

June 9, 2011

14496 Sheldon Road, Suite 200, Plymouth, MI 48170 Telephone: (734) 453-5123 Fax: (734) 453-5201 www.CRAworld.com

Reference No. 017303

Luther Blackburn Industrial Pretreatment Supervisor Ypsilanti Community Utilities Authority

Dear Mr. Blackburn:

Ypsilanti, Michigan 48198

2777 State Road

Re: Wastewater Discharge Permit Application Groundwater Remediation Treatment System Former General Motors Company Vehicle Operations (CVO) Site 2901 Tyler Road Ypsilanti, Michigan

Conestoga-Rovers & Associates, Inc. (CRA), on behalf of the RACER Trust, has prepared this letter and the attached permit application for a proposed discharge to the Ypsilanti Community Utility Authority (YCUA) sanitary sewer system associated with environmental remediation activities at the former General Motors CVO property located at 2901 Tyler Road in Ypsilanti, Michigan (Site). CRA met with YCUA representatives on May 25, 2011 to discuss the proposed discharge and pretreatment. At that meeting, YCUA indicated that they would be amenable to accepting this discharge provided that a completed permit application was submitted accompanied by a letter describing the source and nature of the Site contamination stating that the proposed discharge was not a listed hazardous waste.

Information regarding the Site contamination is presented below, and the completed permit application is included as Attachment A to this letter. Figures are included as Attachment B, Site analytical data representative of this discharge prior to treatment is presented in Attachment C, and analytical data representative of the final effluent and discharge to YCUA will be provided as soon as it is available. We understand that the final permit will not be issued until effluent data is received showing that the discharge is compliant with Sec. 62-179(26) of the Sewer Use Ordinance (i.e., a material that is not considered a hazardous waste under RCRA).

Site Background

The Site is a portion of the former Willow Run Assembly Plant which was owned/operated by Ford, Kaiser-Frazer or GM since early 1940s. Based on investigations to date, including reviews of historical aerial photographs, historical operations, soil borings and test pits, it is evident that industrial waste was buried in many locations on this portion of former Assembly Plant property.

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Investigations completed at the Site have identified soils and groundwater impacted with volatile organic compounds (VOCs), primarily chlorinated VOCs. In addition, buried debris and dense non-aqueous phase liquid (DNAPL) was observed along the southern bank of Tyler Pond. A sheet pile wall was installed in October 2004 to prevent DNAPL from migrating into Tyler Pond (see Figure 1). Water accumulating behind this sheet pile wall has elevated levels of chlorinated VOCs based on the presence of the DNAPL. The main constituents detected in the DNAPL are trichloroethylene (TCE) (approximately 40%) and polychlorinated biphenyls (PCBs).

Wastes generated from remediation efforts at this Site have never been classified as a listed waste. As identified above, the contamination stems from historical dumping at the Site. Several attempts were made to identify sources, such as reviewing historical photographs, documents, drawings and records. Since the material originally dumped cannot be identified, the waste has never been identified as listed. To the best of the permitee's knowledge, the proposed discharge is not a listed hazardous waste.

Supplemental Information for Permit Application

Section H of the attached permit application requires the applicant to provide justification in order to utilize time proportioned composite samples for discharge compliance sampling. In accordance with requirement A(2) of Section H, the wastewater from the proposed treatment process will be a batch discharge which will be treated and released at a consistent flow rate. Additionally, prior to treatment, the wastewater will be collected in a 16,000-gallon batch/equalization tank, which will provide a homogeneous mixed wastewater prior to each batch treatment. Based upon these conditions, we propose the use of time proportioned composite samples or grab samples for the purpose of compliance demonstration.

If you have any questions, please do not hesitate to contact me.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Matthew Lamb, PE

ML/bw/1/Det. Encl: Attachment A – Wastewater Discharge Permit Application Attachment B – Figures Attachment C – Site Analytical Data – Treatment System Influent



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cc: Grant Trigger – RACER David Favero - RACER Scott Adamowski – CRA Beth Landale – CRA ATTACHMENT A

WASTEWATER DISCHARGE PERMIT APPLICATION



Wastewater Discharge Permit Application

For YCUA Use Only		Inspector		
COMPANY NAME:			CITY:	
Date received:	_ Amount Paid: \$	Receipt #	Permit #:	

In accordance with the Municipal Code, no Significant Industrial User (SIU) shall connect, discharge, cause, allow, or permit any discharge, into the Sanitary Sewer System except in accordance with a Wastewater Discharge Permit issued by the Director. The Ypsilanti Community Utilities Authority determines a SIU to be a non-domestic user that meets one or more of the following criteria:

- All industrial users subject to Categorical Pretreatment Standards under 40 CFR Part 403.6 and 40 CFR Chapter 1 Subchapter N.
- Any other industrial user that discharges an average of 25,000 gallons per day or more of process wastewater to the YCUA Wastewater Treatment Plant (excluding sanitary, non-contact cooling, and boiler blowdown water).
- Contributes a process wastestream (excluding sanitary, non-contact cooling, and boiler blowdown water) that makes up five percent or more of the average dry weather hydraulic or organic capacity of the YCUA Wastewater Treatment Plant.
- Designated as a SIU by the YCUA Industrial Pretreatment Program Administrators on the basis that the industrial user has a reasonable potential to adversely affect the YCUA Wastewater Treatment Plant operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

An electronic version of this application is available at <u>www.ycua.org</u>.

