283 Manny's Corners Road
Amsterdam, New York 12010

Telephone (518) 842-7961
Fax No. (518) 843-6136

August 1, 2007

Arcadis of New York, Inc.
Attention: Jessica Mauro
465 New Karner Road, 1st Floor
Albany, New York 12205-3839

Re: Industrial Wastewater Discharger Permit
Former Mohawk Finishing Site, Amsterdam, NY

Dear Jessica:

Upon review of your application by Gary Kerzic, Town Engineer we find your request to discharge pre-treated groundwater to sanitary sewer acceptable.

If you have any questions, please give me a call.

Sincerely,

Linda Bartone Hughes
Town Clerk

ARCADIS

Infrastructure, environment, facilities

ARCADIS of New York, Inc.
465 New Karner Road
First Floor
Albany
New York 12205-3839
Tel 518.452.7826
Fax 518.452.4398

Transmittal Letter

To:
Mr. Thomas DiMezza
Town of Amsterdam
283 Manny's Cors. Road
Amsterdam, NY 12010

Copies:
File

From:
Jessica Mauro

Date:
May 23, 2007

Subject:
Former Mohawk Finishing Products Site, Amsterdam, NY

ARCADIS Project No.:
AY000273.0005

We are sending you:

☐ **Attached** ☐ **Under Separate Cover Via _____ the Following Items:**

☐ Shop Drawings ☐ Plans ☐ Specifications ☐ Change Order
☐ Prints ☐ Samples ☐ Copy of Letter ☐ Reports
☐ Other:

Copies	Date	Drawing No.	Rev.	Description	Action*
1	5/23/07			Industrial Wastewater Discharge Permit Application	
1	5/23/07			Amsterdam POTW Substances of Concern, Former Mohawk Finishing Products Site, Amsterdam, NY	

Action*

☐ A Approved ☐ CR Correct and Resubmit ☐ Resubmit _____ Copies
☐ AN Approved As Noted ☐ F File ☐ Return _____ Copies
☐ AS As Requested ☐ FA For Approval ☐ Review and Comment
☐ Other:

Mailing Method

☐ U.S. Postal Service 1st Class ☐ Courier/Hand Delivery ☐ FedEx Priority Overnight ☐ FedEx 2-Day Delivery
☐ Certified/Registered Mail ☐ United Parcel Service (UPS) ☒ FedEx Standard Overnight ☐ FedEx Economy
☐ Other:

Comments:

ARCADIS
Infrastructure, environment, facilities

ARCADIS of New York, Inc.
465 New Karner Road
First Floor
Albany
New York 12205-3839
Tel 518.452.7826
Fax 518.452.4398
www.arcadis-us.com

ENVIRONMENT

Mr. Thomas P. DiMezza
Town Supervisor
Town of Amsterdam
283 Manny's Cors. Road
Amsterdam, New York 12010

Subject:
Request To Discharge Pre-Treated Groundwater To Sanitary Sewer System, Former Mohawk Finishing Products, Amsterdam NY.

Date:
May 23, 2007

Contact:
Marc W. Sanford

Phone:
518 452 7826 Ext. 15

Email:
marc.sanford@arcadis-us.com

Our ref:
AY000273.0005

Dear Mr. DiMezza:

ARCADIS and its engineering subcontractor, ARCADIS G&M of New York Architectural and Engineering Services, P.C. have been retained by Mohawk Finishing to design a remediation system for the Former Mohawk Finishing (Site) located in Amsterdam, New York (see Figure 1). The remediation activities at this Site are pursuant to the Voluntary Cleanup Agreement (Index No. #A4-0425-0006) entered into between Mohawk Finishing Products and the New State Department of Environmental Conservation (NYSDEC) in May 2001. As part of the remediation process, co-produced groundwater will be generated. The former Mohawk Finishing property is currently owned by the Power Pallet Company.

