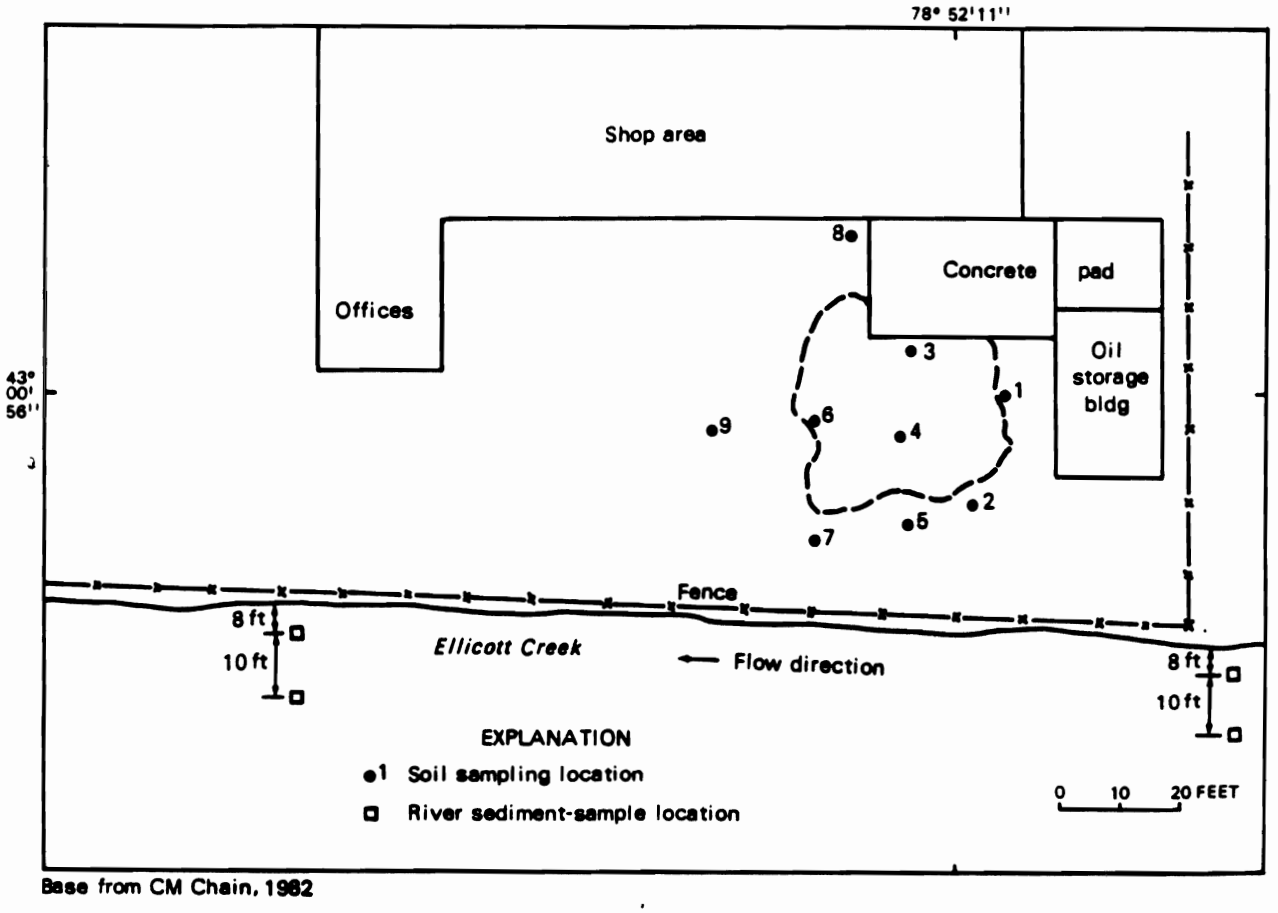


Figure B-17. Location of sampling holes at Columbus McKinnon Corporation, site 123, Tonawanda.

* Memorandum 8/7/84 Requesting Consent Order - Remedial Actions

Geologic information.--The site consists of fill overlying silt and fine sand. No deep test holes were drilled on the site, but the underlying bedrock is assumed to be Camillus Shale. Nine shallow test borings were drilled to a depth of 8 ft in 1981; all indicated only fill or fill overlying silt and fine sand.

Hydrologic information.--No information was obtained from the borehole-drilling program. However, the direction of ground-water flow is probably toward Ellicott Creek.

Chemical information.--CM Chain collected several soil samples for polychlorinated biphenyls (PCB's) and total halogenated organics (THO) analysis. Locations of the boreholes are shown in figure B-17; results are given in tables B-17 and B-18. CM Chain also collected four stream-sediment samples for PCB and THO analysis; results are given in table B-19.

Source of data.--CM CHAIN, Division Columbus McKinnon Corporation, 1982, Closure plans for inactive landfill site, Tonawanda, New York: CM Chain, 22 p., 6 tables, 3 figs.

Table B-17.--Total polychlorinated biphenyl concentration in soil samples from Colombus McKinnon Corporation, site 123, Tonawanda, N.Y.[1]
[Locations are shown in fig. B-17; concentrations are in µg/kg. Dashes indicate that samples were not taken.]

Depth of sample (ft)	Borehole number								
	1	2	3	4	5	6	7	8	9
0.0	124,100	1,610	164,000	78,800	2,560	59,800	1,290	<500	125,000
0.42 - 2.0	--	--	--	459,000	--	--	--	--	--
1.0 - 1.8	--	--	--	--	201,000	--	--	--	--
.84 - 1.68	--	--	--	--	--	13,600	--	--	--
1.0 - 2.0	--	217,000	--	--	--	--	--	--	--
1.25 - 2.5	--	--	--	--	--	--	549,000	--	--
2.0 - 4.0	--	--	--	--	--	--	--	--	8,940
2.0 - 4.5	--	--	250	--	--	--	--	--	--
3.3 - 3.5	--	--	--	--	--	--	--	210	--
4.0 - 4.5	--	--	--	--	27,600	--	--	--	--
4.0 - 5.5	--	74,300	--	165,000	--	7,100	53,00	--	560
3.5 - 5.5	--	--	--	--	--	--	--	150	--
4.5 - 5.5	--	--	310	--	--	--	--	--	--
5.5 - 7.0	--	49,100	230	141,000	17,100	--	58,800	360	40
5.5 - 7.6	--	--	--	--	--	6,050	--	--	--

[1] Data from CM CHAIN, Division of Columbus McKinnon Corporation
[2] Refusal due to concrete

Table B-18.--Concentrations[1] of total halogenated organic compounds (THO) in soil samples from Columbus McKinnon Corporation, site 123, Tonawanda, N.Y.[2] (Except for borehole 1, THO was from composite of samples from each borehole).

[Locations are shown in fig. B-17. Concentrations are in µg/kg.]

Borehole number	Total halogenated organics	Borehole number	Total halogenated organics
1	14,900	6	1,200
2	14,600	7	3,400
3	4,300	8	<100
4	19,000	9	4,000
5	2,600		

[1] Total halogenated organics (THO) qualitative scan is used as an approximation of halogenated compounds based on a lindane standard curve.

[2] Data from CM CHAIN, Division of Columbus McKinnon Corporation.

Table B-19.--Concentration of polychlorinated biphenyls and total halogenated organic compounds in soil samples from Columbus McKinnon Corporation, site 123, Tonawanda, N.Y.[1]
[Concentrations are in µg/kg. Locations are shown in fig. B-17.]

Sample location	Total polychorinated biphenyls	Total halogenated organics
Upstream and 5.0 ft from bank	130,000	21,300
Upstream and 15.0 ft from bank	113,000	27,400
Downstream and 5.0 ft from bank	<390	37,000
Downstream and 15.0 ft from bank	570	52,000

[1] Data obtained from CM CHAIN, Division of Columbus McKinnon Corporation.

8/13

600 Delaware Ave., Buffalo, NY 14202-1073
716/847-4552

October 17, 1986

Mr. John Dicky
Columbus McKinnon Corporation
One Fremont Street
Tonawanda, NY 14150

Dear Mr. Dicky:

Order on Consent
File No. 86-151

Enclosed is an Order on Consent pursuant to Article 27, Title 13 of the Environmental Conservation Law.

You may choose to execute the enclosed Order and return it to me or you may attend an informal conference to discuss the violation and Order. This conference would be held on Thursday, October 24, 1986 at 10:30 a.m. in our Buffalo offices. Please let me know on or before October 22, 1986 if you plan on attending this conference and/or signing the Order.

Very truly yours,

James Charles
Asst. Regional Attorney

JC:ib

Enclosure

cc: Mr. Buechi

STATE OF NEW YORK : DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of a Remedial Action Plan to Mitigate Any Threat to the Environment Caused by the Disposal of Industrial and Hazardous Wastes by:

ORDER ON CONSENT

COLUMBUS MC KINNON CORPORATION
One Fremont Street
Tonawanda, New York 14150

File No. 86-151
R9-1902-86-10

Respondent

WHEREAS:

1. The New York State Department of Environmental Conservation (the "Department") is responsible for the enforcement of Article 27, Title 13, of the Environmental Conservation Law of the State of New York (the "ECL") entitled "Inactive Hazardous Waste Disposal Sites".

2. Columbus McKinnon Corporation (the "Respondent"), is a corporation organized and existing under the laws of the State of New York and is doing business in the State of New York in that Respondent owns a manufacturing facility in Tonawanda, New York.

3. Respondent owns property at One Fremont Street, Tonawanda New York (the "Site"). A map of the Site is attached hereto and is hereby incorporated into this Order as Appendix "A".

4. Beginning approximately in 1930 and continuing to about 1965 Respondent disposed of hazardous and industrial wastes on the Site. Beginning in 1981, Respondent conducted environmental investigations at the site to define the extent and character of contamination at the site. These studies confirmed the presence of hazardous wastes in the soil on the site and in Ellicott Creek adjacent to the site.

5. As used herein, "hazardous wastes" shall mean hazardous wastes, any hazardous constituents thereof, and any toxic degradation products of such wastes and of each constituent.

6. The Site is an inactive hazardous waste disposal site, as that term is defined in ECL Section 27-1301(2).

7. The Department alleges the hazardous and industrial wastes, hazardous waste constituents, and toxic degradation products thereof at the Site constitute a significant threat to the environment.

8. Pursuant to Section 27-1313(3)(a) whenever the Commissioner of Environmental Conservation "finds that hazardous wastes at an inactive hazardous waste disposal site constitute a significant threat to the environment, he may order the owner of such site and/or any person responsible for the disposal of hazardous waste at such site (i) to develop an inactive hazardous waste disposal site remedial program, subject to the approval of the Department at such site, and (ii) to implement such program within reasonable time limits specified in the Order." In addition: "The Commissioner, after investigation, notice and an opportunity to be heard, may issue, modify and revoke orders prohibiting violations of any of the provisions of Article 27 or of any rule or regulation promulgated pursuant thereto and requiring the taking of such remedial measures as may be necessary or appropriate." ECL Section 71-2727(1).

9. The Department and Respondent acknowledge the goals of this Order to be that Respondent shall develop and implement a remedial action program to mitigate the threat to the environment

posed by the prior disposal of hazardous and industrial wastes at the site.

10. Respondent, having waived its right to a hearing herein as provided by law, and having consented to the issuance and entry of this Order, agrees to be bound by provisions, terms and conditions hereof.