A completed permit application is required to be submitted to the Ypsilanti Community Utilities Authority (YCUA) by all Significant Industrial Users. Upon receipt of a completed application, the YCUA will invoice the applicant a permit processing fee. The permit processing fee must be paid prior to a discharge permit being issued. Please be advised that the YCUA may take up to 90 days to process and issue a discharge permit.

The completed permit application shall be mailed to the following:

Attn: Industrial Pretreatment Supervisor Ypsilanti Community Utilities Authority 2777 State Road Ypsilanti, MI 48198-9112.

Please contact the YCUA Compliance Department at (734) 484-4600 ext. 123 with any questions regarding the application.

A. COMPANY INFORMATION

www.racertrust.org
ZIP: <u>48198</u>
ZIP: 48198
ration began: ^{TBD}
sq ft
sa ft
0q it

SIGNATORY REQUIRMENTS

All applications, reports, or information submitted to the Ypsilanti Community Utilities Authority must contain the following certification statement and be signed as required in Sections a, b, c, or d below: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- a. By a responsible corporate officer, if the Industrial User submitting the reports is a corporation. For the purpose of this paragraph, a responsible corporate officer means: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or; the manager of one or more manufacturing, production, or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second quarter 1990 dollars), if authority to sign documents has been assigned or delegated to the manger in accordance with corporate procedures.
- b. By a general partner or proprietor if the Industrial User submitting the reports is a partnership or sole proprietorship respectively.
- c. The principal executive officer or director having responsibility for the overall operation of the discharging facility if the Industrial User submitting the reports is a Federal, State, or local governmental entity, or their agents.
- d. By a duly authorized representative of the individual designated in paragraph a, b, or c of this section if:
 (i) the authorization is made in writing by the individual described in paragraph a, b, or c;
 (ii) the authorization specifies wither an individual or a position having responsibility for the overall operation of the facility from which the Industrial Discharge originates, such as the position of plant manager, operator of a well, or a well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and
- (iii) The written authorization is submitted to YCUA.
- e. If an authorization under paragraph (d) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for the environmental matters for the company, a new authorization satisfying the requirements of paragraph d of this section must be submitted to YCUA prior to or together with an reports to be signed by an authorized representative.

Designated	Signatory Authority (a represe	entative meeting the criteria as des	scribed in parag	raph a, b, or c of this section)
1) Name:	Grant Trigger	Title: Cleanu	p Mgr.	Email:gtrigger@racertrust.org
Phone:	313-486-2908	Cell_313-670-6226	Pager:	
Additional	Signatory Authority			
1) Name:	David Favero	Title: Deputy	Cleanup Mgr.	Email:
Phone:	313-486-2908	Cell	Pager:	
Authoriza Name:	tion of additional signatory	/ authority made by: 		
Date:		Signature:		
Designated	Facility Contact			
2) Name:	Beth Landale	Title: CRA Pro	oject Mgr.	Email:Email:Email:
Phone:	734-357-5528	Cell_734-545-5423	Pager:	
3) Alterna	ite Contact on site:	Title:		Email:
Phone:		Cell	Pager:	
		NATURE OF BUS	INESS	
Descriptic Corporatio	on of business activity, pro on properties.	ducts, or services: Remedia	ation and redev	elopment of former General Motors
Descriptic	on of fabrication or manufa	acturing processes: None		
List applic	cable Standard Industrial (Classification or North Americ	an Industry Cl	assification System Code(s):
1 2				
3				
4				

PERSONNEL SCHEDULE

*Not applicable

	Office		First Shift		Second Shift		Third Shift	
	Number	Hours	Number	Hours	Number	Hours	Number	Hours
WEEKDAYS								
SATURDAYS								
SUNDAYS								

B. WATER USAGE AND DISCHARGE

Data over the past year should be used for all available flows. Engineering estimates may be substituted for new companies with no actual flow data and for waste streams that are not flow metered. The Average influent total should be within 10% of the total of Discharge, Evaporation, and Non-Discharging Flows. Differences of more than 10% must be explained.

INFLUENT FLOWS

(Identify all sources of water to your facility. Attach water bills for last year.)

Water Account Number or Well Nur	nber Primary Use	Flow in Gallons per Day (GPD)			
	-	Ave.	Max.		
Groundwater Collection - French Drain	Environmental Remediation	250	1,400		
(The above may also include small volumes of purge water from area groundwater monitoring wells and occasional water associated with					
equipment decontamination. Characteristics of these will be similar to water collected in the french drain.)					
Trucked influent (DI or other)					

Total Influent Flow: 250 - 1,400 GPD

DISCHARGE FLOWS

(Average Wastewater Discharged to the Sanitary Sewer in GPD for last year)

*No wastewater was discharged to YCUA sewer from this process last year. Information below represents future discharge.

Describe all process wastewater generating activities below (attach additional sheets if necessary). Indicate whether each discharge is continuous during operation or if it is collected and discharged on a batch basis. Process wastewater is generated by any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product.