ARCADIS is requesting permission to discharge pre-treated co-produced groundwater to the local sanitary sewer system located on the property which then discharges to a main sanitary sewer located within County Route 30. The following describes the remedial process and the pre-treated waste stream in which we would like to discharge to the sanitary sewer system:

§ The remedial process is a vacuumed enhance recovery (VER) system which will be operated to cleanup volatile organic compounds, n-butyl acetate, and naphtha (see Table 1).

§ The co-produced groundwater will be extracted from the soil and will be transferred by a high vacuum pump from the recovery wells to collection and treatment system. The collection and treatment system process description is as follows. The liquid and vapor phase will be separated by a liquid knockout tank in which the liquid phase will be transferred to a coalescing oil/water separator where any free phase light non-aqueous phase liquids (LNAPLs) will be decanted off and disposed of separately. The co-produced groundwater will be transferred through a

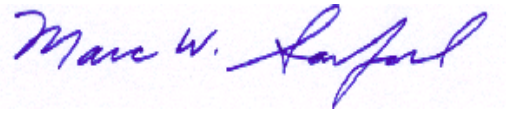
cartridge filter bag to remove any solids and then be treated with two granular activated carbon (GAC) vessels placed in prior to discharge to the sanitary sewer system (see Drawing No. 1 Process Flow Diagram).

§ The designed maximum flows of pre-treated groundwater discharged to the sanitary sewer system would be as follows; the designed maximum daily flow is estimated at 14,400 gallons per day which corresponds to an average daily maximum flowrate of 10 gallons per minute (gpm). The discharges would be monitored by using a totalizing type flow meter. The flow meter would be placed on the system effluent line, would be an in-line meter designed for recording instantaneous and cumulative flows, and would have a flow register that is adequately sealed to eliminate fogging and condensation. The system flows will be monitored and recorded monthly.

We look forward to your approval. If there are any questions or comments regarding this request, please do not hesitate to contact us.

Sincerely,

ARCADIS of New York, Inc.



Marc W. Sanford
Principal Scientist

Copies:
File

TOWN OF AMSTERDAM

INDUSTRIAL WASTEWATER DISCHARGE PERMIT APPLICATION

TOWN OF AMSTERDAM
INDUSTRIAL WASTEWATER DISCHARGE PERMIT QUESTIONNAIRE

PLEASE TYPE OR PRINT CLEARLY

I. GENERAL INFORMATION

1. Facility Name: Power Pallet Inc., Former Mohawk Finishing Products

2. Facility Address: 4715 State Highway 30 Amsterdam, New York

3. Mailing Address: 465 New Karner Road, First Floor Albany, New York 12205

4. Type of Business: Pallet making/ recycling/ former wood finishing products
Primary SIC Code: Former wood finishing products code 2851 / 2860
Secondary SIC Code(s): _____
Applicable sub-categories under the National Categorical Standards: _____

Check off (one or more) lines indicating type of business:

____ Agricultural, forestry or fishing	____ Services
____ Mining or quarrying	____ Construction
_X_ Manufacturing	____ Transportation
____ Retail or Wholesale Trade	____ Finance or Real Estate
____ Other (Specify) _____	

Additionally, briefly describe the nature of the business, including the principal steps used to process input commodities to finished product: _____

NA

5. Facility Status: ____ In Operation
_ _ Under Construction
_X_ Proposed

6. Status of Discharge covered by this application:
____ Existing ____ Decrease
____ Increase _X_ New

7. Number of employees at this facility: N/A

8. Name, title, address and telephone number of person to contact regarding this survey:

Marc Sanford, ARCADIS Principal Scientist/Project Manager,

465 New Karner Road, First Floor, Albany, NY 12205

9. Name and location of any other facilities in the Town Service Area: N/A

II. PLANT OPERATIONAL CHARACTERISTICS

1. Complete table below listing products manufactured or handled and maximum daily production (units per day):

Name	Maximum Quantity	Units	Name	Maximum Quantity	Units
N/A					

2. Complete table below listing raw materials used or consumed and maximum daily production (units per day):

3. List any flammable or combustible liquids, explosives, or liquefied petroleum gases present or used at your facility: N/A