NOW, having considered this matter and being duly advised, IT IS ORDERED THAT:

I. All proposals, reports, plans, remedial programs and supplements and revisions thereto required by this Order shall address on-Site contamination caused by the disposal of hazardous and industrial materials at and in the vicinity of the Site, and shall be prepared, designed and executed in accordance with Requisite Technology. As used in this Order, Requisite Technology means engineering, scientific and construction principles and practices subject to the Department's approval, which (a) are technologically feasible, and (b) will most effectively identify and remedy any present or potential threat to the human health and the environment posed by the disposal of hazardous and industrial wastes at and in the vicinity of the Site.

The failure of Respondent to submit or undertake a proposal, report, construction or any supplement or revision thereof, which is in accordance with Requisite Technology shall constitute a violation of this Order.

In fulfilling the obligations of this Order, Respondent may incorporate, as appropriate, portions of proposals, reports, protocols and plans previously submitted to the Department.

JANUARY 2, 1987

II. On or before November 1, 1986 the Respondent shall submit to the Department a Remedial Action Plan, when implemented, would mitigate and eliminate any threat to the environment posed by the prior disposal of hazardous and industrial wastes at the site.

Failure of the Respondent to submit the Remedial Action Plan by the above specified date shall result in a penalty not to exceed $10,000.

Within thirty (30) days after its receipt of the Remedial Action Plan, the Department shall determine if the Plan has been prepared in accordance with the terms, provisions and conditions of this Order, and shall provide written notification to Respondent of its approval or disapproval of the Report.

If the Department disapproves the Plan, the Department shall notify Respondent in writing of the Department's objections. Within fifteen (15) days after its receipt of notice of disapproval Respondent shall revise the Plan and/or supplement the Plan in accordance with the terms, provisions and conditions of this Order and shall submit to the Department a Plan which has been revised in accordance with the Department's objections (the "Revised Plan").

Within fifteen (15) days after its receipt of the Revised Plan, the Department shall determine if the Revised Plan is in accordance with the terms, provisions and conditions of this Order and shall provide written notification to Respondent of its approval or disapproval of the Revised Plan per paragraph VIII.

The Remedial Action Plan or the Revised Remedial Action Plan whichever is approved by the Department, shall, become incorporated and made a part of this Order, and shall be attached hereto as

Appendix B and shall constitute the approved Remedial Action Plan for the Site.

III. Within thirty (30) days after receipt of the Department's approval of the Remedial Action Plan, or within such greater period as the Department may allow for good cause shown, Respondent shall submit to the Department a remedial design engineering report (the "Remedial Design").

Failure of the Respondent to submit the Remedial Design Engineering Report in accordance with the above specified schedule shall result in a penalty not to exceed $10,000.

The Remedial Design shall include, but not be limited to, the following:

a. A description of the means of effectuating the alternative technology(ies) selected which collectively constitute the Remedial Action Program ("Remedial Action Program"), and the quality control and quality assurance procedures and protocols to be applied to construction, to include, but not be limited to:

1. The disposition of hazardous wastes, and any soil or other materials contaminated thereby.

2. Collection, treatment and disposal of contaminated groundwater, leachate, air, and construction wastes.

3. Physical security and posting of the Site;

4. Health and safety of persons living and/or working at or in the vicinity of the areas being remediated;

5. Quality control and quality assurance procedures and protocols to be applied to Remedial Program construction and operations; and

6. Comprehensive air monitoring on-Site during implementation of the Remedial Program;

7. A time schedule for the construction of the elements of the Remedial Program;

8. The parameters, conditions, procedures and protocols to determine the effectiveness of the Remedial Program, including a schedule for periodic sampling of existing and planned groundwater monitoring wells on-Site;

9. A description of the operation, maintenance and monitoring activities, procedures and protocols to be undertaken during the period commencing upon completion of the construction of the elements of the Remedial Program, including a provision for submission to the Department of periodic monitoring and evaluation reports measuring the effectiveness of the Program; and

10. A contingency response Remedial Program to be implemented in the event that any element of the Remedial Program fails to operate in accordance with the Remedial Design, prior to the date ten (10) years after satisfactory completion of construction pursuant thereto, or for such other period to protect public health or the environment.

11. "Contract-ready" documents for the construction of the elements of the Remedial Program, including plans and specifications prepared and certified by a licensed professional engineer registered in the State of New York which shall satisfy all applicable state and federal laws and rules and regulations.

IV. Within thirty (30) days after its receipt of the Remedial Design, the Department shall determine if the design was prepared in accordance with the terms, provisions and conditions of this Order and shall provide written notification of its approval or disapproval.

If the Department disapproves the Remedial Design, the Department shall notify Respondent in writing of the Department's objections. Within fifteen (15) days after its receipt of notice of disapproval, Respondent shall revise the Remedial Design and shall submit to the Department a Remedial Design which has been revised in accordance with the Department's objections (the "Revised Remedial Design").

Within fifteen (15) days after its receipt of the Revised Remedial Design, the Department shall determine if the Revised Remedial Design is in accordance with the terms, provisions and conditions of this Order, and shall provide written notification to Respondent of its approval or disapproval of the Revised Remedial Design per Paragraph VIII.

The Remedial Design or the Revised Remedial Design, which is approved by the Department shall become incorporated in and made a part of this Order, and shall be attached hereto as Appendix C. Such Remedial Design shall hereafter be referred to as the "Approved Remedial Design".

V. Within such period as may be allowed therefore by the Approved Remedial Design, Respondent shall complete construction pursuant to Remedial Design, and within forty-five (45) days thereafter, Respondent shall submit to the Department as built

drawings and the certification that construction was completed in accordance with the Approved Remedial Design. Such certification shall be made by a licensed Professional Engineer registered in the State of New York.

Within forty-five (45) days after receipt of the as built drawings and certification, the Department shall review the same and provide comments to the Respondent.

VI. If the Department acknowledges that the implementation is complete and in accordance with the Approved Remedial Design then, notwithstanding any provision contained in this Order to the contrary, for a period of ten (10) years from the date of the Department's written acknowledgement that Respondent has completed the implementation of the construction and other elements of the approved Remedial Design, or for such other lesser period of time as directed by the Department, Respondent shall maintain and monitor the areas at which the Approved Remedial Design is implemented, shall collect, treat and dispose of any leachate generated thereat, and shall provide for physical security thereat (the "Post-Closure Period") in accordance with the Approved Remedial Design. During the Post-Closure Period, Respondent shall provide the Department with periodic monitoring reports, as set forth in the Approved Remedial Design. The Department's acknowledgement of completion of implementation shall be in recordable form and shall be acknowledged by the Department before a notary public.

VII. No later than fifteen (15) days after the issuance of this Order by the Department, Respondent shall post or deposit with the Department an approvable surety in a form acceptable to the Department, in the sum of $750,000.00. Such surety shall be non-cancellable, non-diminishable, non-reducible and non-impairable until the Department acknowledges completion of the elements of the Remedial Program pursuant to Paragraph VI, and, thereafter, shall be in the sum of $30,000.00 for so long as the Post-Closure Period shall run.

Should Respondent at any time fail to fulfill any of the terms hereof, the issuer of the surety instrument shall, upon demand by the Department, pay over to the Department a sufficient portion necessary to procure substitute performance of such terms; provided, however, that in no event shall the acceptance of any payment constitute a waiver by the Department of any right to relief that the Department may have.

VIII. If the Department disapproves a revised submission, the Department and Respondent shall meet within ten (10) days of the Respondent's receipt of the Department's disapproval notification to resolve the Department's objections to the revised submission. In the event that the Department and Respondent cannot resolve the Department's objections to the revised submission, the Department may take any action and pursue any remedy to which it is entitled by law.

IX. At its option, the Department shall have the right to obtain, for the purpose of comparative analysis, "split samples" or "duplicate samples" of all substances and materials sampled by

Respondent pursuant to this Order. As used herein: "split samples" shall mean whole samples divided into aliquots; "duplicate samples" shall mean multiple samples, collected at the same time from exactly the same location, using the same sampling apparatus, collected into identical containers prepared identically, filled to the same volume, and thereafter identically handled and preserved.

X. Respondent shall provide notice to the Department of any excavating, drilling, sampling or construction activities to be conducted pursuant to the terms of this Order at least two (2) working days in advance of such activities.

XI. Respondent shall permit any duly designated officer, employee consultant, contractor or agent of the Department to enter upon the site or areas in the vicinity of the Site which may be under the control of Respondent, and any areas necessary to gain access thereto, for inspection purposes and for the purpose of making or causing to be made such sampling and tests as the Department deems necessary, and for ascertaining Respondent's compliance with the provisions of this Order.

XII. Respondent shall obtain whatever permits, easements, rights-of-way, rights-of-entry, approvals or authorizations which are necessary in order to perform the Investigation and all of Respondent's other obligations pursuant to this Order. Respondent shall promptly notify the Department in the event of Respondent's inability to obtain such authorizations on a timely basis. In such event, the Department shall use its best efforts, consistent with its legal authority to asist in obtaining, as appropriate, all such authorizations which Respondent was unable to

obtain. If, despite Respondent's best efforts described in this paragraph, Respondent does not obtain the aforementioned authorizations on a timely basis, the time for performance of its obligations pursuant to this Order shall be extended as appropriate.

XIII. Any laboratory used by the Respondent shall have Department approval.

XIV. Respondent shall not suffer any penalty under any of the provisions, terms and conditions hereof, or be subject to any proceedings or actions for any remedy or relief, if it cannot comply with any requirements of the provisions hereof because of an act of God, war, riot, or other condition as to which negligence or willful misconduct on the part of Respondent was not a proximate cause, provided, however, that Respondent shall immediately notify the Department in writing within five (5) days when it obtains knowledge of any such condition and request an appropriate extension or modification of the provisions hereof.

XV. The failure of Respondent to comply with any provision of this Order shall constitute a default and a failure to perform an obligation under this Order and under the ECL.

XVI. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting (1) any legal or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against anyone other than Respondent, its directors, officers, employees, servants, agents, successors and assigns; (2) the Department's right to enforce, at law or in equity, the terms and conditions of this

Order against Respondent, its directors, officers, employees, servants, agents, successors and assigns in the event that Respondent shall fail to fulfill any of the provisions hereof; and (3) the Department's right to bring any action, at law or in equity against Respondent, its directors, officers, employees, servants, agents, successors, and assigns with respect to areas or resources that may have been affected or contaminated as a result of the release or migration of hazardous or industrial wastes from the Site or from areas in the vicinity of the Site.

XVII. The terms of this Order shall not be construed to prohibit the Commissioner or his duly authorized representative from exercising any summary abatement powers, either at common law or as granted pursuant to statute or regulation.

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

XIX. The effective date of this Order shall be the date this Order is signed by the Commissioner or his designee.

XX. If, for any reason, Respondent desires that any provision of this Order be changed, Respondent shall make timely written application therefor to the Commissioner, setting forth reasonable grounds for the relief sought.

XXI. Within thirty (30) days after the effective date of this Order, Respondent shall file a Declaration of Covenants and Restrictions with the real property records of the Erie County Clerk's Office, for the purpose of providing notice of this Order to all potential future purchasers of any portion of the Site. Said Declaration must indicate that any successor in title to any portion of the Site shall be responsible for implementing the provisions of this Order.