		Ave.	ινιάλ.
Process #1 Description:	Groundwater collection from french drain (see Figure 1)	250	1,400
Groundwater will be treated a	nd discharged in ~16,000 gallon batches every 2 to 3-weeks.	_	
Process #2 Description:			
Process #3 Description:			
Process #4 Description:			
Process #5 Description:		·	
Process #6 Description:		·	

Process #7 Description:		
Process #8 Description:		
Process #9 Description:		
Process #10 Description:		
Total Process Wastewater Flow (GPD)		
Sanitary Usage (Use 15 gallons per day per employee unless metered)	NA	
Cooling Tower Blowdown	NA	
Boiler Blowdown	NA	
Reverse Osmosis Reject Water	NA	
Laundry Facility	NA	
Restaurant/Kitchen/Cafeteria	NA	
Recreational Facilities (e.g. swimming pools, water rides, etc.)	NA	
Other		
Total Non-Process Wastewater Flow (GPD)	0	
Total Discharge to the Sanitary Sewer (Process + Non-Process)	250	1,400

	EVAPORATIVE LOSS	Ave.	Max
#1		NA	
<u>#2</u>			
#3			
Total Evaporative Loss (GPD)			

NON-DISCHARGING WATER USES

Irrigation/Landscaping	Ave NA	Max
Trucked or Hauled Off-site	NA	
Other	NA	

C. WASTEWATER CHARACTERISTICS

(From the following list of wastewater characteristics, check those that apply to the wastewater generated in this facility **prior** to pretreatment.) **Please check all that apply.**

	Flammable	 Particles Larger Than 3/4"
X	Toxic Substances	 Suspended Solids
	Acidic, pH < 5.0	 High Biological Oxygen Demand (BOD)
	Caustic, pH > 11.0	 Ammonia
	Heavy Metals	 Grease/Oil/Fats
X	Solvents	 Temperature > 150 degrees F
	Solid or Viscous Matter	 Other (specify)
	Petroleum Products	

D. ENVIRONMENTAL CONTROL PERMITS

List all other environmental control permits issued to this facility.

Name of Permit	<u>Permit No.</u>	
EPA – Generator I.D. Number	MIK468293311	
County of Washtenaw/Wayne – Environmental Health Permit	NA	
State of Michigan – Hazardous Waste Generator Permit	NA	
MDEQ Air Quality Division – Permit to Operate	NA	
MDEQ NPDES permit	NA	
Local Hazardous Materials Storage Permit (Fire Dept.)	NA	
Radioactive Materials License	NA	
Biohazard Waste Generation Registration	NA	
Other:		

E. BUILDING AND PLUMBING LAYOUT, FLOW DIAGRAMS

*See Figures 1 and 2 attached.

- (1) Plumbing Layout: On a separate sheet, draw to scale the building and plumbing layout of your facility (or provide blueprint showing same). Identify the location of sewer lines, wastewater process connections, water meters, storm drains, and any sampling points. The proposed sampling point for evaluating wastewater compliance shall be clearly identified on this submittal. Identify street locations, and N↑ on all drawings.
- (2) Pretreatment System: On a separate sheet, sketch your pretreatment system(s), if applicable. Show the routing of process waters from each wastewater-generating process to the treatment system that will address it. For example: high-pH rinses to pH-adjust, heavy metals wastestream to precipitation system, or kitchen wastes to a grease interceptor. Provide a list of treatment chemistry used. Show the flow of treated water from the treatment system to the sanitary sewer. Indicate all monitoring equipment, pH recorders, flow meters, ORP meters, sample points, etc.
- (3) **Block Flow Diagram:** On a separate sheet, draw a simple block diagram showing the flow of water, materials, and chemicals from start to final discharge point for each activity that generates wastewater. Identify all unit processes (blocks) and number these to correspond to numbers identifying processes on the building and plumbing layout.

F. PRETREATMENT

Check the pretreatment methods used in your facility. Indicate rated flow for each pretreatment method checked, and label the facility diagram accordingly.

	Capacity		Capacity
	Clarifier or Interceptor	Biological Treatment	
	pH Adjustment	Air Stripper/Scrubber	
	lon Exchange	Chemical Precipitation	
	Grease or Oil Separation	Cyanide Destruction	
	Electrolytic Recovery	Chromium Reduction	
	Wastestream Segregation (Including solvents)	Ozonation	
Х	Filtration: () Screen (X) Bag () Filter Press		
	Silver Recovery:		
Х	Other: Granular Activated Carbon (GAC)	

Describe each pretreatment system checked above. (e.g. design capacity, physical size, loading rate, etc.). If no pretreatment exists, please explain. (Please attach additional sheets if necessary.)

Groundwater is collected from the french drain located along the sheet pile wall (see Figures 1 and 2) and is pumped into a 16,000-gallon equalization/batch tank. From the equalization/batch tank the groundwater will be pumped via a 2-inch transfer pump through a bag filtration unit (2-cannisters in parallel)equipped with 100-micron bag filters to remove suspended solids prior to the GAC units. Effluent from the bag filtration unit will then proceed through two 1,000-lb GAC vessels in series (lead/lag configuration)for removal of contaminants of concern (cis-1,2-Dichloroethene, Trichloroethene, and Vinyl Chloride)prior to discharge to the YCUA sewer system (discharge location to be designated by YCUA representative).

Explain how compliance is verified at each sample point. (e.g. In-house testing, certified outside lab, etc.): A certified outside laboratory will be used to complete sample analyis of a time weighted composite effluent sample from

each batch discharge event. Samples will be analyzed for the contaminants of concern indicated above.