4. Number of buildings at this facility: N/A

5. Annual number of days operation: N/A

6. Number of shifts pr workday: N/A

7. Number of workdays per week: N/A

8. Average number of employees, per shift (Based on 40 hours/week:
   1st N/A Start Time, 1st _____
   2nd _____ Start Time, 2nd _____
   3rd _____ Start Time, 3rd _____

9. Average number of part-time employees per shift (Based on 20 hours or more per week:
   1st N/A Start Time, 1st _____
   2nd _____ Start Time, 2nd _____
   3rd _____ Start Time, 3rd _____

10. Are there scheduled shutdowns? Yes___ No___. If Yes, when? N/A

11. Is production seasonal? Yes___ No___. If yes, explain month(s) of peak production. N/A

12. Remarks: N/A

III. WATER CONSUMPTION AND SOURCES

1. Complete the table below listing from each source the past year's (four quarters) water consumption. Consumption, in cubic feet (cf), can be taken directly from utility bills. Where flow is unmetered, give estimate and so indicate. The surfaces are coded as follows: (C) Public water supply; (W) Private wells; (S) Individual surface intakes; (O) Other.

Quarterly Dates	Source (C) cf	(W) cf	(S) or (O) cf
N/A			
TOTAL			

Total Annual Water Consumed, all sources: N/A cf

2. Private Well Inventory:

How many private wells are in use? N/A
How many private wells are abandoned? N/A

Well Identification	Pump Capacity	Well Depth
N/A		

3. Remarks: N/A

IV. WATER USAGE (Refer to Section III-1)

IV. WATER USAGE (Refer to Section III-1)

1. Complete the table below:

	Annual Consumption (cf)	Max. Daily Consumption (cf/day)	Sources (W,S,C,O)
Domestic	N/A		
Cooling: Evaporated	N/A		
Cooling: Discharged	N/A		
Process: Into product	N/A		
Process: Discharged	N/A		
Fire	N/A		
Other:			
TOTAL			

2. Remarks: N/A

V. WASTEWATER DISCHARGE

1. Complete the table below listing the quantity of wastewater discharged to the City sewer system (if quantity given in gallons, please note):

Wastewater Discharge (cf)

Source	Avg. Daily	Max. Daily	Peak 15 Minutes	Duration Discharge (hrs./day)
Domestic	N/A	N/A	N/A	N/A
Cooling*	N/A	N/A	N/A	N/A
Process	14,400 gallons	N/A	N/A	N/A
Drain	N/A	N/A	N/A	N/A
Other	N/A	N/A	N/A	N/A
TOTAL	N/A	N/A	N/A	N/A

NOTE: *Indicate contact or non-contact cooling water.

2. Type of discharge for process wastewater: Batch X; Continuous ____. If batch, number of gallons discharged per batch: 40 .

3. Is there more than one discharge point to the City sewer system? Yes___ No X. If yes, please explain:

4. Location of each discharge connection to the Town sewer:
4715 State Highway 30 Amsterdam, NY 12010

5a. Has this facility applied for a variance from Categorical Standards for Fundamentally Different Factors per 40 CRF 403.13?

X No ____Applied ____Received ____Denied

b. Has this facility applied for alternative discharge limits per 40 CFR403.15?

X No ____Applied ____Received ____Denied

c. Has this facility applied for alternative discharge limits per 40 CFR 403.6(e)?

X No ____Applied ____Received ____Denied

If any of the above have been applied for or received, provide the appropriate documentation on the discharge.

6. Known or expected concentrations or quantity* in the discharge wastewater of:

5-Day Biochemical Oxygen Demand	< 5 mg/l or	____lb/day
Chemical Oxygen Demand	< 100 mg/l or	____lb/day
Total Suspended Solids	< 10 mg/l or	____lb/day

See Attached Table 1.

7. Based upon knowledge of materials used and operations conducted at this facility, could the wastewater discharged from this facility contain any of the pollutants listed in Table 1? Yes X No___. If yes, indicate which materials in Table 1 and attach data on known or expected discharge quantity or concentration*.