XXII. In the event that Respondent proposes to convey the whole or any part of its ownership interest in this Site, Respondent shall, not less than twenty (20) days prior to the consummation of such proposed conveyance, notify the Department in writing of the identity of the transferee and of the nature and date of the proposed conveyance. In advance of such proposed conveyance. Respondent shall notify the transferee in writing, with a copy to the Department, of the applicability of this Order.

XXIII. A. All communication required hereby to be made between the Department and Respondent shall be made in writing and transmitted by United States Postal Service return receipt requested, or hand delivered to the address as listed hereinunder.

B. Communication to be made from Respondent to the DEC, shall be made as follows:

1. Two copies to the Regional Director, Region 9, 600 Delaware Avenue, Buffalo, New York 14202-1073.

2. Two copies to the Director Division of Solid and Hazardous Waste, Room 209, 50 Wolf Road, Albany, New York 12233.

C. Communication to be made from the Department to Respondent shall be made as follows:

John Dicky
Columbus McKinnon Corporation
One Fremont Street
Tonawanda, New York 14150

D. The Department and Respondent respectively reserve the right to designate other or different addresses on notice to the other.

E. No informal advice or guidance by the Department's officers or employees or representatives upon any plan, report, proposal, study or other document, or modifications or additions thereto, submitted by Respondent to the Department, shall relieve Respondent of any obligation it may have to obtain the Department's formal written approval of the same.

XXIV. The provisions of this Order shall be deemed to bind Respondent, its officers, directors, agents, servants, employees, successors and assigns.

XXV. Nothing herein shall be construed to bind any entity not specifically bound by the terms of this Order.

XXVI. The provisions hereof shall constitute the complete and entire Order between Respondent and the Department concerning the Site. No terms, conditions, understandings or agreements purporting to modify or vary the terms hereof shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestions or comments by the Department

regarding reports, proposals, plans, specifications, schedules or any other writing submitted by Respondent shall be construed as relieving Respondent to its obligations to obtain such formal approvals as may be required by this Order.

DATED: , New York

HENRY G. WILLIAMS
Commissioner
New York State Department of
Environmental Conservation

"OW-2 GROUNDWATER SAMPLE SPLIT WITH THE DEC AND ANALYSED FOR VOLATILES AND PCB'S"

Report Prepared For

COLUMBUS MCKINNON CORPORATION
CM CHAIN DIVISION

By

ADVANCED ENVIRONMENTAL SYSTEMS, INC.

W. Joseph McDougall

W. Joseph McDougall, Ph.D.
Technical Evaluation

February 18, 1985
AES Job RI

SCOPE OF WORK

Mr. Peter Buechi, P.E., Associate Sanitary Engineer for the New York State Department of Environmental Conservation, required that a groundwater sample from OW-2 be split with the DEC and analyzed for priority pollutant volatiles and PCB'S. This request was made January 3, 1985 at a meeting at the DEC office.

COLLECTION OF SAMPLES

Dr. W. Joseph McDougall of AES purged the well OW-2 to dryness; approximately 2.5 gallons of purged groundwater was obtained. On January 14, 1985, sample splits of the groundwater were obtained with Mr. Ahmad Tayyebi of the DEC. The samples for AES were transported in an insulated chest with blue ice, directly to the laboratory.

ANALYTICAL METHODOLOGY

The sample for Volatile Organics Analysis was spiked at AES. All the VOA vials were coded and air-freighted to Compuchem Laboratories.

The extractable fraction was analyzed for PCB'S and Pesticides.

ADVANCED ENVIRONMENTAL SYSTEMS, INC.
LABORATORY REPORT

TYPE OF ANALYSIS: GC - TEST CONTROLS
UNITS OF MEASURE: MICROGRAMS/LITER, OR PPB
CLIENT:C M CHAIN A.E.S. JOB CODE 02RI

ANALYSIS	TYPE	ORIGINAL CONC.	ADDED CONC.	EXPECTED CONC.	REPORTED CONC.	PERCENT RECOVERY	95% CONFIDEN INTERVAL
PCB 1254	75-SPK	<0.10	5.62	5.62	6.50	115.6	4.7-
LINDANE	75-SPK	<0.02	79.76	79.76	94.99	119.1	22.8-13

ADVANCED ENVIRONMENTAL SYSTEMS, INC.
LABORATORY REPORT

TYPE OF ANALYSIS: GC - TEST CONTROLS
UNITS OF MEASURE: MICROGRAMS/LITER, OR PPB
CLIENT:C M CHAIN A.E.S. JOB CODE 01RI

ANALYSIS	TYPE	ORIGINAL CONC.	ADDED CONC.	EXPECTED CONC.	REPORTED CONC.	PERCENT RECOVERY	95% CONFIDENC. INTERVAL
TRICHLOROETHYLENE	75-SPK	<10	190	190	130	68.4	I
TETRACHLOROETHYLENE	75-SPK	<10	170	170	110	64.7	I
TRANS-1,2-DICHLOROETHYLENE	75-SPK	100	160	260	190	73.1	I
CARBON TETRACHLORIDE	75-SPK	<10	180	180	100	55.6	I
BENZENE	75-SPK	<10	190	190	130	68.4	I
VINYL CHLORIDE	75-SPK	115	160	275	250	90.9	I

ADVANCED ENVIRONMENTAL SYSTEMS, INC.
LABORATORY REPORT

TYPE OF ANALYSIS: GC - QUALITY CONTROL DUPLICATE*
UNITS OF MEASURE: MICROGRAMS/LITER, OR PPB
CLIENT: C M CHAIN A.E.S. JOB CODE 01RI

ANALYSIS	SAMPLE	ORIGINAL CONC.	DUPL. CONC.	AVERAGE CONC.	RANGE	REL. % DIFF.
VINYL CHLORIDE	75	120	110	115	10	8.7
TRANS-1,2-DICHLOROETHYLENE	75	100	100	100	0	0

*All compounds not listed were below determinable limits
Relative Percent Difference =
Range/Average X 100

ADVANCED ENVIRONMENTAL SYSTEMS, INC.
LABORATORY REPORT

TYPE OF ANALYSIS: GC - QUALITY CONTROL DUPLICATE
UNITS OF MEASURE: MICROGRAMS/LITER, OR PPB
CLIENT: C M CHAIN A.E.S. JOB CODE 02RI

ANALYSIS	SAMPLE	ORIGINAL CONC.	DUPL. CONC.	AVERAGE CONC.	RANGE	REL. % DIFF.
PCB 1260	75	<0.12	<0.12	NA	NA	NA
PCB 1254	75	<0.10	<0.10	NA	NA	NA
PCB 1242	75	<0.11	<0.11	NA	NA	NA
ENDRIN	75	<0.02	<0.02	NA	NA	NA
LINDANE	75	<0.02	<0.02	NA	NA	NA
METHOXYCHLOR	75	<0.04	<0.04	NA	NA	NA
TOXAPHENE	75	<1.67	<1.67	NA	NA	NA

Relative Percent Difference =
Range/Average X 100

ADVANCED ENVIRONMENTAL SYSTEMS, INC.
LABORATORY REPORT

TYPE OF ANALYSIS: PCBs AND PESTICIDES
UNITS OF MEASURE: MICROGRAMS/LITER, OR PPB
CLIENT: C. M. CHAIN A.E.S. JOB CODE 03RI

ANALYSIS	METHOD	REF	DETERMINABLE LIMITS	75 0W-2 1-14-85
LINDANE (GAMMA BHC)	608	1	0.02	BDL
ENDRIN	"	"	0.02	BDL
TOXAPHENE	"	"	1.67	BDL
METHOXYCHLOR	"	"	0.04	BDL
PCB 1260	"	"	0.12	BDL
PCB 1254	"	"	0.10	BDL
PCB 1242	"	"	0.11	BDL

Susan M. Cerquetti

SUSAN M. CERQUETTI
G. C. DIVISION

ADVANCED ENVIRONMENTAL SYSTEMS, INC.
LABORATORY REPORT

TYPE OF ANALYSIS: VOLATILE ORGANICS
UNITS OF MEASURE: MICROGRAMS/LITER, OR PPB
CLIENT: C M CHAIN A.E.S. JOB CODE 02RI

ANALYSIS	METHOD	REF	SAMPLE IDENTIFICATION		
			DETERMINABLE LIMITS	75 1-14-85 OW-2	76 1-14-85 FIELD BLK
1,1,2,2-TETRACHLORETHYLENE	624	1	10	BDL	BDL
ETHYLENE	"	"	10	BDL	BDL
1,1,2,2-TETRACHLOROETHANE	"	"	10	BDL	BDL
TOLUENE	"	"	10	BDL	BDL
CHLOROBENZENE	"	"	10	BDL	BDL
ETHYLBENZENE	"	"	10	BDL	BDL
2-CHLOROETHYL VINYL ETHER	"	"	10	BDL	BDL

Susan M. Cerquetti

SUSAN M. CERQUETTI
G. C. DIVISION

ADVANCED ENVIRONMENTAL SYSTEMS, INC.
LABORATORY REPORT

TYPE OF ANALYSIS: VOLATILE ORGANICS
UNITS OF MEASURE: MICROGRAMS/LITER, OR PPB
CLIENT: C M CHAIN A.E.S. JOB CODE 01RI

ANALYSIS	METHOD	REF	DETERMINABLE LIMITS	75 1-14-85 OW-2	76 1-14-85 FIELD BLK
CHLOROMETHANE	624	1	10	BDL	BDL
VINYL CHLORIDE	"	"	10	115	BDL
CHLOROETHANE	"	"	10	BDL	BDL
BROMOMETHANE	"	"	10	BDL	BDL
ACROLEIN	"	"	100	BDL	BDL
ACRYLONITRILE	"	"	100	BDL	BDL
METHYLENE CHLORIDE	"	"	10	BDL	BDL
TRICHLOROFLUOROMETHANE	"	"	10	BDL	BDL
1,1-DICHLOROETHYLENE	"	"	10	BDL	BDL
1,1-DICHLOROETHANE	"	"	10	BDL	BDL
TRANS-1,2-DICHLOROETHYLENE	"	"	10	100	BDL
CHLOROFORM	"	"	10	BDL	BDL
1,2-DICHLOROETHANE	"	"	10	BDL	BDL
1,1,1-TRICHLOROETHANE	"	"	10	BDL	BDL
CARBON TETRACHLORIDE	"	"	10	BDL	BDL
BROMODICHLOROMETHANE	"	"	10	BDL	BDL
1,2-DICHLOROPROPANE	"	"	10	BDL	BDL
TRANS-1,3-DICHLOROPROPENE	"	"	10	BDL	BDL
TRICHLOROETHYLENE	"	"	10	BDL	BDL
BENZENE	"	"	10	BDL	BDL
CIS-1,3-DICHLOROPROPENE	"	"	10	BDL	BDL
1,1,2-TRICHLOROETHANE	"	"	10	BDL	BDL
DIBROMOCHLOROMETHANE	"	"	10	BDL	BDL
CHLOROFORM	"	"	10	BDL	BDL

Susan M. Cerquetti

SUSAN M. CERQUETTI
G. C. DIVISION

The site was used by Occidental Chemical (Durez Division) and Bell Aerospace for the disposal of 25,000 tons of phenolic resin, 25,000 tons of phenolic molding compounds, 50 tons of oil and grease, and 50,000 tons of domestic refuse.

Contaminant migration would be expected from this site. The fill is fairly permeable, enabling groundwater to move freely toward the Niagara River. Downward movement of contaminants through the clay unit is unlikely because of its very low permeability.