If wastewater is treated and/or discharged in batches, complete the following for each of these wastestreams: <u>Note that this is a new discharge and no historic discharges of this wastewater to YCUA have taken place.</u>

Number of batches discharged per year y month / week / day ... (circle one): 8 - 10

Average volume per batch: <u>16,000</u> gallons

Other comments on batch treatment, including material treated and treatment technology:

G. SAMPLING AND MONITORING

After pretreatment (if used streams?	d), can waste XYES	water strea	ams be san	npled prior to Applicable	mixing with	other waste	
If "NO" please explain:							
							<u></u> .

All significant industrial users must provide the YCUA with an adequate monitoring point for sample collection purposes. The monitoring point must provide YCUA the ability to collect samples representative of your facility's discharge. Provide a written physical description (manhole, lift station, stilling well, etc.) of the proposed sampling/monitoring location including at least two (2) distances with direction from fixed objects (walls, equipment, fences, etc.) where samples will be collected from.

A 5-gallon bucket will be utilized as a stilling well at the end of pipe discharge to the YCUA designated discharge manhole.

Treated water will discharge from the effluent piping, cascade into the 5-gallon bucket and then overflow into the discharge

manhole. This will provide YCUA with the ability to collect representative samples of the discharge.

Describe the wastewater discharge monitoring practices for your facility. Include the type of analytical tests and/or

methods to be used, the frequency of testing, and the name of the person(s) who will perform the tests. Attach

analytical data if available. Enclose a copy of any logs, check lists, forms, etc., which are maintained. During each batch treatment and discharge event, samples of the influent (equalization/batch tank), GAC unit midfluent

(between lead/lag vessels), and effluent at the YCUA discharge location will be collected and analyzed for the VOC

contaminants of concern (cis-1,2-Dichloroethene, Trichloroethene, and Vinyl Chloride) using a third party analytical laboratory.

List sampling and monitoring equipment in place at your facility:

None

H. FLOW MEASURMENT

*See supplemental permit information included in the cover letter.

All permittees must collect flow proportioned composite samples unless it is demonstrated that time proportioned composite samples are representative of your facility's discharge. A composite sample is defined by the YCUA as a sample that is collected over time, formed either by continuous sampling or by mixing discrete samples. The sample may be composited either as a time or flow proportional composite sample. A time proportional composite sample is composed of discrete sample aliquots collected in one container at constant time intervals providing representative samples irrespective of stream flow. A flow proportional composite sample is collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increases while maintaining a constant time interval between the aliquots.

Your facility must submit the requirements of item A, B, or C with the completed application.

- A) Information on your facility's discharge that demonstrates time proportioned composite samples are representative of your facility's discharge. The submittal must indicate on which of the following bases your are requesting an exemption from the flow proportioned composite sampling requirement:
 - 1. The wastewater discharge flow rate is consistent facility must provide discharge information to substantiate claim.
 - 2. The wastewater is discharged on a batch basis and is homogenously mixed prior to discharge facility must thoroughly explain batch discharge and mixing process.
 - 3. The wastewater flow rate although variable throughout a day, contains a consistent pollutant concentration information must be submitted to substantiate claim.

- 4. Other conditions that generate a time proportioned composite sample representative of your facility's discharge.
- B) A written action plan for implementing flow proportioned composite sampling. This requires the installation of a flow-metering device at the established compliance point. The flow meter must be equipped with an analog output for connecting a 4 – 20mA sampler interface module.
 - 1. Type of flow classification open or closed channel: Open channel is defined as a channel where liquid flows with a free surface. Closed channel is defined as completely filled pressure conduit.
 - 2. Description of proposed flow measurement technology: description shall include the type of flow measurement device that is or will be installed, i.e. magnetic flow meter, venture flow meter, parshall flume, etc.
 - 3. Specification of the measuring range and accuracy of flow measurement technology.
 - 4. Manufacture's suggested calibration frequency. Please be advised that all facilities implementing flow proportioned composite sampling will be required to have their flow measurement device calibrated per manufactures specifications.
 - 5. Sampling Requirement the transmitter for the flow measurement device must include 6-pin military connector that reaches an appropriate distance for locating an automatic sampler. Indicate which of the following signal specifications your transmitter will utilize (please be advised that not all flow meters meet these specifications):
 - a) Analog Signal: 4-20 mA. Facility must provide YCUA with a sampler interface module that converts analog signal to pulse.
 - b) Pulse Signal: requires a 25 millisecond or greater isolated contact closure with 5-15 VDC pulse.
- C) Current YCUA significant industrial users with approved flow proportional composite sampling plans shall provide the following information:
 - 1. Type of flow classification (open or closed channel) Open channel is defined as a channel where liquid flows with a free surface. Closed channel is defined as completely filled pressure conduit:
 - 2. Type of flow measurement technology installed (magnetic flow meter, venture flow meter, parshall flume, etc.):
 - 3. Specification of the measuring range and accuracy of flow measurement technology:

4. Manufacture's suggested calibration frequency:

- 5. Date of last calibration:
- 6. Calibration was performed by:
- 7. Flow meter output (volume per pulse):

- COMPLETE THIS SECTION FOR EACH TYPE OF WASTE <u>NOT</u> DISCHARGED TO THE SANITARY OR STORM SEWERS. USE A SEPARATE FORM FOR EACH TYPE OF WASTE (e.g. Spent Silver Bearing Solutions, Mercury Wastes, Solvents, Medical Wastes, etc.).
- Do not include wastes sent to sanitary landfill such as trash and garbage.