NOTE:* Where quantity or concentration is requested, provide data based on actual sampling results where available. If actual sampling data is not available, provide best estimate based upon knowledge of the process. The Town may advise of sampling that is required to allow completion of the review of this application.

8. Does this facility discharge wastewater including, but not limited to, process wastewater, cooling water, blowdown, sanitary sewage or stormwater run-off, to waters of the United States? Yes___ No X .

If yes, do you have an SPDES Discharge Permit?

If yes, do you have an SPDES Discharge Permit?

Yes___ No___ SPDES Permit No. NA

9. Is this facility covered by a promulgated National Categorical Pretreatment Standard? Yes___ No_X_.

10. (Answer only if response to No. 9 is "Yes"). Does the discharge comply with Standard? Yes___ No___.

If the response to No. 10 is "No", then provide compliance schedule of efforts to comply with the requirements of the National Categorical Pretreatment Standards.

11. Remarks: N/A

VI. PRETREATMENT

1. Does this facility currently pretreat any wastewater prior to discharge to the City sewer system? Yes___ No_X_. If yes, indicate type)s) used:

____ Adsorption	____ Neutralization
____ Biological	____ Oil and grease removal
____ Chemical stabilization	____ Sedimentation
____ Filtration	____ Other (specify)
____ Flow equalization	

2. Please briefly describe the waste stream and function of treatment units. Prepare and attach flow diagram if necessary. Liquid phase portion of process: Oil water separator > two 5 micron cartridge filter > two granular activated carbon vessels in series

See Attached Drawing 1.

3. Residual waste matter produced from treatment operations and quantity: N/A

4. Residual waste matter disposal: N/A

____ On-site dumping (show location on sketch)
____ On-site processing (describe)_____
____ Hauling or barging scavenger (fill in information below)
Hauler's Name:_____
Address:_____

5. Remarks: _____

_____

_____

The information contained in this questionnaire is familiar to me and to the best of my knowledge and belief, such information is complete and accurate.

(Signed): M.W. Sanford

Name: Marc W. Sanford

Title: Principal Scientist

Application approved and Permit issued.

(Signed): _____ Date: _____

Town or Governing Participant

permit2.ams

TABLE I

NYSDEC SUBSTANCES OF CONCERN

POLLUTANT

Class A - Halogenated Hydrocarbons

A01. Methyl chloride
A02. Methylene chloride
A03. Chloroform
A04. Carbon tetrachloride
A05. Freon/Genatron
A06. Other halomethanes
A07. 1, 1, 1-Trichlorethane
A08. Other haloethanes
A09. Vinyl fluoride
A10. Vinyl chloride
A11. Dichloroethylene
A12. Trichloroethylene
A13. Tetrachloroethylene
A14. Chlorinated propane
A15. Chlorinated propene
A16. Hexachlorobutadiene
A17. Hexachlorocyclopentadiene
A18. Chlorinated benzene
A19. Chlorinated toluene
A20. Fluorinated toulene
A21. Polychlorinated biphenyl (PCB)
A22. Chlorinated naphthalene
A23. Dechlorane ($C_{10}Cl_{12}$)
A24. Hexachlorocyclohexane (BHC)
A99. Halogenated hydrocarbons not specified above

Class B - Halogenated Organics (other than hydrocarbons)

B01. Phosgene
B02. Methyl chloromethyl ether
B03. bis-chloromethyl ether
B04. Other chloroalkyl ethers
B05. Benzoyl chloride
B06. Chlorothymol
B07. Chlorinated phenol
B08. Chlorinated cresols or xylenols
B09. Chlorendic acid
B10. Chloroaryl ethers
B11. Dichlorophene or hexachlorophene
B12. Chlorinated aniline (including methylene bis(2-chloroaniline))
B13. Dichlorobenzidine

TABLE 1
(Continued)

Class B (continued)

