# Remediation General Permit Notice of Intent

River St Fire House 176 River St. Cambridge Ma. 02138

Submitted by:

Paul J. Rogan Co., Inc.

25 Hayward St.

Braintree Ma 02184

# II. Suggested Format for the Remediation General Permit Notice of Intent (NOI)

# A. General site information:

1. Name of site:	Site address:						
	Street:						
	City:		State:	Zip:			
2. Site owner	Contact Person:						
	Telephone:	Email:					
	Mailing address:	l					
	Street:						
Owner is (check one): ☐ Federal ☐ State/Tribal ☐ Private ☐ Other; if so, specify:	City:	State:	Zip:				
3. Site operator, if different than owner	Contact Person:						
	Telephone:	Email:					
	Mailing address:						
	Street:						
	City:		State:	Zip:			
4. NPDES permit number assigned by EPA:	5. Other regulatory program(s) that apply to the site (check all that apply):						
	☐ MA Chapter 21e; list RTN(s):	□ CERCL	LΑ				
NPDES permit is (check all that apply: □ RGP □ DGP □ CGP	☐ NH Groundwater Management Permit or	□ UIC Pro	•				
☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:		☐ POTW Pretreatment					
L MISSI L Marriada M DES permit L Suici, ii so. seccir.	Groundwater Release Detection Permit:	□ CWA S					

В.	Receiving	water	information:	
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1. Name of receiving water(s):	waterbody identification of receiving water(	waterbody identification of receiving water(s): Classification of						
Receiving water is (check any that apply): □ Outstar	ding Resource Water □ Ocean Sanctuary □ territo	rial sea □ Wild and Scenic Ri	ver					
2. Has the operator attached a location map in accord	ance with the instructions in B, above? (check one)	: □ Yes □ No						
Are sensitive receptors present near the site? (check of If yes, specify:	one): □ Yes □ No							
3. Indicate if the receiving water(s) is listed in the Stapollutants indicated. Also, indicate if a final TMDL i 4.6 of the RGP.								
4. Indicate the seven day-ten-year low flow (7Q10) of the receiving water determined in accordance with the instructions in Appendix V for sites located in Massachusetts and Appendix VI for sites located in New Hampshire.								
5. Indicate the requested dilution factor for the calcul accordance with the instructions in Appendix V for s								
6. Has the operator received confirmation from the ap If yes, indicate date confirmation received:	opropriate State for the 7Q10and dilution factor indi	cated? (check one): ☐ Yes ☐	No					
7. Has the operator attached a summary of receiving (check one): ☐ Yes ☐ No	water sampling results as required in Part 4.2 of the	RGP in accordance with the i	nstruction in Appendix VIII?					
C. Source water information:								
1. Source water(s) is (check any that apply):								
☐ Contaminated groundwater	dwater ☐ Contaminated surface water ☐ The receiving water ☐ Potable water; if so, indicaminicipality or origin:							
Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP	Has the operator attached a summary of influent sampling results as required in Part 4.2 of the	☐ A surface water other						
in accordance with the instruction in Appendix VIII? (check one):	RGP in accordance with the instruction in Appendix VIII? (check one):	than the receiving water; if so, indicate waterbody:	☐ Other; if so, specify:					
□ Yes □ No	□ Yes □ No							