I. NON-DISCHARGED WASTE STREAM(s)

Identify the waste (e.g. spent chemical, treatment sludge, medical waste, etc.) and the process that generates the waste. Dense Non-Aqueous Phase Liquid (DNAPL) collection and storage. This DNAPL is manually removed from recovery wells on-site.

Physical state of the waste (liquid, sludge, slurry, etc.): Liquid

Brief characterization of waste (list hazardous ingredients and attach supporting MSDS or lab analysis): 40% Trichloroethene and 1.5% Polychlorinated Biphenyls

Rate of waste generation in terms of quantity per day, week, month, or quarter.

ON-SITE STORAGE

(X) Yes

() Yes

() No

(^x) No

Method of Storage: 55-gallon drum

Typical Volume Stored: 55-gallon maximum Typical Length of Time in Storage:

Is Storage Site Secondarily Contained?

Are	there	provisions	for	Surface	Drainage	Collection?
				0411400	Dramago	001100111

(If you answered "yes" to either question above, please describe provisions for secondary containment and/or surface drainage collection.)

Secondary containment is provided by a drum overpack and a fully enclosed fire-rated storage locker. Surface drainage

collection is not necessary since the storage unit is fully enclosed.

TRANSPORTATION

Name of Waste Hauler:	US Industrial Technologies			EPA No. MIK757944491
Address: 13075 Newburgh	Rd. Livonia	Michigan	48150	(734)462-4100
Street	City	State	Zip	Phone

DISPOSAL

Name of Waste Hauler: \	eolia Environmental Service	EPA No. TXD000838896		
Highway 73, 3.5 m Address: Taylor's Bayou Brid	les W of dge Port Arthur	Texas	77643	(409)736-2821
Street	City	State	Zip	Phone
Method of Disposal (e.g. re	ecycled, land disposal, ind	cineration, et	c.): Incineration	

J. SLUG DISCHARGE MANAGEMENT PLAN

Note: Per discussions with YCUA, a slug discharge management plan is not required as part of this permit application. All permittees are required to develop and submit a current Slug Discharge Management Plan to the YCUA. The Slug Discharge Management Plan may part of an integrated plan provided it contains all the minimum requirements of 40 CFR 403.8(f)(2)(v) A-D. The submitted plan must include the YCUA and the Michigan Department of Environmental Quality's (MDEQ) Pollution Emergency Alerting System (PEAS) in the notification process.

The Slug Discharge Management Plan can be developed in either of two ways:

- 1. Develop a Slug Discharge Management Plan Control Plan that contains at minimum all the requirements of 40 CFR 403.8 (f) (2) (v) A-D
- 2. Develop an integrated plan that includes at minimum all the requirements of a Slug Discharge Management Plan set forth in 40 CFR 403.8 (f) (2) (v) A-D.

The YCUA additionally requires that the submitted plan be reviewed and re-submitted every two years. Significant industrial users must notify the YCUA immediately if any changes occur at your facility that affect the Slug Discharge Management Plan or spill/slug potential.

If your facility does not have a Slug Discharge Management Plan or an integrated plan meeting the minimum requirements of 40 CFR 403.8 (f) (2) (v) A-D, one will be required to be submitted to the YCUA within 90 days of receiving an industrial user permit. The YCUA requires completion of the following section for applicants not submitting a plan meeting the requirements described above:

Describe your facility's procedures for assuring that concentrated or prohibited chemicals do not spill or leak into the wastewater. (e.g. segregation controls, hard plumbing, etc.) Provide extra sheets if necessary.

Do you maintain a spill log? Yes:	No:
Please be advised notification of the POTW in the evo Your facility shall contact YCUA at 734-484-4600 in th	ent of a spill, bypass or an upset is required by lav ne event of a spill, bypass, or upset.
Describe your facility's Employee Training Program for C	hemical Handling:
Describe your facility's Emergency Response Procedure	s in the event of a spill:
Describe your facility's disposal procedures for miscellan	eous floor water:

K. QUANTITIES OF CHEMICALS STORED & USED

Complete the following section for all chemicals stored and used in the facility. Indicate chemical usage in pounds or gallons per month. If an alternate inventory is maintained it can be submitted as a supplement to this section. <u>*Note - no chemicals greater than 1-L stored on-site. Hexane and acetone are occasionally used on-site in 1-L guantities.</u>