B14. Chlorinated diphenyl oxide
B15. Chlorinated toluidine
B16 Kepone ($C_{10}Cl_{10}O$)
B17. Dichlorovinyl sulfonyl pyridine
B18. Chloropicrin
B19. Trichloromethyl thio-phthallmide
B20. Trichloro-propylsulfonyl pyridine
B21. Tetrachloro-methylsulfonyl pyridine
B22. Tetrachloro-isophthalonitrile
B99. Halogenated organics not specified above

Class C - Pesticides (includes herbicides, algaecides, biocides, slimicides and mildewcides)

C01. Aldrin/Dieldrin
C02. Chlorodane and metabolites
C03. DDI and metabolites
C04. Endosulfan/Thiodan and metabolites
C05. Endrin and metabolites
C06. Heptachlor and metabolites
C07. Malathion
C08. Methoxychlor
C09. Parathlon
C10. Toxaphene
C11. Sevin
C12. Kelthane
C13. Dizainon
C14. Dithane
C15. Carbaryl
C16. Silvex
C17. Dithlocarbamates
C18. Maneb
C19. Dioxathion
C20. Tandex/Karbutilate
C21. Carbofurans
C22. Pentac
C23. Folpet
C24. Dichlone
C25. Rotenone
C26. Lindane/Isotox
C27. Simazine
C28. Methoprene
C99. Pesticides not specified above

TABLE I
(Continued)

Class D - Aromatic Hydrocarbons

D01. Benzene
D02. Toluene
D03. Xylene
D04. Biphenyl
D05. Naphthalene
D06. Ethylbenzene
D07. Styrene
D08. Acenaphthehe
D09. Fluoranthene
D99. Aromatic hydrocarbons not specified above

Class E - Tars

E01. Coal tar
E02. Petroleum tar
E99. Tars not specified above

Class F - Substituted Aromatics (other than hydrocarbons and non-halogenated)

F01. Phenol, cresol, or xylenol
F02. Catechol, resorcinol, or hydroquinone
F03. Nitrophenols
F04. Nitrobenzenes
F05. Nitrotoluenes
F06. Aniline
F07. Toluidines
F08. Nitroanilines
F09. Nitroanisole
F10. Toluene dilsocyanate
F11. Dimethylaminoazobenzene
F12. Benzoic Acid (and Benzoate salts)
F13. Phthalic, isophthalic or terephthalic acid
F14. Phthalic anhydride
F15. Phthalate esters
F16. Phenoxyacetic acid
F17. Phenylphenols
F18. Nitrobiphenyls
F19. Aminobiphenyls (including benzidine)
F20. Diphenylhydrazine
F21. Naphthylamines
F22. Carbazole
F23. Acetylaminoflurene
F24. Dyes and organic pigments
F25. Pyridine
F99. Substituted aromatics not specified above

TABLE I
(Continued)

Class G - Miscellaneous

G01. Asbestos
G02. Acrolein
G03. Acrylonitrile
G04. Isophorone
G05. Nitrosamines
G06. Ethyleneimine
G07. Propiolactone
G08. Nitrosodimethylamine
G09. Dimethyl hydrazine
G10. Maleic anhydride
G11. Methyl isocyanate
G12. Epoxides
G13. Nitrofurans
G14. Cyanide

Class M - Metals and their Compounds

M01. Antimony
M02. Arsenic
M03. Beryllium
M04. Cadmium
M05. Chromium
M06. Copper
M07. Lead
M08. Mercury
M09. Nickel
M10. Selenium
M11. Silver
M12. Thallium
M13. Zinc
M99. Metals not specified above