The geology of the site consists of fill overlying a Holocene lacustrine clay which overlies a bedrock of Camillus Shale. The depth to bedrock is approximately 7.6 metres (25 feet).

In 1982, the USGS installed a monitoring well and collected a sample along with a sample from each of four existing wells. The samples were analyzed for arsenic, cadmium, chromium, copper, lead, mercury, and nickel as well as for organic compounds using a GC/MS acid-base neutral scan.

Elevated levels of lead and nickel were quantified as indicated in the following listing. Organic compounds including a number of priority pollutants were also quantified.

	Concentration (ug/L)	
Parameter	Maximum	Mean
Lead[1/]	150	99
Nickel[1/]	20	7
Phenol[1/]	1,914	405
Naphthalene[1/]	50	10
Butylbenzyl phthalate[1/]	21	4
2-Ethylhexyl phthalate	8	2
2,4-Dimethylphenol[1/]	5	1
m-Cresol	370	113
p-Cresol	18	4

1/ EPA priority pollutant

COUNTY OF ERIE
DEPARTMENT OF ENVIRONMENT AND PLANNING
DIVISION OF ENVIRONMENTAL CONTROL

* * * MEMORANDUM * * *

FROM: E. Joseph Sciascia DATE: 10/7/85

TO: Peter Buechi, NYSDEC

SUBJECT: Columbus McKinnon
May 29, 1985 Sediment Sampling Results
(July 26, 1985 Report)

Thank you for a copy of the subject report for our review. Please consider the following comments:

1) On October 8, 1982, sediment samples were collected directly into sample jars (affixed to an extending fiberglass surveyor's pole). Samples were collected at approximately 5 feet and 15 feet from the creek. Sampling results showed problem levels of PCB's at stations #3 and #4.

Sample ID	PCB's (PPM)
3 - 5 feet	107.01
3 - 15 feet	127.37
4 - 5 feet	365.97
4 - 15 feet	222.20

On October 29, 1982 additional sediment samples were collected apparently using the same sampling technique. However, results of sampling in areas other than what was done on October 8, 1982 showed all sample concentrations below 50 ppm (the action level).

2) On July 6, 1983, another round of sediment samples was collected. This time a boat was used to collect samples. Sampling was done further out in the creek than the previous sampling. Apparently a similar sample collection technique was used. All samples showed less than 50 ppm of PCB's. This lead to the conclusion that PCB's were essentially only present within 15 feet of the creek bank in sediment at levels of concern in the vicinity of station #3 and #4 near the oil storage building. Fine grain size of the sediment at these locations lead to a major concern with potential PCB migration from the area.

3) Most recent samples collected on May 29, 1985 were collected as part of preparation for an overall remedial plan. However, samples were collected using a different method. This time, samples were collected using a split spoon sampling device (2 foot long, 2 inches in diameter). Samples were collected at approximately the same locations as the October 8, 1982 sampling apparently to determine the depth of contamination. Sample results indicate very low levels of PCB's (substantially less than 50 ppm).

DISCUSSION

Our review assumes valid sample collection and analytical techniques were used and that quality control measures were acceptable. Sample results to data may be consistant with expectation considering the different sampling techniques used. The first sampling appears to represent a thin layer of the sediment surface. It is questionable whether a person standing on shore could collect a sample six inches deep.

Follow-up sampling results on May 29, 1985 may be representative of the entire cross section (six inches) depth. This may account for the substantially lower concentrations of PCB's found. If this is the case, then it does appear that the additional sampling may be necessary to adequately characterize the thin surface layer of sediment. Additional sampling would also indicate whether contaminant migration (through transport) has occurred.

CONCLUSION

1) Sample results from the May 29, 1985 indicate that contamination is either limited to the very surface of creek sediment or has migrated downstream.

2) Additional sampling (or analysis of existing samples) of the surface sediment appears to be necessary before any definitive conclusions can be made about contamination depth or migration.

3) Assuming PCB's are still present in the sediment surface at levels of concern, any removal efforts should be tailored to prevent the spread of contaminates to other areas.

TECHNICAL COMMENTS

1) There are inconsistancies between narrative description on sample location and depth as compared to the tabulated results.

2) Result much higher than the determinable limits are shown as less than (<) values. Apparently dilution problems caused this. The report should reflect this notation for all such values. Only a few are so identified by an asterisk.

Joseph Sciascia

E. JOSEPH SCIASCIA, P.E.
Sr. Environmental Quality Engineer

EJS/bb

cc: A. T. Voell

COLUMBUS McKINNON CORPORATION
CHAIN DIVISION
ONE FREMONT STREET
TONAWANDA, NEW YORK 14150
716/698-3200

TO JOE'S FYI
+ File
Columbus McKinnon

September 25, 1985

New York State Dept. of Environmental Conservation
Mr. Ahmad Tayyebi
600 Delaware Avenue
Buffalo, NY 14202-1073

Subject: Groundwater Sample Test Results

Dear Mr. Tayyebi:

Attached you will find one copy of "OW-2 Groundwater Sample Split with the DEC and Analysed for Volatiles and PCB's" report prepared by Advanced Environmental Systems, Inc. dated February 18, 1985. I apologize for the oversight in not sending you a copy of this report. At our December 1984 meeting we discussed Calculated Loading to Ellicott Creek, CM Chain, Tonawanda, New York, report and that report contained the results of groundwater analysis in October 1983.

I believe the above gives you the complete information with respect to groundwater analysis.

If there is anything further that you will need, please call me at your convenience.

Sincerely,

John Dicky

John Dicky, Manager
Chainmaker Manufacturing and
Development Division

JD:asc
Enc.

"OW-2 GROUNDWATER SAMPLE SPLIT WITH THE DEC AND ANALYSED FOR VOLATILES AND PCB'S"

Report Prepared For

COLUMBUS MCKINNON CORPORATION
CM CHAIN DIVISION

By

ADVANCED ENVIRONMENTAL SYSTEMS, INC.

W. Joseph McDougall

W. Joseph McDougall, Ph.D.
Technical Evaluation

February 18, 1985
AES Job RI

SCOPE OF WORK

Mr. Peter Buechi, P.E., Associate Sanitary Engineer for the New York State Department of Environmental Conservation, required that a groundwater sample from OW-2 be split with the DEC and analyzed for priority pollutant volatiles and PCB'S. This request was made January 3, 1985 at a meeting at the DEC office.

COLLECTION OF SAMPLES

Dr. W. Joseph McDougall of AES purged the well OW-2 to dryness; approximately 2.5 gallons of purged groundwater was obtained. On January 14, 1985, sample splits of the groundwater were obtained with Mr. Ahmad Tayyebi of the DEC. The samples for AES were transported in an insulated chest with blue ice, directly to the laboratory.

ANALYTICAL METHODOLOGY

The sample for Volatile Organics Analysis was spiked at AES. All the VOA vials were coded and air-freighted to Compuchem Laboratories.

The extractable fraction was analyzed for PCB'S and Pesticides.

ADVANCED ENVIRONMENTAL SYSTEMS, INC.
LABORATORY REPORT

TYPE OF ANALYSIS: VOLATILE ORGANICS
UNITS OF MEASURE: MICROGRAMS/LITER, OR PPB
CLIENT: C M CHAIN A.E.S. JOB CODE 01RI

ANALYSIS	METHOD	REF	DETERMINABLE LIMITS	75 1-14-85 OW-2	76 1-14-85 FIELD BLK
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ACRYLONITRILE	"	"	100	BDL	BDL
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1,1-DICHLOROETHANE	"	"	10	BDL	BDL
TRANS-1,2-DICHLOROETHYLENE	"	"	10	100	BDL
CHLOROFORM	"	"	10	BDL	BDL
1,2-DICHLOROETHANE	"	"	10	BDL	BDL
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CARBON TETRACHLORIDE	"	"	10	BDL	BDL
BROMODICHLOROMETHANE	"	"	10	BDL	BDL
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TRANS-1,3-DICHLOROPROPENE	"	"	10	BDL	BDL
TRICHLOROETHYLENE	"	"	10	BDL	BDL
BENZENE	"	"	10	BDL	BDL
CIS-1,3-DICHLOROPROPENE	"	"	10	BDL	BDL
1,1,2-TRICHLOROETHANE	"	"	10	BDL	BDL
DIBROMOCHLOROMETHANE	"	"	10	BDL	BDL
BROMOFORM	"	"	10	BDL	BDL

Susan M. Cerquetti

SUSAN M. CERQUETTI
G. C. DIVISION

ADVANCED ENVIRONMENTAL SYSTEMS, INC.
LABORATORY REPORT

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TOLUENE	"	"	10	BDL	BDL
CHLOROBENZENE	"	"	10	BDL	BDL
ETHYLBENZENE	"	"	10	BDL	BDL
2-CHLOROETHYL VINYL ETHER	"	"	10	BDL	BDL

Susan M. Cerquetti

SUSAN M. CERQUETTI
G. C. DIVISION

ADVANCED ENVIRONMENTAL SYSTEMS, INC.
LABORATORY REPORT

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UNITS OF MEASURE: MICROGRAMS/LITER, OR PPB
CLIENT: C. M. CHAIN A.E.S. JOB CODE 03RI

ANALYSIS	METHOD	REF	DETERMINABLE LIMITS	75 0W-2 1-14-85
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ENDRIN	"	"	0.02	BDL
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METHOXYCHLOR	"	"	0.04	BDL
PCB 1260	"	"	0.12	BDL
PCB 1254	"	"	0.10	BDL
PCB 1242	"	"	0.11	BDL

Susan M Cerquetti

SUSAN M. CERQUETTI
G. C. DIVISION

ADVANCED ENVIRONMENTAL SYSTEMS, INC.
LABORATORY REPORT

TYPE OF ANALYSIS: GC - QUALITY CONTROL DUPLICATE
UNITS OF MEASURE: MICROGRAMS/LITER, OR PPB
CLIENT: C M CHAIN A.E.S. JOB CODE 02RI

ANALYSIS	SAMPLE	ORIGINAL CONC.	DUPL. CONC.	AVERAGE CONC.	RANGE	REL. % DIFF.
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PCB 1254	75	<0.10	<0.10	NA	NA	NA
PCB 1242	75	<0.11	<0.11	NA	NA	NA
ENDRIN	75	<0.02	<0.02	NA	NA	NA
LINDANE	75	<0.02	<0.02	NA	NA	NA
METHOXYCHLOR	75	<0.04	<0.04	NA	NA	NA
TOXAPHENE	75	<1.67	<1.67	NA	NA	NA

Relative Percent Difference =
Range/Average X 100

ADVANCED ENVIRONMENTAL SYSTEMS, INC.
LABORATORY REPORT

TYPE OF ANALYSIS: GC - QUALITY CONTROL DUPLICATE*
UNITS OF MEASURE: MICROGRAMS/LITER, OR PPB
CLIENT: C M CHAIN A.E.S. JOB CODE 01RI

ANALYSIS	SAMPLE	ORIGINAL CONC.	DUPL. CONC.	AVERAGE CONC.	RANGE	REL. % DIFF.
VINYL CHLORIDE	75	120	110	115	10	8.7
TRANS-1,2-DICHLOROETHYLENE	75	100	100	100	0	0

*All compounds not listed were below determinable limits
Relative Percent Difference =
Range/Average X 100

ADVANCED ENVIRONMENTAL SYSTEMS, INC.
LABORATORY REPORT

TYPE OF ANALYSIS: GC - TEST CONTROLS
UNITS OF MEASURE: MICROGRAMS/LITER, OR PPB
CLIENT:C M CHAIN A.E.S. JOB CODE 01RI

ANALYSIS	TYPE	ORIGINAL CONC.	ADDED CONC.	EXPECTED CONC.	REPORTED CONC.	PERCENT RECOVERY	95% CONFIDENC. INTERVAL
TRICHLOROETHYLENE	75-SPK	<10	190	190	130	68.4	!
TETRACHLOROETHYLENE	75-SPK	<10	170	170	110	64.7	!
TRANS-1,2-DICHLOROETHYLENE	75-SPK	100	160	260	190	73.1	!
CARBON TETRACHLORIDE	75-SPK	<10	180	180	100	55.6	!
BENZENE	75-SPK	<10	190	190	130	68.4	!
VINYL CHLORIDE	75-SPK	115	160	275	250	90.9	!