	Acius	Stored	Used	Solvents
	Hydrochloric (Muriatic)			Acetone
	Hydrofluoric			Alcohols
	Nitric			Chlorinated Hydrocarbons
	Sulfuric			Ketones
	Other (specify)			Petroleum Solvents
				Toluene
				Xvlene
	Alkalis			Other (specify)
	Ammonia			
	Calcium Hydroxide (Lime)			Organic Compounds
	Sodium Hydroxide			Aldehvdes
	(Caustic Soda)			Algaecides
	Magnesium Hydroxide			Formaldehvdes
	Other (specify)			Herbicides
				Pesticides
				Phenols
	Metals & Compounds			Surfactants
	Antimony			Other (specify)
	Barium			
	Beryllium			
	Cadmium			Misc. Chemicals
	Chromium			Boron
	Copper			Chlorine
	Lead			Cvanides
	Manganese			Dyes
	Mercury			Fluorides
	Nickel			Peroxides
	Selenium			Sulfides
	Silver			Other (specify)
	Zinc			- · · · ·
-	Other (specify)			
		Hydrofluoric Nitric Sulfuric Other (specify) Alkalis Ammonia Calcium Hydroxide (Lime) Sodium Hydroxide (Caustic Soda) Magnesium Hydroxide Other (specify) Metals & Compounds Antimony Barium Beryllium Cadmium Copper Lead Manganese Mercury Nickel Selenium Silver Zinc Other (specify)	Hydrofluoric Nitric Sulfuric Other (specify) Alkalis Ammonia Calcium Hydroxide (Lime) Sodium Hydroxide (Caustic Soda) Magnesium Hydroxide Other (specify) Magnesium Hydroxide Other (specify) Metals & Compounds Antimony Barium Beryllium Cadmium Chromium Copper Lead Marcury Nickel Selenium Silver Zinc Other (specify)	Hydrofluoric Hydrofluoric Nitric Sulfuric Other (specify) Image: Solid structure Alkalis Image: Solid structure Alkalis Image: Solid structure Calcium Hydroxide (Lime) Sodium Hydroxide Sodium Hydroxide Image: Solid structure (Caustic Soda) Image: Solid structure Magnesium Hydroxide Image: Solid structure Other (specify) Image: Solid structure Metals & Compounds Image: Solid structure Mange: Solid structure Image: Solid structure Solid structure Image: Solid structure Solid structure Image: Solid structure Solid structure Image: Solid structure

TRADE CHEMICALS

List other chemicals stored or used, including over-the-counter chemicals (e.g. Jasco paint stripper, pesticides, motor oil, etc.) in pounds or gallons per month for which chemical compositions are unknown or proprietary. Include an MSDS for each item listed where possible. Please indicate units of measure.

Stored	Used	Trade Name	Distributor (Name & Address)		

L. TOXIC SUBSTANCES/POLLUTANTS (EPA Priority Pollutants)

From the following list of compounds, check all those, which are either used in your facility, generated in your facility, or are stored on the premises.

Priority Pollutant – Volatile Compounds

- Acrolein
- Acrylonitrile
- Benzene
- Bromodichloromethane
- Bromoform
- Bromomethane
- Carbon tetrachloride
- Chlorobenzene
- Chloroethane
- 2-Chloroethyl vinyl ether

- Chloroform
- Chloromethane
- Dibromochloromethane
- 1,1-Dichloroethane
- □ 1,2-Dichloroethane
- 1,1-Dichloroethene
- trans-1,2-Dichloroethylene
- 1.2-dichloropropane
- 1,3-Dichloropropene

- Ethylbenzene
- Methylene chloride
- 1,1,2,2-Tetrachloroethane
- □ 1,1,2,2-Tetrachloroethene
- □ Toluene
- □ 1,1,1-Trichloroethane
- X Trichloroethene
- Trichlorofluoromethane
- X Vinvl chloride

- - Priority Pollutant Extractable Compounds

Acid Extractable

- p-Chloro-m-cresol
- 2-Chlorophenol
- 2,4-Dichlorophenol
- 2.4-Dimethylphenol
- 4,6-Dinitro-o-cresol
- 2,4-Dinitrophenol
- 2-Nitrophenol
- 4-Nitrophenol
- Pentachlorophenol
- Phenol
- 2,4,6-Trichlorophenol

Base / Neutral Extractable

- Acenapthene
- Acenapthylene
- Anthracene
- Benzidine
- Benzo(a)anthracene
- Benzo(e)fluoranthene
- Benzo(k)fluoranthene
- □ Benzo(ghl)perylene
- Benzo(a)pyrene
- Bis(2-chloroethyl)ether
- Bis(2-chloroisopropyl)ether
- Bis(2-ethylhexyl)phthalate
- 4-Bromophenyl phenyl ether
- Butyl benzyl phthalate

Priority Pollutant - Extractable Compounds

Base / Neutral Extractable Cont.

- 2-Chloronapthalene
- 4-Chlorophenyl phenyl ether
- Chrysene
- Dibenzo(a,h) anthracene
- Di-n-butyl phthalate
- 1,2-Dichlorobenzene
- 1,3-Dichlorobenzene
- 1,4 Dichlorobenzene
- 3.3'-Dichlorobenzidine
- Diethylphthalate
- Dimethyl phthalate
- 2.4-Dinitrotoluene
- 2,6-Dinitrotoluene
- Di-n-octyl phthalate
- Fluoranthene
- Fluorene

- Hexachlorobenzene
- Hexachlorobutadiene
- Hexachlorocyclopentadiene
- Hexachloroethane
- Indeno(1,2,3-c,d) pyrene
- Isophorone
- Napthalene
- Nitrobenzene
- N-Nitrosodimethylamine
- N-Nitrososdiphenylamine
- N-Nitroso-din-propylamine
- Phenathrene
- Pyrene
- 1,2,4-Trichlorobenzne
- 2,3,7,8- Tetrachlorodibenzo p-dioxin (2,3,7,8-TCDD)