2. Source water contaminants:	
a. For source waters that are contaminated groundwater or contaminated	b. For a source water that is a surface water other than the receiving water, potable water
surface water, indicate are any contaminants present that are not included in	or other, indicate any contaminants present at the maximum concentration in accordance
the RGP? (check one): $\square$ Yes $\square$ No If yes, indicate the contaminant(s) and the maximum concentration present in accordance with the instructions in	with the instructions in Appendix VIII? (check one): ☐ Yes ☐ No
Appendix VIII.	NA
3. Has the source water been previously chlorinated or otherwise contains resi	dual chlorine? (check one): ☐ Yes ☐ No
D. Discharge information	
1.The discharge(s) is a(n) (check any that apply): $\Box$ Existing discharge $\Box$ Ne	w discharge □ New source
Outfall(s):	Outfall location(s): (Latitude, Longitude)
Discharges enter the receiving water(s) via (check any that apply): □ Direct d	ischarge to the receiving water □ Indirect discharge, if so, specify:
$\Box$ A private storm sewer system $\Box$ A municipal storm sewer system	
If the discharge enters the receiving water via a private or municipal storm sev	ver system:
Has notification been provided to the owner of this system? (check one): $\Box$ Y	es □ No
Has the operator has received permission from the owner to use such system f obtaining permission:	or discharges? (check one): □ Yes □ No, if so, explain, with an estimated timeframe for
Has the operator attached a summary of any additional requirements the owner	r of this system has specified? (check one): $\square$ Yes $\square$ No
Provide the expected start and end dates of discharge(s) (month/year):	
Indicate if the discharge is expected to occur over a duration of: $\Box$ less than 1	2 months □ 12 months or more □ is an emergency discharge
Has the operator attached a site plan in accordance with the instructions in D,	above? (check one): ☐ Yes ☐ No

2. Activity Category: (check all that apply)	3. Contamination Type Category: (check all that apply)				
	a. If Activity Category I or II: (check all that apply)				
	<ul> <li>□ A. Inorganics</li> <li>□ B. Non-Halogenated Volatile Organic Compounds</li> <li>□ C. Halogenated Volatile Organic Compounds</li> <li>□ D. Non-Halogenated Semi-Volatile Organic Compounds</li> <li>□ E. Halogenated Semi-Volatile Organic Compounds</li> <li>□ F. Fuels Parameters</li> </ul>				
<ul> <li>□ I – Petroleum-Related Site Remediation</li> <li>□ II – Non-Petroleum-Related Site Remediation</li> </ul>	b. If Activity Category III, IV, V, VI, VII or VIII: (check either G or H)				
<ul> <li>□ III – Non-Petroleum-Related Site Remediation</li> <li>□ III – Contaminated Site Dewatering</li> <li>□ IV – Dewatering of Pipelines and Tanks</li> <li>□ V – Aquifer Pump Testing</li> <li>□ VI – Well Development/Rehabilitation</li> <li>□ VII – Collection Structure Dewatering/Remediation</li> <li>□ VIII – Dredge-Related Dewatering</li> </ul>	□ G. Sites with Known Contamination  c. If Category III-G, IV-G, V-G, VI-G, VII-G or VIII-G: (check all that apply)  □ A. Inorganics □ B. Non-Halogenated Volatile Organic Compounds □ C. Halogenated Volatile Organic Compounds □ D. Non-Halogenated Semi-Volatile Organic Compounds □ E. Halogenated Semi-Volatile Organic Compounds □ F. Fuels Parameters	□ H. Sites with Unknown Contamination  d. If Category III-H, IV-H, V-H, VI-H, VII-H or VIII-H Contamination Type Categories A through F apply			

#### 4. Influent and Effluent Characteristics

	Known	Known	nown Influent Effl	Influent Effluer		Effluent Lir	Effluent Limitations		
Parameter	or believed absent	or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
A. Inorganics									
Ammonia								Report mg/L	
Chloride								Report µg/l	
Total Residual Chlorine								0.2 mg/L	
Total Suspended Solids								30 mg/L	
Antimony								206 μg/L	
Arsenic								104 μg/L	
Cadmium								10.2 μg/L	
Chromium III								323 µg/L	
Chromium VI								323 μg/L	
Copper								242 μg/L	
Iron								5,000 µg/L	
Lead								160 μg/L	
Mercury								0.739 µg/L	
Nickel								1,450 μg/L	
Selenium								235.8 μg/L	
Silver								35.1 μg/L	
Zinc								420 μg/L	
Cyanide								178 mg/L	
B. Non-Halogenated VOCs		•	•						
Total BTEX								100 μg/L	
Benzene								5.0 μg/L	
1,4 Dioxane								200 μg/L	
Acetone								7.97 mg/L	
Phenol								1,080 µg/L	