ADVANCED ENVIRONMENTAL SYSTEMS, INC.
LABORATORY REPORT

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ANALYSIS	TYPE	ORIGINAL CONC.	ADDED CONC.	EXPECTED CONC.	REPORTED CONC.	PERCENT RECOVERY	95% CONFIDEN INTERVAL
PCB 1254	75-SPK	<0.10	5.62	5.62	6.50	115.6	4.7-
LINDANE	75-SPK	<0.02	79.76	79.76	94.99	119.1	22.8-13

Jack Tygert
Peter Buechi
Columbus McKinnon Site

November 19, 1986

On November 14, 1986, a meeting was held with representatives from Columbus McKinnon to discuss the consent order previously sent to the firm. In attendance were the writer, James Charles, John Dicky, Joseph McDougall, and Columbus McKinnon's attorney, Morgan Grant. A summary of the meeting follows:

- Columbus McKinnon (CM) has concluded that containment is the preferred remedial alternative. None of the treatment alternatives studied as well as excavation/removal are feasible due to cost. These alternatives range in cost from $1.5 to $3 million.

- CM will submit a review of all remedial alternatives that will include costs as well as advantages and disadvantages of each. This report will be submitted with the remedial action plan.

- CM's containment plan will include:

  - Installation of a concrete or steel sheet pile barrier along the creek.

  - Removal of contaminated sediments by vacuuming creek bottom. Water and sediments will be decanted with water treated by sand filtration and granular carbon prior to discharge to stream or city sewer system.

  - Dewatered sediments would be placed on site.

  - Outlying areas with PCB's would be excavated and brought back to main site.

  - Asphalt cap would be placed over entire site.

  - Existing wells would be removed.

  - Long term monitoring and maintenance program for the cap.

  - Health and safety plan.

- I advised CM that I saw possible problems with discharge of water back to the creek and removal of monitoring wells. Also expressed surprise that they had rejected all treatment options and reverted to containment approach. Approval of containment approach would not be granted until review of CM alternatives assessment is completed and assessment is accepted.

- Following dates were agreed to for submission of documents by CM:

  - November 26 - CM attorney to submit proposed revisions to consent order language and revised bonding amounts.

  - January 2, 1987 - CM to submit remedial action plan and alternatives assessment.

Following the meeting, CM was contacted by James Charles and requested to submit alternatives assessment document by December 1 so that it might be reviewed prior to submission of remedial action plan. CM attorney agreed to this.

vam

cc: Mr. John Willson
Ahmad Tayyebi

7/23/86
CRC File Copy

CM CHAIN

SITE INVESTIGATION

233 Fillmore Avenue
Tonawanda

July 23, 1986

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LIST OF APPENDICES

1.0 INTRODUCTION

On May 9, 1986, a Site investigation was conducted by Advanced Environmental Systems (AES) and Conestoga-Rovers & Associates Limited (CRA), on behalf of CM Chain. The investigation was conducted on a portion of property formerly owned by CM Chain located east of the Erie Railroad and north of Fillmore Avenue, at 233 Fillmore Avenue. The area investigated, consisted of an alleged disposal site on the property measuring approximately 100 ft. by 120 ft.in size. The Site is believed to have been utilized in the past by CM Chain for refuse disposal.

The purpose of the Site investigation was to provide preliminary information concerning composition, existing cover material, areal and vertical extent of waste disposal and identification of potential avenues of chemical migration.

Six (6) shallow trenches were dug in order to determine the vertical and areal limits of the disposal area. The excavating was accomplished by a rubber-tired backhoe equipped with a 2 ft. wide bucket. Figure 1 illustrates the Site and presents the locations of the trenches.

2.0 SITE WORK

The initial phase of the Site investigation was conducted under the supervision of John Dicky of CM Chain and David Black of CRA. Also present during much of the Site work was Ahmad Tayyebi, Assistant Sanitary Engineer with Region 9 of the New York State Department of Environmental Conservation (NYSDEC).

Trenches 1 and 2 were excavated to determine the southern areal limit and the depth of the disposal area. Observation of the soil profile of both trenches indicated a constant profile from north to south consisting of a saturated lower layer of black cinders and gravel, 9 to 18 inches in thickness overlaying native clayey silt soils. Above the cinders, various layers of dry fill were noted including bricks, steel fragments, silt and gravel. The total thickness of fill is approximately 4 ft.

Due to the uniform nature of the soil profile from one end of each trench to the other, it was impossible to visually define the horizontal extent of the disposal area. According to CM Chain personnel, the disposal area ended at the roadway to the south, which originates at an opening in the building and runs east as shown in Figure 2.

A soil sample was taken from the north end of trench #2 and a water sample was collected from the north end of trench #1.

Trench #3 was dug north of trenches #1 and #2 to determine the depth in that vicinity of the disposal area. The soil horizon at trench #3 revealed a 4 ft. layer of fill including a 12 inch layer of saturated black cinders and gravel immediately overlying the native clayey silt soils. The upper 3 ft. of fill was similar in nature to that of trenches #1 and #2.

A soil sample was collected from trench #3.

Trenches #4, #5 and #6 were excavated to determine the depth of fill and the eastern boundary of the disposal area. From trenches #5 and #6 it was determined that the disposal area extended approximately 120 ft. east of the building.

Inspection of the soil profiles revealed by trenches #4, #5 and #6 indicated that the depth of fill in that area ranged from 2 ft. to 4 ft. thick, overlying native sandy brown and gray clayey silt soils. The fill consisted of dark brown silty soils and gravel, brick, concrete blocks,

3.0 SAMPLING

A total of four (4) soil samples were taken. Samples were taken from the north end of trench #2, the mid-section of trench #3 and from the west end of trenches #4 and #5. All samples were taken from within the apparent limits of the disposal area. Trench #1 was not sampled as it was near trench #2 and likewise trench #6 was not sampled as it was essentially an extension of trench #5.

Soil samples were collected from the backhoe bucket as potential caving-in of the trench prevented entry into the trench. Soils retained for analytical purposes were collected from the entire fill material horizon. Each soil sample consisted of a composite of these soils.

The four (4) soil samples were composited at the laboratory by AES into one (1) sample. The soil sample and the water sample were then analyzed for the full priority pollutant list, minus asbestos and dioxin, plus a library search. The analytical results, presented in Appendix B, are further discussed in Section 6.0.

Each soil sample location was also sampled by the NYSDEC Site Representative, Ahmad Tayyebi.

A water sample was taken of water which collected in trench #1.

5.0 POTENTIAL CHEMICAL MIGRATION PATHWAYS

The potential for chemical migration via surface runoff is nominal as surface runoff is minimal due to the flatness of the terrain and the nature of the surface cover. Vegetative cover is sparse and the upper fill layers are very coarse, thus infiltration is expected to be high.

The potential chemical migration pathway of most concern, is the saturated layer of cinders and gravel which overlies the native soils. This layer is very porous and tends to collect infiltration. The areal limits of the cinder layer was not determined during this program, but evidently extends beyond the disposal area boundary.

The bedding of the sewer, watermain, electrical conduit and any other underground utility which cross or approach the former disposal area, may act as potential chemical migration pathways. Figure 2 shows the approximate locations of known underground utilities in the area.

15 (12/75)

FILE COPY

New York State Department of Environmental Conservation

MEMORANDUM

TO: Peter Buechi - Region 9
FROM: David Vitale - Western Site Investigation
SUBJECT: Columbus McKinnon Plant Site - #91506
Tonawanda, Niagara County, New York
DATE: March 30, 1984

We have reviewed the Groundwater and Additional Sampling Program report prepared by Advanced Environmental Systems, Inc. There are concerns which we feel have not been adequately addressed. The following are our comments:

1. Number 3 on Page 14 mentions sediment transport as the major concern. This sediment erosion should be throughly investigated to determine its transport path. Depending upon the findings of transport studies, a biological investigation may be in order.

2. Number 4 on Page14 is a surprising recommendation in view of the significant levels of solvents in Well #3. We feel that the detection of these levels merit further investigation of the area.

3. Number 5 on Page 14 is considered to be premature. Other remediation options should be fully investigated. Findings of the above noted further investigation may effect the available remedial options as well as the unique access conditions.

4. Number 6 on Page 14 is vauge. The proposed embankment stabilization should be fully described. In addition, the area requiring such stabilization should be designated.

5. Air Pollution potential is not addressed in this report and should be evaluated.

Please refer any comments to me at (518) 457-9538.

bcc: N. Nosenchuck (2)
M. O'Toole
C. Goddard
W. Demick
Files

DV:sjc

New York State Department of Environmental
Division of Solid and Hazardous Waste
50 Wolf Road, Albany, New York 12233

RECEIVED

AUG 09 1984

BUREAU OF
HAZARDOUS WASTE OPERATION
DIVISION OF SOLID AND
HAZARDOUS WASTE

Part I

General Information and Classification of Facility

Note: 365.00 indicates reference to New York State regulation

COMPANY NAME: COLUMBUS McKINNON

EPA I.D. NUMBER: NYD 002 105 534

COMPANY ADDRESS: FILLMORE & FREMONT ST.

COUNTY/CITY/~~TOWN/VILLAGE~~: TONAWANDA

COMPANY CONTACT OR OFFICIAL: TOM KENTNEY

E/A NUMBER:

TITLE: MGR. OF PLANT ENGR.