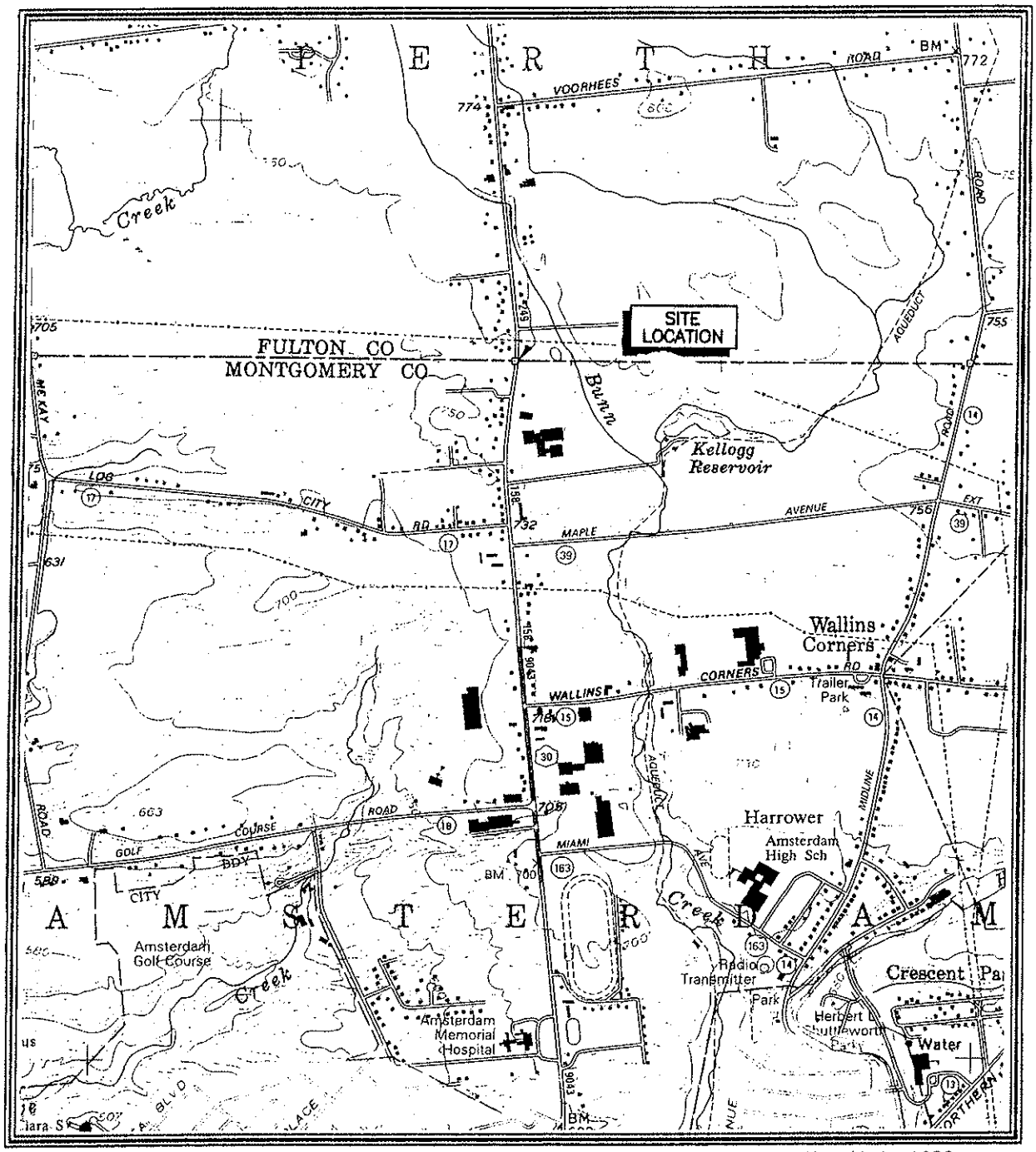
ARCADIS

Table 1. Amsterdam POTW Substances of Concern, Former Mohawk Finishing Products Site, Amsterdam, New York