	Known	Known		_		Infl	luent	Effluent Lin	nitations
Parameter	or believed absent	or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
C. Halogenated VOCs									
Carbon Tetrachloride								4.4 μg/L	
1,2 Dichlorobenzene								600 μg/L	
1,3 Dichlorobenzene								320 µg/L	
1,4 Dichlorobenzene								5.0 μg/L	
Total dichlorobenzene								763 µg/L in NH	
1,1 Dichloroethane								70 μg/L	
1,2 Dichloroethane								5.0 μg/L	
1,1 Dichloroethylene								3.2 µg/L	
Ethylene Dibromide								0.05 μg/L	
Methylene Chloride								4.6 μg/L	
1,1,1 Trichloroethane								200 μg/L	
1,1,2 Trichloroethane								5.0 μg/L	
Trichloroethylene								5.0 μg/L	
Tetrachloroethylene								5.0 μg/L	
cis-1,2 Dichloroethylene								70 μg/L	
Vinyl Chloride								2.0 μg/L	
D. Non-Halogenated SVO	Cs	_							
Total Phthalates								190 μg/L	
Diethylhexyl phthalate								101 μg/L	
Total Group I PAHs								1.0 μg/L	
Benzo(a)anthracene								_	
Benzo(a)pyrene								_	
Benzo(b)fluoranthene								<u> </u>	
Benzo(k)fluoranthene								As Total PAHs	
Chrysene								_	
Dibenzo(a,h)anthracene								_	
Indeno(1,2,3-cd)pyrene									

	Known	Known				Inf	luent	Effluent Lin	nitations
Parameter	or believed absent	or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
Total Group II PAHs								100 μg/L	
Naphthalene								20 μg/L	
E. Halogenated SVOCs									
Total PCBs								0.000064 µg/L	
Pentachlorophenol								1.0 μg/L	
	1			•					
F. Fuels Parameters Total Petroleum		1	1	1		1 1		<u> </u>	
Hydrocarbons								5.0 mg/L	
Ethanol								Report mg/L	
Methyl-tert-Butyl Ether								70 μg/L	
tert-Butyl Alcohol								120 μg/L in MA 40 μg/L in NH	
tert-Amyl Methyl Ether								90 μg/L in MA 140 μg/L in NH	
Other (i.e., pH, temperatur	re, hardness,	salinity, LC	50, addition	al pollutar	ats present);	if so, specify:			

# E. Treatment system information

1. Indicate the type(s) of treatment that will be applied to effluent prior to discharge: (check all that apply)	
☐ Adsorption/Absorption ☐ Advanced Oxidation Processes ☐ Air Stripping ☐ Granulated Activated Carbon ("GAC")/Liquid Phase Carbon Adsorption	
☐ Ion Exchange ☐ Precipitation/Coagulation/Flocculation ☐ Separation/Filtration ☐ Other; if so, specify:	
2. Provide a written description of all treatment system(s) or processes that will be applied to the effluent prior to discharge.	
Identify each major treatment component (check any that apply):	
☐ Fractionation tanks☐ Equalization tank ☐ Oil/water separator ☐ Mechanical filter ☐ Media filter	
☐ Chemical feed tank ☐ Air stripping unit ☐ Bag filter ☐ Other; if so, specify:	
Indicate if either of the following will occur (check any that apply):	
□ Chlorination □ De-chlorination	
3. Provide the <b>design flow capacity</b> in gallons per minute (gpm) of the most limiting component.	
Indicate the most limiting component:	
Is use of a flow meter feasible? (check one): $\square$ Yes $\square$ No, if so, provide justification:	
Provide the proposed maximum effluent flow in gpm.	
Trovide the proposed maximum emacht now in gpini	
Provide the average effluent flow in gpm.	
If Activity Category IV applies, indicate the estimated total volume of water that will be discharged:	
4. Has the operator attached a schematic of flow in accordance with the instructions in E, above? (check one): □ Yes □ No	