INSPECTOR'S NAME: D. MCKENZIE

PHONE: (716)-694-3321

TITLE/ORGANIZATION/REGION: SR. SAN ENGR. NYSDEC REG 9

OTHER ENVIRONMENTAL PERMITS HELD BY FACILITY:

___NPDES ___AIR ___OTHER _____

DATE OF INSPECTION: JULY 9 1984

TIME OF INSPECTION: 1:30

Identification of Hazardous Waste - 366

	YES	NO	DON'T KNOW
(1) Is there reason to believe the facility has hazardous waste on-site? If yes, what leads you to believe it is hazardous waste? Check appropriate box/boxes:	___	___	___

A. ___Company admits that its waste is hazardous during the inspection.

B. ___Company admitted the waste is hazardous in its RCRA notification and/or Part A permit application.

C. ___EPA testing has shown characteristics ___Has revealed hazardous constituents [Please attach analysis report] 366.4(a)2 (261 Appendix VIII)

( ) ignitability	366.3b
( ) corrosivity	366.3c
( ) reactivity	366.3d
( ) EP toxicity	366.3e

D. ___The waste material is listed in the regulations as a hazardous waste from non-specific sources 366.4b

E. ___The waste material is listed in the regulations as a hazardous waste from specific sources. 366.4c

F. ___The material or product is listed in the regulations as discarded commercial chemical products, off-specification species, containers, residues and spill residues thereof. 366.4d

G. ___Company is unsure, but they have reason to believe that waste materials are hazardous. (Explain) _____

_____

(2) Is there reason, other than those above, for you to believe that there are hazardous waste on site? (Explain) _____

_____

(3) The facility appears on the notification listing as a (check each appropriate category):

✓ generating facility

✓ treatment, storage or disposal facility

___transport facility

(4) The facility should be classified and inspected as a (check each appropriate category):

✓ generating facility

___treatment ___storage ___disposal facility

___transport facility

___small-quantity generator

___exempt facility

(5) If the facility is a treatment, storage or disposal facility, have they submitted a:

___Part A application

___Part B application

___Has the facility been granted a hazardous waste Part B permit?

If so, when does it expire: _____

___Have any variances been granted - 360.1(g)

If so, explain: _____

_____

(6) Identify the hazardous wastes that are on-site, and estimate the approximate quantity of each (use waste code, CAS Number, DOT Number or EPA Number).
Too much to list - see Part II

(7) Describe the activities that result in the generation of hazardous waste.

Generator Status Identification 365.1

1. ___Not a generator.

2. ___Not a solid waste. 366.1(g)1

3. ___Not a hazardous waste. 366.1(g)2

4. ___Exclusions to hazardous waste list. 366.4-366.6 IDENTIFY: _____

5. ___Exemption for used engine lubricating oil. 365.1(e)2 - Complete Part II, 1B

6. ___Exemption for farmers. 365.1(3)3. If so, does he ___triple rinse each emptied pesticide container in accordance with paragraph 365.1 (e)(3)i or 365.1(e)(3) ii, and ___dispose of the pesticide residues on his own farm in a manner consistent with Section 325.4(d) of this title or in a manner consistent with the disposal instructions on the pesticide label, whichever is more restrictive?

7. ___Exemption for publicly owned treatment works. 365.1(e)4

8. ___Samples shipped to laboratories solely for analysis. 365.1(e)5

9. ___Residues of hazardous waste in empty containers. 365.1(e)6

10. ___Hazardous wastes which are exempted-generated in a product or raw material storage tank, transport vehicle or vessel, pipeline or manufacturing unit in use unless a surface impoundment. 365.1(e)7

11. ___Generated or produced in raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste treatment manufacturing unit...until it exits. The unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials. 365.1(e)7

12. ___Small quantity generator - generates less than 100 kg/mo and stores less than 100 kg. 365.1(e)(1)i - Complete Part II, 1B

13. ___Small quantity generator - generates less than 100 kg/mo and stores more than 100 kg but less than 1,000 kg.- 365.1(e)(1)ii - Complete Part II, 1C

E. ___ Wastes are not placed in containers which are managed in accordance with 365.2(a)(8) of this Part - Standards for management of containers or in tanks which are managed in accordance with paragraph 365.2(a)(9) of this Part.-

Standards for management of tanks. If not, complete Part III. 365.2(a)(7)(ii)b

no time to leave

F. ___ The date upon which each period of accumulation begins is not clearly marked and visible for inspection on each container. If not, complete Part III - 365.2(a)(7)(ii)c

G. ___ Each container is not properly labeled and marked according to paragraphs 365.2(a)4 and 365.2(a)5 of this Part. If not, complete Part III - 365.2(a)(7)(ii)d

H. ___ Exemptions (TSD) - 360.1(f) (for facilities and operations that do not manage hazardous waste or waste oil)

1. ___ Solid waste generated from a one-family residence.___ If so, hazardous wsste generated and disposed of within the property boundaries of such residence.

2. ___ Solid waste generated from a farm.___ If so, solid waste generated and disposed of within the property boundaries of such farm.

3. ___ Solid waste used in normal farming operation. Disposal of waste pesticides. If so:

   (a) ___ Is it disposed by the farmer who generated them?

   (b) ___ Does the farmer comply with Section 325.4?

   (c) ___ Does the farmer comply with Section 325.5?

4. ___ Transfer, storage, treatment, incineration and processing facilities located at, and used for solid waste generated at apartment houses, schools, parks, industries, hospitals, commercial establishments, individual residences and farms. Except establishments which temporarily store more than 275 gallons of liquid waste and dot not discharge in compliance with a permit issued pursuant to Environmental Conservation Law Article 17, and are located in a geographical area overlying a sole source aquifer.

5. ___ Transfer, storage, incineration and processing facilities, except composting facilities, located at publicly owned treatment works and used for solid waste.

A. ____ All such wastes are not shipped off-site to a permitted treatment, storage or disposal (SD) facility in 90 days or less or treated on-site of generation in 90 days or less - 365.2(a)(7)(ii)a

see drums above

B. ____ The date upon which each period of accumulation begins is not clearly marked and visible for inspection on each container - 365.2(a)(7)(ii)d

C. Standards for management of containers - 365.2(a)8

1. What type of containers are used for storage? Describe the size, type and quantity and nature of waste (e.g., 12 fifty-five gallon drums of waste acetone). 55 gal. drums (various used)

2. ____ The containers do not appear to be in good condition and are in danger of leaking. (If containers are leaking, describe the type, condition and number that are leaking or corroded. Be detailed and specific)-365.2(a)(8)iii or 360.8(c)(8) i.

3. ____ Hazardous waste stored in containers are not made of compatible materials in accordance with paragraph 365.2(a)3 - 365.2aa)(8)i or 360.8(c)(8)ii (If not, please explain).

4. ____ All containers except those in use are not closed - 365.2(a)(8)ii or 360.8(c)(8)(iii)a

5. ____ Containers holding hazardous waste appear to be opened, handled or stored in a manner which may rupture the container or cause it to leak - 365.2(a)(8)iii or 360.8(c)(8)(iii)b

6. ____ The storage area is not inspected at least weekly - 365.2(a)(8)iv or 360.8(c)(8)(iv)

7. ____ Containers holding ignitable and reactive wastes are not located at least 15 meters (50 feet) from the facility's property line - 365.2(a)(8)v or 360.8(c)(8)(v)

8. ____ The generator does not comply with the following special requirements related to storage of ignitable, reactive or incompatible wastes 365.2 (a)(8)vi:

Special requirements related to storage of ignitable, reactive or incompatible wastes - 365.2(a)10

(A) ___ Generator has not taken precuations to prevent accidental ignition or reaction of ignitable or reactive waste - 365.2(a)(10)i

(B) ___ Generator has not placed "No Smoking" signs conspicuously wherever there is a hazard from ignitable or reactive waste - 365.2(a)(10)i

(C) ___ The storage of ignitable or reactive wastes, and the mixture or comingling of incompatible wastes, on incompatible wastes and materials, is not conducted to prevent:

(a) ___ the generation of extreme heat or pressure, fire or explosion, or violent reaction - 365.2,a)(10)(ii)a or 360.8(c)(9)(i)a

(b) ___ production of uncontrolled toxic mists, fumes, dusts or gases in sufficient quantities to threaten human health - 365.2(a)(10)(ii)b or 360.8(c)(9)(i)a

(c) ___ production of uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions - 365.2(a)(10)(ii)c or 360.8(c)(9)(i)a

(d) ___ the damage to the structural integrity of the device or facility containing the waste - 365.2(a)(10)(ii)d or 360.8(c)(9)(i)a

(e) ___ a threat to human health or the environment - 365.2(a)(10)(ii)e or 360.8(c)(9)(i)a

D. Standards for management of tanks - 365.2(a)9

1. What are the approximate number and size of tanks containing hazardous waste?

1 - 6000 gal. tank

2. Identify the waste treated/stored in each tank. Include whether they are above or below ground.

spent sulfuric acid (K062). above ground

___ If the tanks are below ground, they cannot be entered for inspection.

General Operating Requirements - 365.2(a)(9)i

3. ___ Hazardous wastes or treatment reagents are placed in the tank, such that they could cause the tank or its inner liner to rupture, leak, corrode, or otherwise fail before the end of its intended life - 365.2(a)(9)(i)a or 360.8(c)(9)(i)b. If so, please explain.

(3) ___ The waste is not stored or treated in such a way that it is protected from any material or conditions which may cause the waste to ignite or react-365.2(a)(9)(iii)(a)2 or 360.8(c)(9)(v)(a)2

(4) ___ The tank is not used solely for emergencies-365.2(a)(9)(iii)(a)3 or 360.8(c)(9)(v)(a)3

(5) ___ The ignitable or reactive waste in covered tanks does not comply with the National Fire Protection Association's (NFPA's) buffer zone requirements for tanks, contained in Tables 2-1 thru 2-6 of the "Flammable and Combustible Code, 1977."

(6) ___ Incompatible wastes or incompatible wastes and materials are placed in the same tank not in compliance with 365.2(a)(10)ii - 365.2(a)(9)(iv)a or not in compliance with 360.8(c)(1)(v)b - 360.8(c)(9)(vi)a

(7) ___ Incompatible wastes are placed in an unwashed tank which previously held an incompatible waste or material not in compliance with 365.2(a)(10)ii - 365.2(a)(9)(iv)b or not in compliance with 360.8(c)(1)(v)b - 360.8(c)(9)(vi)b

(8) ___ The generator has abandoned use of a tank used to store hazardous waste and has not revoved from such tanks and related discharge control equipment and discharge confinement structures all hazardous waste and hazardous waste residues.

4. Manifest Records - 365.2(b)

A. ___ It does not appear, from the available information, that there is a manifest copy available for <u>each</u> hazardous waste shipment that has been made - 365.2(b)(5)i.

If "checked" or "don't know," please elaborate. ______________

____

B. Describe the approximate size of an average shipment made (on a monthly basis) since March 9, 1982. [illegible] 5 [illegible] ([illegible]), + 16 [illegible]

C. Indicate transporter name and Part 364 Permit Number ______________
[illegible] - 9-1-090, [illegible] - 9-1-01[illegible]

D. Each manifest (or a representative sample) does not have the following information (check information missing): - 365.3(b. and 365.3(b)(1)i

	Generator	Transporter 1	Transporter 2	TSDF
1. ___ Name of	___	___	___	___
2. ___ EPA ID No. of	___	___	___	___
3. ___ Mailing Address of	___	___	___	___
4. ___ Telephone No. of	___	___	___	___
5. ___ Manifest Document No.				

New York State Department of Environmental Conservation
Division of Solid and Hazardous Waste
50 Wolf Road, Albany, New York 12233

NOT FOR RELEASE TO COMPANY, PROTECTED INFORMATION

PART V

Comments, Conclusions and Recommendations Section

Facility Name Columbus McKinnon Co.

EPA I.D. No. NYD 082 105 534

Date of Inspection July 9, 1984

General Comments and Conclusions (cite appropriate State regulations in violation)

Columbus McKinnon manufactures chain. Normal link stock sizes range from 1/4" to 1 1/4" using standard production equipment. Larger sizes can be made by hand forging.

This site is phasing out chain manufacture & transferring needed equipment to a site in the South. The phase out should be complete this fall. Columbus McKinnon is examining the feasibility of becoming a heat treat job shop. If this change does occur the generation of waste pickle liquor may or may not increase based on the type of heat treating required.

Columbus McKinnon is a large generator (18.15 MT/mo) of hazardous waste. The following sites reflect operating conditions

in 1983 + does not reflect the potential shut down options likely in the near future.