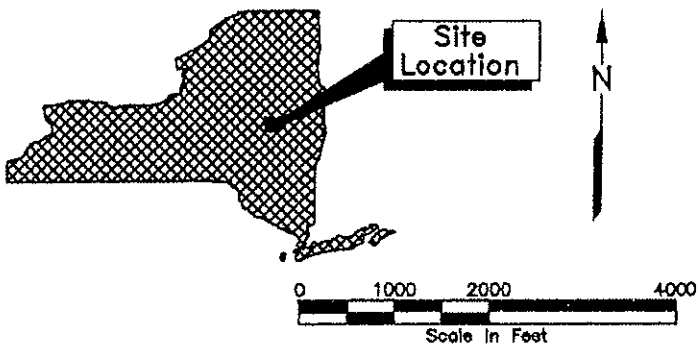
Parameter	Range of Influent Concentrations Pre-Treatment	Expected Effluent Concentrations Post-Treatment
Alcohols (mg/L)		
Methanol	ND	< 10
Ethanol	ND	< 10
Isopropanol	ND	< 10
Isobutanol	ND	< 10
Volatile Organics (ug/L)		
Chloromethane	ND	< 0.50
Vinyl chloride	ND - 4.45	< 0.80
Bromomethane	ND	< 1.2
Chloroethane	ND	< 0.80
1,1-Dichloroethene	ND - 0.55	< 0.70
Carbon disulfide	ND	< 0.90
*Acetone	180 - 620	180 - 620[1]
Methylene chloride	ND - 79	< 0.40
trans-1,2-Dichloroethene	ND - 0.92	< 0.50
1,1-Dichloroethane	ND - 18	< 0.60
Vinyl acetate	ND	< 0.20
cis-1,2-Dichloroethene	ND - 47	< 0.60
*2-Butanone (MEK)	41 - 4,200	41 - 4,200[2]
Chloroform	ND	< 0.70
1,1,1-Trichloroethane	ND	< 0.40
Carbon tetrachloride	ND	< 1.0
Benzene	ND	< 0.40
1,2-Dichloroethane	ND	< 0.60
Trichloroethene	ND - 25	< 0.70
1,2-Dichloropropane	ND	< 0.90
Bromodichloromethane	ND	< 0.40
cis-1,3-Dichloropropene	ND	< 0.50
4-Methyl-2-pentanone (MIBK)	ND - 24	< 0.70
Toluene	ND	< 0.30
trans-1,3-Dichloropropene	ND	< 0.80
1,1,2-Trichloroethane	ND	< 0.60
Tetrachloroethene	3.8 - 18	< 0.50
2-Hexanone	ND	< 0.80
Dibromochloromethane	ND	< 0.50
Chlorobenzene	ND	< 0.40
Ethylbenzene	ND - 1.63	< 1.0
Styrene	ND	< 0.50
Bromoform	ND	< 0.80
1,1,2,2-Tetrachloroethane	ND	< 0.40
Xylenes (total)	13 - 28	< 1.0
1,2,4-Trimethylbenzene	15- 299	< 0.60
Organics (mg/L)		
n-Butyl acetate	0	< 0.10
Naphtha	118 - 11,000	0.1

Notes:
1. Acetone is unlikely to be removed/adsorbed by carbon filtration.
2. MEK is removed moderately.

Definitions:
< Less than
ND - Non Detect, result less than laboratory detection limit