#### F. Chemical and additive information

1. Indicate the type(s) of chemical or additive that will be applied to effluent prior to discharge or that may otherwise be present in the discharge(s): (check all that apply)
1. Indicate the type(s) of element of additive that will be applied to eliment prior to discharge of that may otherwise be present in the discharge(s). (eleck all that apply)
□ Algaecides/biocides □ Antifoams □ Coagulants □ Corrosion/scale inhibitors □ Disinfectants □ Flocculants □ Neutralizing agents □ Oxidants □ Oxygen □
scavengers □ pH conditioners □ Bioremedial agents, including microbes □ Chlorine or chemicals containing chlorine □ Other; if so, specify:
2. Provide the following information for each chemical/additive, using attachments, if necessary:
a. Product name, chemical formula, and manufacturer of the chemical/additive;
b. Purpose or use of the chemical/additive or remedial agent;
c. Material Safety Data Sheet (MSDS) and Chemical Abstracts Service (CAS) Registry number for each chemical/additive; d. The frequency (hourly, daily, etc.), duration (hours, days), quantity (maximum and average), and method of application for the chemical/additive;
e. Any material compatibility risks for storage and/or use including the control measures used to minimize such risks; and
f. If available, the vendor's reported aquatic toxicity (NOAEL and/or LC50 in percent for aquatic organism(s)).
3. Has the operator attached an explanation which demonstrates that the addition of such chemicals/additives may be authorized under this general permit in accordance
with the instructions in F, above? (check one):   Yes   No; if no, has the operator attached data that demonstrates each of the 126 priority pollutants in CWA Section
307(a) and 40 CFR Part 423.15(j)(1) are non-detect in discharges with the addition of the proposed chemical/additive?
(check one): ☐ Yes ☐ No
G. Endangered Species Act eligibility determination
1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:
□ <b>FWS Criterion A</b> : No endangered or threatened species or critical habitat are in proximity to the discharges or related activities or come in contact with the "action area".
□ <b>FWS Criterion B</b> : Formal or informal consultation with the FWS under section 7 of the ESA resulted in either a no jeopardy opinion (formal consultation) or a written concurrence by FWS on a finding that the discharges and related activities are "not likely to adversely affect" listed species or critical habitat
(informal consultation). Has the operator completed consultation with FWS? (check one): ☐ Yes ☐ No; if no, is consultation underway? (check one): ☐
Yes □ No
□ <b>FWS Criterion C</b> : Using the best scientific and commercial data available, the effect of the discharges and related activities on listed species and critical habitat have been evaluated. Based on those evaluations, a determination is made by EPA, or by the operator and affirmed by EPA, that the discharges and related activities will have "no effect" on any federally threatened or endangered listed species or designated critical habitat under the jurisdiction of the
FWS. This determination was made by: (check one) $\square$ the operator $\square$ EPA $\square$ Other; if so, specify:

NMFS Criterion: A determination made by EPA is affirmed by the operator that the discharges and related activities will have "no effect" or are "not likely to adversely affect" any federally threatened or endangered listed species or critical habitat under the jurisdiction of NMFS and will not result in any take of
listed species. Has the operator previously completed consultation with NMFS? (check one): ☐ Yes ☐ No
2. Has the operator attached supporting documentation of ESA eligibility in accordance with the instructions in Appendix I, and G, above? (check one):   Yes  No
Does the supporting documentation include any written concurrence or finding provided by the Services? (check one):   Yes  No; if yes, attach.
H. National Historic Preservation Act eligibility determination
1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:
☐ <b>Criterion A</b> : No historic properties are present. The discharges and discharge-related activities (e.g., BMPs) do not have the potential to cause effects on historic properties.
☐ Criterion B: Historic properties are present. Discharges and discharge related activities do not have the potential to cause effects on historic properties.
☐ <b>Criterion C</b> : Historic properties are present. The discharges and discharge-related activities have the potential to have an effect or will have an adverse effect on historic properties.
2. Has the operator attached supporting documentation of NHPA eligibility in accordance with the instructions in H, above? (check one):   Yes  No
Proposed activities are not considered to affect historic properties. The dewatering is for the construction of a closed loop geothermal system and will only be needed on an intermittent basis. Water discharged asprt of this work will controlled via temporary structures
Does the supporting documentation include any written agreement with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (TPHO), or
other tribal representative that outlines measures the operator will carry out to mitigate or prevent any adverse effects on historic properties? (check one):   Yes  No
I. Supplemental information
Describe any supplemental information being provided with the NOI. Include attachments if required or otherwise necessary.
Has the operator attached data, including any laboratory case narrative and chain of custody used to support the application? (check one):   Yes  No
Has the operator attached the certification requirement for the Best Management Practices Plan (BMPP)? (check one): ☐ Yes ☐ No