- - Bis(2-chloroethoxy)methane

Priority Pollutant / TTO Pesticides and PCB's

- 4,4'-DDD
- 4,4'-DDE
- □ 4,4'-DDT
- □ Aldrin
- BHC-alpha
- Endosulfan-alpha
- BHC-beta
- Endosulfan-beta

- Chlordane
- BHC-delta
- Dieldrin
- Endrin
- Endrin aldehyde
- □ Fluoranthene
- BHC-gamma (Lindane)
- Heptachlor
- Heptachlor Epoxide

- Toxaphene
- Arochlor 1016
- Arochlor 1221
- Arochlor 1232 X
- Arochlor 1242
- Arochlor 1248
- Arochlor 1254
- Arochlor 1260

Indicate the location and use of any compounds that are checked:

Trichloroethene and Vinyl Chloride are contaminants present in the groundwater that will be treated prior to discharge

to YCUA. Trichloroethene is also present in the DNAPL collected on-site as well as the PCB's indicated above.

M. CERTIFICATION STATEMENT

Municipal Code requires that permit applications, and any other reports required by the Director shall be **signed by an Executive Officer of the business filing the application**. Such Executive Officer shall be at least of the level of Vice President, General Partner, President, or an individual responsible for the overall operation of the facility applying for the Permit, or meet the Federal requirements for NPDES applications as contained in Title 40 of the Code of Federal Regulations.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person of persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations."

CERTIFIED BY:

Grant R Trigger	gtrigger & racertus	st.org cleany Manager
Name (please print)	Email	Title
Frant R Trigger	6-9-11	313-670-6226
Signature	Date	Phone
PREPARED BY:		
Matthew Lamb, PE	mlamb@craworld.com	Project Engineer
Name (please print)	Email	Title
2/6/	05/09/2011	734-453-5123
Signature	Date	Phone