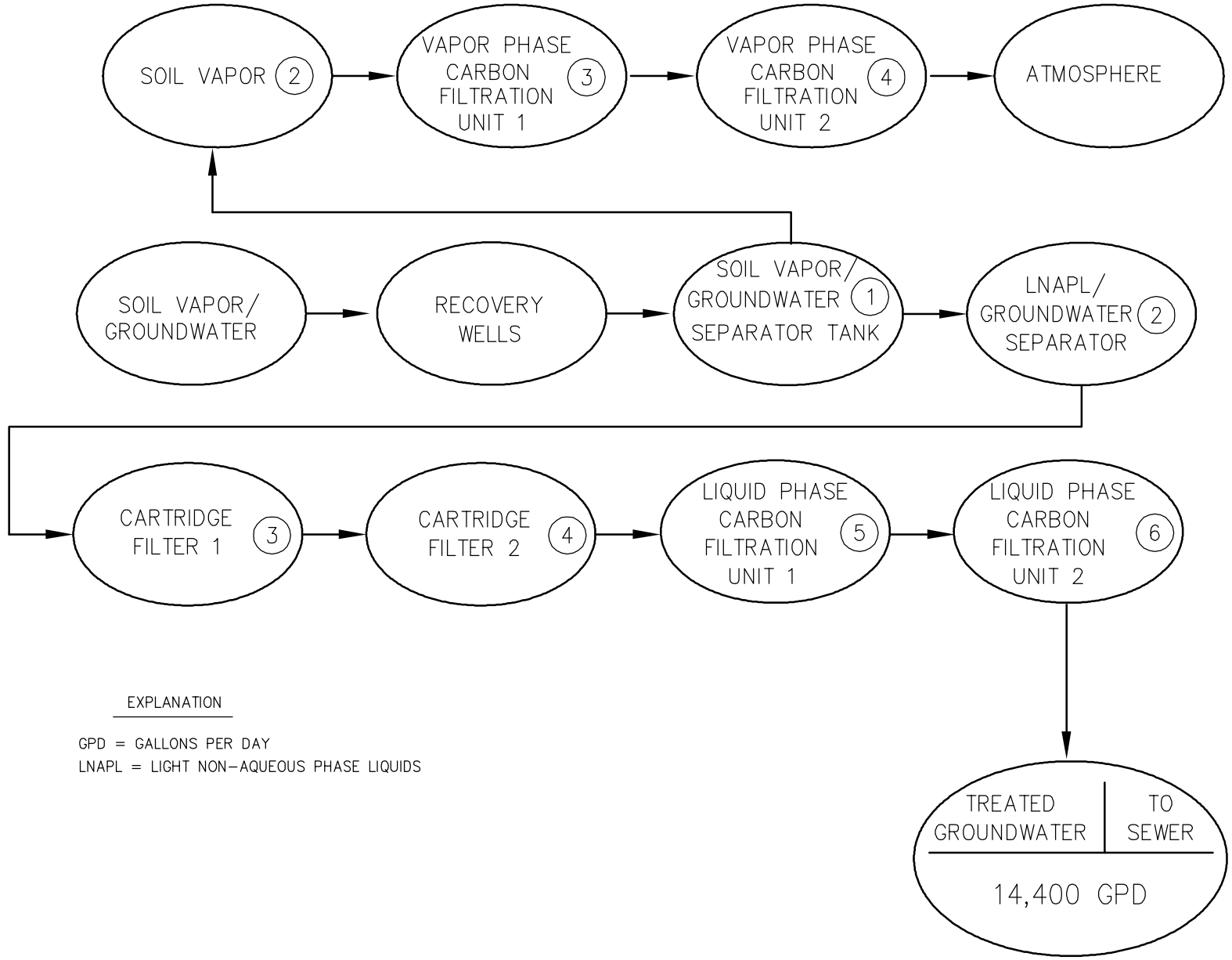


Reference: U.S. Geological Survey, 7.5 x 15 Minute Quadrangle, Amsterdam, New York, 1992.



SITE LOCATION		
MOHAWK FINISHING 4715 State Highway #30 Amsterdam, New York		
DRAWN: TAD/G280	DATE:	FIGURE 1
APP'D: CC	MARCH 2000	

ARCADIS GERAGHTY&MILLER



Path\Name: G:\APROJECT\MOHAWK FINISHING\REPORTS\REMEDIAL DESIGN\POTW\PROCESS FLOW.dwg

ARCADIS
465 New Karner Road, 1st Floor
Albany, New York 12205
Tel: 518-452-7826 Fax: 518-452-4398
www.arcadis-us.com

PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
M. SANFORD	M. MOHIUDDIN	M. MOHIUDDIN	T.CARIGNAN
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
PROCESS SCHEMATIC FORMER MOHAWK FINISHING AMSTERDAM, NEW YORK		00001	TMC
		PROJECT NUMBER	DRAWING NUMBER
		AY000273.0005	1