# J. Certification requirement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in a that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and be no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are information, including the possibility of fine and imprisonment for knowing violations.	persons who manage t elief, true, accurate, a	the system, or those and complete. I have
BMPP certification statement:		
Notification provided to the appropriate State, including a copy of this NOI, if required.	Check one: Yes □	No □
Notification provided to the municipality in which the discharge is located, including a copy of this NOI, if requested.	Check one: Yes □	No □
Notification provided to the owner of a private or municipal storm sewer system, if such system is used for site discharges, including a copy of this NOI, if requested. Upon approval of this NOI, Cambridge Permit to dewater will be iss Permission obtained from the owner of a private or municipal storm sewer system, if such system is used for site discharges. If yes, attach additional conditions. If no, attach explanation and timeframe for obtaining permission.	Check one: Yes □  Check one: Yes □	No □ NA □
Notification provided to the owner/operator of the area associated with activities covered by an additional discharge	Check one. Tes 🗆	110 11111
permit(s). Additional discharge permit is (check one): $\square$ RGP $\square$ DGP $\square$ CGP $\square$ MSGP $\square$ Individual NPDES permit $\square$ Other; if so, specify:	Check one: Yes □	No □ NA □
Signature: Date	te:	
Print Name and Title:		



25 HAYWARD STREET BRAINTREE, MA. 02184 TEL (781) 843-1900 FAX (781) 843-1061

Cambridge River St Fire House 176 River St Cambridge Ma Treatment System Settlement Tank
20,000 gas Filter Filter Storm Drawn outfall Sump Pit 42.358847 -71.115909 Prepared by: Ronald & Bergman



## **DeWatering Bag**

FLT617 For Oil; Sediment, For Up to a 6" Dia. Discharge Hose, Max Flow Rate 1500 gal./Minute

Remove oil, sediment and pollutants from high volume pump outs.

- Ideal for spill cleanup, draining during construction or pumping out containment areas, sumps and ponds
- Extra-large bag has greater capacity for extensive dewatering operations
- Accommodates up to a 6" discharge hose for high volume pumping
- Disperses water to help prevent erosion
- Non-biodegradable skin has low ash and high BTU value
- Landfillable or incinerable for waste reduction/fuels blending



#### Specifications

Pigalog® Page Number

Specifications	
Style	Beyond the Drain
Use With	Up to a 6" Dia. Discharge Hose
Dimensions	15' W x 15' L
Recycled Content	100% Post-Consumer Recycled Textiles
Absorbency	Up to 22.6 gal.
Brand	Ultratech
Color	Black
Capacity	225 cu. ft.
Max Flow Rate	1500 gal./Minute
Micron Rating	180 Microns
Separator Type	Dewatering & Silt Bags & Socks
Substance Filtered	Oil; Sediment
Distributor Part Number	3733486;04088x89866
Sold as	1 each
Weight	28 lbs.
# per Pallet	16
Composition	Non-Woven Polypropylene
UNSPSC	47101525

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# Metric Equivalent

Absorbency Up to 85.5 L

Dimensions 4.6m W x 4.6m L

Weight 12.7 kg

### **Technical Information**

**Technical Documents** 

Why is there no SDS?