Haz. waste no.	7/9/84 haz. waste inventory	generation rate for 1983 transported	MT/mo.	haz. waste description
K062	150 gal.	56,880 gal	1784	(1) Spent pickle liquor
F001	0	330 gal	0.08	waste chlorinated solvent used in degreasing (tetrachloroethane)
(2) D002	0	605 gal	0.20	Sludge from bottom of pickling tank
D014	0	4 drums	(3) N.A.	PCB's - scrapped electrical equipment
D002	0	1,000 #	(4) N.A.	corrosive solid
D001	0	400 #	(5) N.A.	oxidizer solid
D001	0	300 #	(6) N.A.	flammable solid
D002 [2]	0	500 #	(7) N.A.	poison corrosive solid
?	0	200 #	(8) N.A.	waste diphenylamine chloride
	TOTAL		1812	

(1) K062 - At this site refers to spent waste nitric sulfuric acid. The initial pickling liquor consists of 7½ % H_2SO_4 - the remainder is water. The spent liquor is discarded when the iron content reaches 5%. The sulfuric acid content

has then been reduced to 5%.

EPA is in the process of delisting K062. EPA's description of this waste (the one being delisted) is the sludge only - this would apply to the next item on the chart listed as D002 (acid sludge). The delisting of K062 is confusing in that this number refers to both sulfuric acid and hydrochloric acid, or sludge removed from the bottom of pickling tanks (about 5% acid), or the neutralized filter cake from the WWTP processing these wastes. After delisting the aqueous phase of pickling liquor using H_2SO_4 will remain a hazardous waste.

(2) Spent pickle liquor sludge will be delisted 12/84. See item (1).

(3) This was a one time (1983) disposal of unneeded laboratory materials. The hazardous waste descriptions, identification & grouping of wastes & choice of hazardous waste codes were those of a CECOS employee who came on site, packed & removed these wastes.

(4) Subsequent disposal not related to production.

Aluminum McKinnon does not transport, treat, store or dispose of (on site) hazardous waste.

Training, preparedness & prevention & contingency plans were observed. These items were inadequate (not written) and previous

47-15-15(7/82)

(14) 9

RCRA INSPECTION FORM

HWDMS LISTING — AS OBSERVED

Report Prepared for:

Generator ☒ — n/a

Transporter ☐ — n/a

HWM (TSD) facility ☐ — n/a

Copy of report sent to the facility ☐

Facility Information

Name: COLUMBUS McKINNON

Address: FILLMORE & FREMONT STS.
TONAWANDA

EPA ID#: NYD 002 105 534

Date of Inspection: JUNE 15, 1983

Participating Personnel

State or EPA Personnel: A.D. McKENZIE

Facility Personnel: MIKE CHRZANOWSKI, PERSONNEL MGR.
FRED BENTLEY, H&K PROD-ENGR.

Report Prepared by Name: A.D. McKENZIE

Agency: U.S.D.E.C.

Telephone #: (716) 754-7539

Approved for the Director by: _____

Summary of Findings

Facility Description and Operations

Coffumbus McKinnon manufactures chain. The steel bar stock as received in the storage shed becomes rusty. The rust must be removed before further processing can take place. Sulfuric acid is used for pickling (rust removal) since it preferentially attacks the iron oxide + leaves the iron clean. The wire is further conditioned by zinc phosphate + lime coatings. The wire is then cut, bent into a link + welded to form the chain. The completed chain is oiled but has not been metal plated.

Sulfuric acid is received in a solid form in a 6000 gal tank. The entire steel stock is immersed in the H_2SO_4 + observed for rust removal + the amount of time required for this process. When the rust removal becomes too slow it is "spent" + consists approximately of: 9% H_2O_2 5% H_2SO_4 + 4% $Fe_2(SO_4)_3$. The liquid portion of this waste goes to Envirite Chemical when it is beneficially reused in water treatment. The sludge phase is disposed of at CECOS.

The spent acid tank (7000 gal cap) overflowed

Summary of Findings (2)

Facility Description and Operations

a leak just ahead of the discharge valve in Feb. 83. About 300 gal. of this hazardous waste was spilled but contained to the satisfaction of authorities. The tank & rubber lining was replaced by Buffalo Tank & Lining Co.

C-M now has a separate building (concrete floor + concrete block walls) for the storage of drummed wastes. The hazardous waste was stored in drums of spic plus plate + 1 drum cutting machine coolant (both non hazardous) were observed.

Two manifests to CECOS dated 11/10/82 (65 drums) & 12/23/82 (17 drums) were observed. It was stated that these were the hazardous wastes observed 9/22/82.

C-M is now operating at about 1/3 of capacity.

-B- (1)

Describe the activities that result in the generation of hazardous waste.

F001 degreasing - has been discontinued probably permanently
D002 pickling - solid precipitate
K062 " " - spent sulfuric acid (gone off)
D007 chromium plating - discontinued.

Identify the hazardous waste located on site, and estimate the approximate quantities of each. (Identify Waste Codes)

Haz. waste no.	6/2/83 Inventory	generation rate per 1982	MT max	hazardous waste description
D002	(1) 0	9000 #/yr. (2)	0.34	(3) corrosive solids (iron sulfate)
D007	(1) 0	0	0	(4) chromium
F001	(1/2) 55 gal drum (1)	0	0	(5) degreasing waste (tetrachloroethylene)
K062 (6)	(8) 0	374 (7) T/yr.	28.3	(8) spent pickle liquor (sulfuric acid)

(1) The purpose of this inspection (less than 24 hours notice) was to observe removal of these items. This was required on inspection 9/22/82. And noted a gravel or dirt storage yard containing 75+ corroding drums of waste. EPA had requested that DEC verify the removal of these wastes 6/83.

Identify the hazardous waste located on site, and estimate the approximate quantities of each. (Identify Waste Codes)

(2) This is a measured 1982 figure & is far less than the permit application quantity: act. = 9,000 #/yr. vs. permit app. = 524,000 #/yr.

(3) The corrosive solids are precipitated iron sulfates resulting from the sulfuric acid removal of the iron oxide on the rusty bar & wire stock used for chain manufacture. Dirt is also washed off the wire stock & collected with this waste.

(4) The process creating this waste has been discontinued. For a while C-M Chromium plated the mandrels throughout the plant on which the chain is wound. The area was not sufficiently reduced as the procedure (done on site) was discontinued. 174 metric tons per year of chrome waste was created by this plating process.

(5) This partly filled drum was being held because it has additional capacity. The process (degreasing) was discontinued last year but could be reactivated if business

Identify the hazardous waste located on site, and estimate the approximate quantities of each. (Identify Waste Codes)

picked up. C-M said they would send this drum to CECOS as soon as possible since it is the only hazardous waste on site over 90 days.

(6) K062 is exempt under 261.6(a)(3)(i) - spent pickle liquor used in a waste water treatment plant.

(7) This is a increased 1982 figure + is also greater than the permit application quantity Act. = 374 tons/yr. vs. permit app. = 100 tons/yr.

(8) 5000 gal of spent pickle liquor was on hand during this inspection. It will be sent to CECOS by 6/17/83. Since it is still part of the process the inventory value is 0.

Is there reason to believe that the facility has hazardous waste on-site? yes

a. If yes, what leads you to believe it is hazardous waste? Check appropriate boxes:

☒ Company admits that its waste is hazardous during the inspection.

☐ Company admitted the waste is hazardous in its RCRA notification and/or Part A Permit Application.

☒ The waste material is listed in the regulations as a hazardous waste from a nonspecific source (§261.31)

☒ The waste material is listed in the regulations as a hazardous waste from a specific source (§261.32)

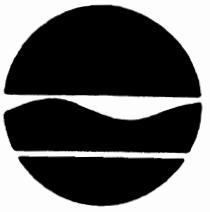
☐ The material or product is listed in the regulations as a discarded commercial chemical product (§261.33)

☐ Testing has shown characteristics of ignitability, corrosivity, reactivity or extraction procedure toxicity, or has revealed hazardous constituents (please attach analysis report)

☐ Company is unsure but there is reason to believe that waste materials are hazardous. (Explain)

New York State Department of Environmental Conservation
600 Delaware Avenue, Buffalo, New York 14202-1073

DV



Henry G. Williams
Commissioner

July 20, 1984

Mr. John Dicky, Manager
Columbus-McKinnon Corporation
Chain Division
One Freemont Street
Tonawanda, New York 14150

Dear Mr. Dicky:

This Department has reviewed the "Groundwater and Additional Sampling Program" report prepared by Advanced Environmental Systems, Inc. for Columbus-McKinnon Corporation. Please excuse our delay in responding to the report.

We generally concur with conclusions and recommendations Numbers 1 through 3 as presented on Page 14 of the subject report. However, we believe that there are several areas of concern that must be addressed prior to our acceptance of conclusions and recommendations Numbers 4 through 6 presented in the report. In addressing the following items, additional data will be developed that will assist in the development evaluation and selection of the final remedial plan for the site.

- An elevated level of total volatile halogenated organics was found in one of the monitoring wells. A lower level of total halogenated organics was also detected in this well. The specific parameters accounting for the levels of TVHO and THO detected were not determined during the subject investigation.

  In order to determine the concentration of specific parameters in the groundwater on site, a sample should be collected from Well OW2-83 and analyzed for the organic priority pollutants. The results from this analysis can be used to define indicator parameters to be used in conducting further groundwater investigations discussed below.

  Prior to collecting the well sample, it is requested that this office be provided with at least 24 hours notice so that we might obtain a split of the sample.

- Although the subject investigation identified the presence of organic contaminants in the groundwater, the extent of the groundwater contamination problem on site has not yet been determined.

  Before a remedial plan for the site can be approved by this office, the nature and extent of the groundwater problem must be defined. It is therefore necessary to proceed with a more comprehensive groundwater investigation of the site. This investigation must be sufficiently broad to determine groundwater levels and flow direction, contaminant concentrations and loading to Ellicott Creek. The investigation should also determine if the inactive disposal site is the source of the groundwater contamination problem or if a broader problem exists across the plant site. The investigation should provide the data necessary to assess the significance of the groundwater problem, and to develop the necessary remedial action plan.

- The remedial program proposed for the site, i.e. capping of the PCB contaminated soils and stabilization of the creek bank, does not address the contaminated groundwater detected on site. As noted above, groundwater concerns must be considered in selecting the final remedial plan to be implemented at the site. It is suggested that options such as excavation, cutoff walls, and groundwater collection systems may have to be considered, dependent on the results of the requested groundwater investigation.

Considering that it has been some time since our last meeting, and that the points raised above will require further activity on your part, I would suggest that we meet during the week of August 13, 1984 to review any questions you might have on the activities we desire to see implemented, your response to the requested activities and your schedule for moving ahead with the additional investigations. Please contact Mr. Ahmad Tayyebi at 847-4590 to schedule a meeting date.