ATTACHMENT B

FIGURES



017303-T02(PRES016)GN-DE001 JUN 02/2011



017303-T02(PRES016)GN-DE002 JUN 02/2011

ATTACHMENT C

SITE ANALYTICAL DATA – TREATMENT SYSTEM INFLUENT

REPRESENTATIVE GROUNDWATER AND WASTEWATER ANALYTICAL DATA INFLUENT TO PROPOSED TREATMENT SYSTEM

GM COMPANY VEHICLE OPERATIONS YPSILANTI, MICHIGAN

Sample ID: Sample Date:		GW-17303-050410-EM-001 05/04/2010	GW-17303-050410-EM-002 05/04/2010	WW-17303-073010-EV-001 07/30/2010	WW-17303-042711-CB-001 04/27/2011
Parameter:	Units				
VOCs					
1,1,1-Trichloroethane	ug/L	330 U	1400 U		1200 U
1,1,2,2-Tetrachloroethane	ug/L	330 U	1400 U		1200 U
1,1,2-Trichloroethane	ug/L	330 U	1400 U		1200 U
1,1-Dichloroethane	ug/L	330 U	1400 U	-	1200 U
1,1-Dichloroethene	ug/L	330 U	1400 U 7100 U		1200 U
1,2,4-1fichiorobenzene 1,2 Dibromo 3. chloropropano (DBCP)	ug/L	1700 U 330 U	7100 U 1400 U		1200 U
1.2-Dibromoethane (Ethylene dibromide)	ug/L ug/L	330 U	1400 U		1200 U
1,2-Dichlorobenzene	ug/L	330 U	1400 U	-	1200 U
1,2-Dichloroethane	ug/L	87 J B	330 J B	-	1200 U
1,2-Dichloropropane	ug/L	330 U	1400 U		1200 U
1,3-Dichlorobenzene	ug/L	330 U	1400 U		1200 U
1,4-Dichlorobenzene	ug/L	330 U	1400 U		1200 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	3300 U 17000 U	36000 U 71000 U		31000 U 62000 U
2-1 rexample 4. Methyl. 2-nentanone (Methyl isobutyl ketone) (MIBK)	ug/L ug/I	17000 U	71000 U		62000 U
Acetone	ug/L	870 I	3600 I		31000 U
Benzene	ug/L	330 U	1400 U		1200 U
Bromodichloromethane	ug/L	330 U	1400 U	-	1200 U
Bromoform	ug/L	330 U	1400 U		1200 U
Bromomethane (Methyl bromide)	ug/L	330 U	1400 U		1200 U
Carbon disulfide	ug/L	180 J	510 J	-	6200 U
Caroon tetrachioride	ug/L	330 U 330 T	1400 U		1200 U
Chloroethane	ug/L ug/L	330 U	1400 U		1200 U
Chloroform (Trichloromethane)	ug/L	330 U	1400 U		1200 U
Chloromethane (Methyl chloride)	ug/L	330 U	1400 U	-	1200 U
cis-1,2-Dichloroethene	ug/L	9300	46000		35000
cis-1,3-Dichloropropene	ug/L	330 U	1400 U	-	1200 U
Cyclohexane	ug/L	65 J	1400 U	-	1200 U
Dibromochloromethane	ug/L	330 U	1400 U		1200 U
Ethylbenzene	ug/L ug/I	330 U	1400 U 1400 U		1200 U
Isopropyl benzene	ug/L	1700 U	7100 U		6200 U
Methyl acetate	ug/L	3300 U	14000 U		12000 U
Methyl cyclohexane	ug/L	330 U	1400 U	-	1200 U
Methyl tert butyl ether (MTBE)	ug/L	1700 U	7100 U		6200 U
Methylene chloride	ug/L	1700 U	7100 U		420 J
Styrene	ug/L	330 U	1400 U	-	1200 U
Tetrachloroethene	ug/L	330 U	1400 U		1200 U
trans 1.2 Dichloroothono	ug/L	74 J 330 U	1400 U 1400 U		1200 U
trans-1,3-Dichloropropene	ug/L ug/L	330 U	1400 U		1200 U
Trichloroethene	ug/L	330 U	1400 U		900 J
Trichlorofluoromethane (CFC-11)	ug/L	330 U	1400 U	-	1200 U
Trifluorotrichloroethane (Freon 113)	ug/L	330 U	1400 U		1200 U
Vinyl chloride	ug/L	3600	2500		9700
Xylenes (total)	ug/L	670 U	2900 U		2500 U
TCLP VOCs					
1,1-Dichloroethene	mø/I	-		0.070 U	-
1,2-Dichloroethane	mg/L	-		0.025 U	
2-Butanone (Methyl ethyl ketone) (MEK)	mg/L	-		0.25 U	-
Benzene	mg/L	-		0.025 U	-
Carbon tetrachloride	mg/L	-		0.025 U	
Chlorobenzene	mg/L	-		0.025 U	
Tatrachloroothene	mg/L mg/I	-		0.025 U	
Trichloroethene	mg/L	-		0.050 U	-
Vinyl chloride	mg/L	-		2.3	
SVOCs					
1,4-Dichlorobenzene	ug/L	10 U			
2,4,5-Trichlorophenol	ug/L	10 U			
2,4,6-Trichlorophenol	ug/L	10 U			-
2,4-Dinitrotoluene	ug/L	10 U 2 E T			
3&4-Methylphenol	ug/L ug/L	2.3 J			
Hexachlorobenzene	ug/L	10 U			
Hexachlorobutadiene	ug/L	10 U			
Hexachloroethane	ug/L	10 U			
Nitrobenzene	ug/L	10 U			-
Pentachlorophenol	ug/L	10 U		-	-
Pyridine	ug/L	20 0			-
ICLP SVOCs					
1,4-Dichlorobenzene	mg/L	-		0.0040 U	
2,4,5-1 richlorophenol	mg/L	-		0.020 U	
2,4,0-1 richlorophenol 2 4.Dinitrotoluene	mg/L mg/I	-		0.020 U	
2-Methylphenol	mg/L mg/I	-		0.0040 U	
3&4-Methylphenol	mg/L	-		0.040 U	
Hexachlorobenzene	mg/L	-		0.020 U	-
Hexachlorobutadiene	mg/L	-		0.020 U	
Hexachloroethane	mg/L	-		0.020 U	
Nitrobenzene	mg/L	-		0.0040 U	-
1 emacmorophenor	mg/L	-		0.040 U	

REPRESENTATIVE GROUNDWATER AND WASTEWATER ANALYTICAL DATA INFLUENT TO PROPOSED TREATMENT SYSTEM

GM COMPANY VEHICLE OPERATIONS YPSILANTI, MICHIGAN

Sample ID: Sample Date:		GW-17303-050410-EM-001 05/04/2010	GW-17303-050410-EM-002 05/04/2010	WW-17303-073010-EV-001 07/30/2010	WW-17303-042711-CB-001 04/27/2011
Parameter:	Units				
Pyridine	mg/L	-	-	0.020 U	-
Metals					
Arsenic	ug/L	5.4 J			
Barium	ug/L	259 B			-
Cadmium	ug/L	5.0 U			-
Chromium	ug/L	10.0 U			-
Lead	ug/L	100 U			-
Mercury	ug/L	0.20 U			
Selenium	ug/L	250 U			-
Silver	ug/L	10.0 U			
TCLP Metals					
Arsenic	mg/L	-		0.50 U	
Barium	mg/L			10.0 U	-
Cadmium	mg/L	-		0.10 U	-
Chromium	mg/L	-		0.50 U	-
Lead	mg/L			0.50 U	-
Mercury	mg/L	-		0.0020 U	-
Selenium	mg/L			0.25 U	
Silver	mg/L	-		0.50 U	
PCBs					
Aroclor-10(PCB-1016)	ug/L	0.10 U		0.10 U	-
Aroclor-12(PCB-1221)	ug/L	0.10 U		0.10 U	-
Aroclor-12(PCB-1232)	ug/L	0.10 U		0.10 U	-
Aroclor-12(PCB-1242)	ug/L	0.10 U		0.10 U	
Aroclor-12(PCB-1248)	ug/L	0.10 U		0.10 U	-
Aroclor-12(PCB-1254)	ug/L	0.10 U		0.10 U	
Aroclor-12(PCB-1260)	ug/L	0.10 U		0.10 U	-
Total PCBs	ug/L	0.10 U		0.10 U	
General Chemistry					
Ignitability	Deg F	180 >	-	180 >	-
pH corrosivity	s.u.	6.0	-	7.4	-
. ,					

Qualifiers U The analyte was analyzed for, but was not detected above the reported sample quantitation limit. J Qualified as estimated B Qualified as possible method blank contamination