40 CFR 122.26



One Pork Avenue • Tipton, PA 16684-0304

1-855-493-4647 • Fax: 1-800-621-7447 • newpig.com • hothogs@newpig.com



ANDERSON CONTRACTOR CONTRACTOR

Home > #2 Size 50 Micron Liquid Filter Bags, Polyester Felt, Polypropylene Ring







# Technical Data Sheet

# USALCO® Ground Aluminum Sulfate Purified Grade

USALCO's dry aluminum sulfate (alum) is manufactured using a state of the art process and high quality raw materials ensuring that it meets the highest quality standards. USALCO produces dry alum in various grades (Low-Iron, Iron-Free, FCC Grade) as well as specialty granular sizes to satisfy even the most difficult applications. USALCO's dry alum is used in water treatment, colors and dyes, leather tanning, paper making as well as many other industrial applications. USALCO dry alum meets the specifications of the American Water Works Association Standard B403-16 and complies with the requirements of NSF/ANSI/CAN 60: Drinking Water Treatment Chemicals -Health Effects at a maximum dosage of 150 mg/L.

#### **SPECIFICATIONS**

% Al<sub>2</sub>O<sub>3</sub>: 17.0 -17.5 Iron (Fe): 10-300 ppm

% Insoluble < 0.5

Particle Size:

Through 4 Mesh 0%Through 10 Mesh  $\geq 90\%$ 

#### PRINCIPAL USES

Drinking water / wastewater treatment – removal of suspended matter and phosphorus

#### SAFETY / HANDLING

Observe caution when handling corrosive materials. Please consult the safety data sheet (SDS) for safety and handling precautions.

#### **DELIVERY**

50 lb bags, FIBC (supersacks), and bulk (pneumatic trailer)

#### **PRODUCTION**

USALCO has production facilities in:

Baltimore, Maryland

#### **CUSTOMER SERVICE**

If you have any questions concerning this material, please contact our Inside Sales Department at:

410-918-2230 or info@usalco.com

Nashoba Analytical, LLC

Tel: 978-391-4428

Fax: 978-391-4643

LabNumber:

ReportDate:

232135

31A Willow Road, Ayer MA 01432

Website: http://www.NashobaAnalytical.com

Use this number with all correspondence

9/3/2021

Client:

Paul J. Rogan Co., Inc.

26 Hayward St

Braintree, MA 02184

# **Certificate of Analysis**

#### 176 River Street, Cambridge MA

Parameter	Method	Result	MRL	Date of Analysis	Analyst
- Discharge Sample					
Sampled: 8/20/2021 9:49:00 AM	l by R. Bergma				
Antimony, MG/L	EPA 200.7	0.012	0.003	8/25/2021	M-MA1118
Arsenic, MG/L	EPA 200.7	ND	0.004	8/25/2021	M-MA1118
Cadmium, MG/L	EPA 200.7	0.022	0.001	8/25/2021	M-MA1118
Chrome-hexavalent, MG/L	HACH 8023	ND	0.01	8/27/2021	M-MA1118
Chromium, MG/L	EPA 200.7	0.018	0.001	8/25/2021	M-MA1118
Copper, MG/L	EPA 200.7	0.148	0.004	8/25/2021	M-MA1118
Iron, MG/L	EPA 200.7	231	0.004	8/25/2021	M-MA1118
Lead, MG/L	EPA 200.7	0.096	0.001	8/25/2021	M-MA1118
Mercury, MG/L	EPA 245.2	ND	0.001	8/31/2021	M-CT008
Nickel, MG/L	EPA 200.7	0.046	0.001	8/25/2021	M-MA1118
Selenium, MG/L	EPA 200.7	ND	0.004	8/25/2021	M-MA1118
Silver, MG/L	EPA 200.7	ND	0.003	8/25/2021	M-MA1118
Zinc, MG/L	EPA 200.7	1	0.004	8/25/2021	M-MA1118
Ammonia as N, MG/L	SM 4500-NH3-D	1.3	0.1	8/24/2021	M-MA1118
Chloride, MG/L	EPA 300.0	2380	1	8/25/2021	M-MA1118
Chlorine, Total Residual, MG/L	SM 4500-CL-G	ND	0.02	8/20/2021	M-MA1118
Petroleum Hydrocarbons, MG/L	EPA 1664A	ND	2.11	8/26/2021	M-MA072
Phenols, MG/L	EPA 420.1	ND	0.06	8/30/2021	M-CT008
Total Suspended Solids, MG/L	SM 2540D	988	1	8/25/2021	M-MA1118