Yours truly,

Peter J. Buechi, P.E.
Associate Sanitary Engineer

PJB:cag

cc: Mr. John McMahon, NYSDEC/Buffalo
Mr. Walter Demick, NYSDEC/Albany
Mr. Ahmad Tayyebi, NYSDEC/Buffalo
Mr. Donald Campbell, Erie County Department of Environment & Planning

COLUMBUS McKINNON CORPORATION
CHAIN DIVISION
ONE FREMONT STREET
TONAWANDA, NEW YORK 14150
716/696-3200

September 25, 1985

New York State Dept. of Environmental Conservation
Mr. Ahmad Tayyebi
600 Delaware Avenue
Buffalo, NY 14202-1073

Subject: Groundwater Sample Test Results

Dear Mr. Tayyebi:

Attached you will find one copy of "OW-2 Groundwater Sample Split with the DEC and Analysed for Volatiles and PCB's" report prepared by Advanced Environmental Systems, Inc. dated February 18, 1985. I apologize for the oversight in not sending you a copy of this report. At our December 1984 meeting we discussed Calculated Loading to Ellicott Creek, CM Chain, Tonawanda, New York, report and that report contained the results of groundwater analysis in October 1983.

I believe the above gives you the complete information with respect to groundwater analysis.

If there is anything further that you will need, please call me at your convenience.

Sincerely,

John Dicky

John Dicky, Manager
Chainmaker Manufacturing and
Development Division

JD:asc
Enc.

TELECON NO

CONTROL NO 02-8710-95 | DATE 12/8/87 | TIME 820

DISTRIBUTION

BETWEEN Paul McDonough | OF Superintendent of North Tonawanda Water Dept. | PHONE (716) 695-8531

AND Donna Restivo

DISCUSSION:

I asked Mr. McDonough how many people were served by the North Tonawanda intake on the Niagara River. He said they had 11,000 accounts.

Donna J. Restivo
12/8/87

ACTION ITEMS:

NUS 067 REVISED 0881

TELECON NO

CONTROL NO	DATE	TIME
02-870-95	12/7/87	1030

DISTRIBUTION

Columbus McKinnon

BETWEEN	OF	PHONE
Marion Koah	Lockport Water Dept. Office	(716)439-6678

AND

Donna Restivo

DISCUSSION:

I asked Ms. Koah how many people were served by the Lockport Water intake on the Niagara River. She said they had approximately 7,625 accounts.

Donna J. Restivo
12/7/87

ACTION ITEMS:

NUS 067 REVISED 0581

NUS CORPORATION — TELECON NOTE

CONTROL NO	DATE.	TIME.
02-8710-95	November 30, 1987	4:10

DISTRIBUTION.

Columbus McKinnon

BETWEEN:	OF: CITY OF TONAWANDA WATER DEPARTMENT	PHONE:
John Cadwalader		(716) 695-1800.

AND: G. Flaherty (NUS)

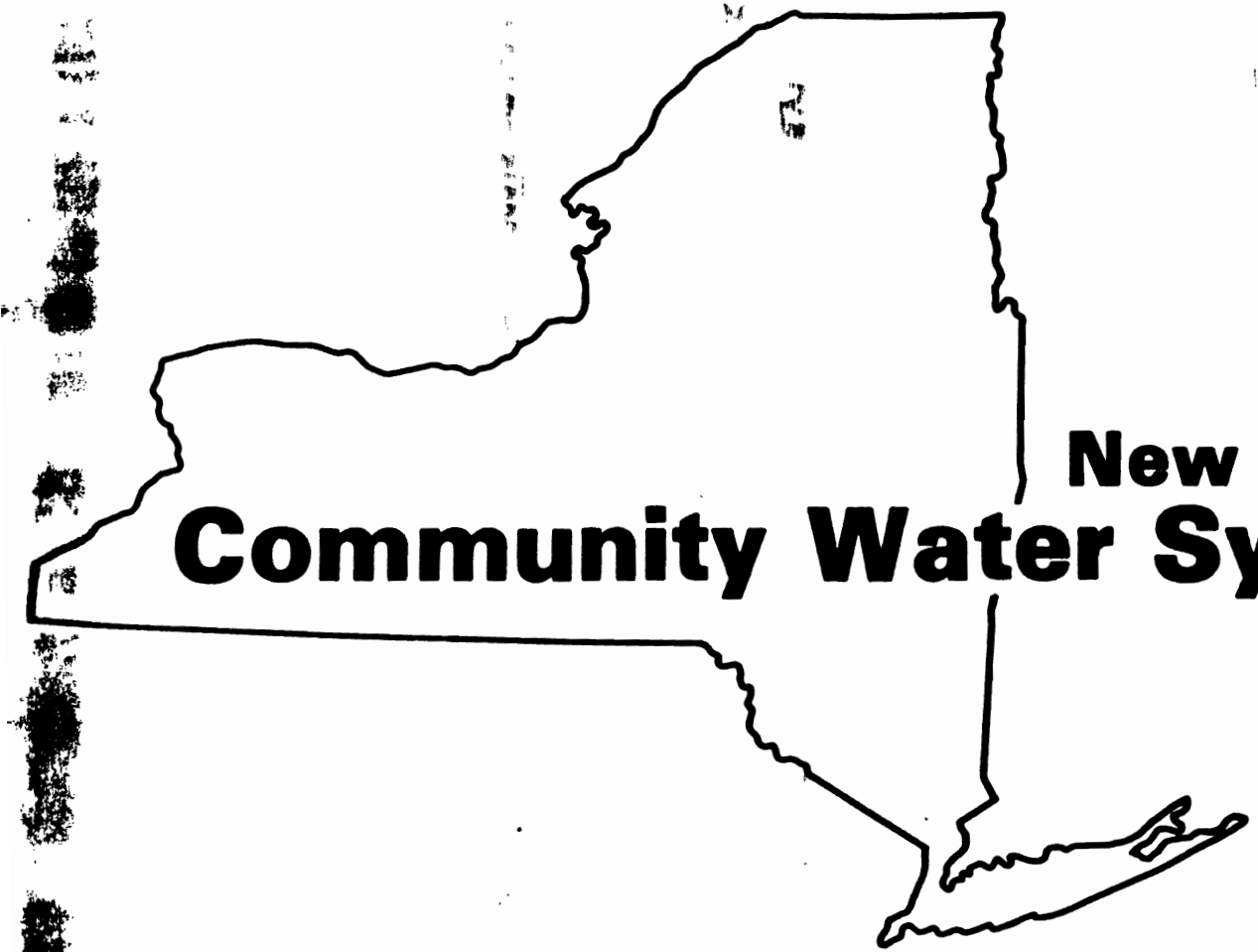
DISCUSSION:

The intakes indicated on USGS topo are accurate. The intakes west of Tonawanda Island serve Tonawanda, No. Tonawanda and Lockport. Niagara intake is on Niagara River near Williams Road

The water system of Tonawanda serves approximately 18,000 people.

ACTION ITEMS:

NUS 067 REVISED 0581



New York State Atlas of Community Water System Sources 1982

NEW YORK STATE DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL PROTECTION
BUREAU OF PUBLIC WATER SUPPLY PROTECTION

ERIE COUNTY

ID NO	COMMUNITY WATER SYSTEM	POPULATION	SOURCE
Municipal Community			
	Akron Village (See No 1 Wyoming Co, Page 10).	3640	
1	Alden Village.	3460.	Wells
2	Angola Village.	8500.	Lake Erie
3	Buffalo City Division of Water.	357870.	Lake Erie
4	Caffee Water Company.	210.	Wells
5	Collins Water District #3.	704.	Wells
6	Collins Water Districts #1 and #2.	1384.	Wells
7	Erie County Water Authority (Sturgeon Point Intake).	375000.	Lake Erie
8	Erie County Water Authority (Van DeWater Intake).	NA.	Niagara River - East Branch
9	Grand Island Water District #2.	9390.	Niagara River
10	Holland Water District.	1670.	Wells
11	Lawtons Water Company.	138.	Wells
12	Lockport City (Niagara Co).		Niagara River - East Branch
13	Niagara County Water District (Niagara Co).		Niagara River - West Branch
14	Niagara Falls City (Niagara Co).		Niagara River - West Branch
15	North Collins Village.	1500.	Wells
16	North Tonawanda City (Niagara Co).		Niagara River - West Branch
17	Orchard Park Village.	3671.	Pipe Creek Reservoir
18	Springville Village.	4169.	Wells
19	Tonawanda City.	18538.	Niagara River - East Branch
20	Tonawanda Water District #1.	91269.	Niagara River
21	Wanakah Water Company.	10750.	Lake Erie
Non-Municipal Community			
22	Aurora Mobile Park.	125.	Wells
23	Bush Gardens Mobile Home Park.	270.	Wells
24	Circle B Trailer Court.	50.	Wells
25	Circle Court Mobile Park.	125.	Wells
26	Creekside Mobile Home Park.	120.	Wells
27	Donnelly's Mobile Home Court.	99.	Wells
28	Gowanda State Hospital.	NA.	Clear Lake
29	Hillside Estates.	160.	Wells
30	Hunters Creek Mobile Home Park.	150.	Wells
31	Knox Apartments.	NA.	Wells
32	Maple Grove Trailer Court.	72.	Wells
33	Millgrove Mobile Park.	100.	Wells
34	Perkins Trailer Park.	75.	Wells
35	Quarry Hill Estates.	400.	Wells
36	Springville Mobile Park.	114.	Wells
37	Springwood Mobile Village.	132.	Wells
38	Taylors Grove Trailer Park.	39.	Wells
39	Valley View Mobile Court.	42.	Wells
40	Villager Apartments.	NA.	Wells

NIAGARA COUNTY

ID NO	COMMUNITY WATER SYSTEM	POPULATION	SOURCE
Municipal Community			
—	Lockport City (See No 12, Erie Co).	25000	
1	Middleport Village.	.2000. .	.Wells (Springs)
	Niagara County Water District (See No 13, Erie Co).	.48	
2	Niagara Falls City (See also No 14 Erie Co).	77384. .	.Niagara River - East Branch
—	North Tonawanda City (See No 16 Erie Co).	36000	
Non-Municipal Community			
3	Country Estates Mobile Village.	.28. .	.Wells

LOCATION OF COMMUNITY WATER SYSTEM SOURCES-1982

NEW YORK STATE D
DIVISION OF ENVIRO
BUREAU OF PUBLIC W

NUS CORPORATION AND SUBSIDIARIES — TELECON NOTE

CONTROL NO:	DATE:	TIME:
02-8710-95	November 24, 1987	3:45 pm

DISTRIBUTION:

Columbus
McKinnon

02-8710-95

NYCC PA

BETWEEN:	OF:	PHONE:
Peter Bucchi	NYSDEC - Enforcement Asst. Regional Attorney	(716) 847-4585
AND: P. Doherty	(NUS)	

DISCUSSION:

The Order on Consent was not signed. Phase I or II studies have not yet been conducted.

C.M. has submitted a workplan to the DEC. The DEC is currently reviewing it.

Consent Order issued 10/86.

ACTION ITEMS:

NUS 087 REVISED 0685

NUS CORPORATION AND SUBSIDIARIES — TELECON NOTE

CONTROL NO:	DATE:	TIME:
02-8710-95	DECEMBER 10, 1987	12:25

DISTRIBUTION:

COLUMBUS McKINNON

02-8710-95 PA

NYCC PA

BETWEEN:	OF:	PHONE:
G. MILLER	ERIE COUNTY DEPT. OF ENVIRONMENT AND PLANNING	(716) 846-7583

AND:

P. DOHERTY (NUS)

DISCUSSION:

ELLICOTT CREEK IS USED FOR RECREATIONAL FISHING. FISH ARE CO EATEN - CONSUMPTION IS MINIMAL

RO. 12/10/87.

ACTION ITEMS:

NUS 067 REVISED 0685