#### New England ChromaChem 6 Nichols Street Salem, MA 01970 978-744-6600

#### MA DEP Lab. M-MA072 RI Lab. LAO00364

#### **Sample Information**

EPA Method 624.1 Volatile	Organic Compounds	
Lab ID:	108387	
Client:	Nashoba Analytical, LLC	
Client ID:	232135 - Discharge	
State:	Liquid	
Date Sampled:	08/20/21	
Date Received:	08/23/21	
Date Analyzed:	08/24/21	

**Analytical Results** 

Parameter	Results	Parameter	Results
	(ug/L)		(ug/L)
Acetone*	ND	1,1-Dichloroethene	ND
Acrolein	ND	cis-1,2-dichloroethene	ND
Acrylonitrile	ND	trans-1,2-dichloroethene	ND
Benzene	26.5	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-dichloropropene	ND
Bromoform	ND	trans-1,3-dichloropropene	ND
Bromomethane	ND	Ethylbenzene	ND
2-Butanone	ND	2-Hexanone	ND
Carbon Disulfide	ND	Methylene Chloride	ND
Carbon Tetrachloride	ND	4-Methyl-2-pentanone	ND
Chlorobenzene	ND	Methyl-tert-butyl ether	ND
Chloroethane	ND	Styrene	ND
2-Chloroethylvinyl Ether	ND	1,1,2,2-Tetrachloroethane	ND
Chloroform	ND	Tetrachloroethene	ND
Chloromethane	ND	Toluene	ND
Dibromochloromethane	ND	1,1,1-Trichloroethane	ND
Dibromomethane	ND	1,1,2-Trichloroethane	ND
1,2-Dichlorobenzene	ND	Trichloroethene	ND
1,3-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,4-Dichlorobenzene	ND	Vinyl Chloride	ND
1,1-Dichloroethane	ND	Vinyl Acetate	ND
1,2-Dichloroethane	ND	Total Xylenes	ND

#### **Surrogate Standard Recoveries**

Benzene-d6	105
4-Bromofluorobenzene	98
1,2-Dichlorobenzene-d4	97

ND = < Method Detection Limit NA = Not Analyzed Dilution Factor = 10 Method Detection Limit = 5 ug/L

MRL = 5 ug/L

**Additional Compound** 

1,4-Dioxane	ND
Detection Limit 1,4-Dioxane	100 ug/L

Analysis performed per 310CMR42 MA DEP Lab. M-MA072 RI Lab. LAO00364

	08/25/21
Electronically signed and approved by: Mr. Bruce A. Bornstein, Lab Director	Date

<sup>\*</sup>Acetone Method Detection Limit = 50 ug/L

#### New England ChromaChem 6 Nichols Street Salem, MA 01970 978-744-6600

#### MA DEP Lab. M-MA072 RI Lab. LAO00364

Sample Information

EPA Method 8260B Ex	tended Volatile Organic Compounds		
Lab ID:	108387		
Client:	Nashoba Analytical, LLC		
Client ID:	232135 - Discharge		
State:	Liquid		
Date Sampled:	08/20/21		
Date Received:	08/23/21		
Date Analyzed:	08/24/21		

#### **Analytical Results**

Parameter	Results	Parameter	Results
	ug/L		ug/L
Acetone*	ND	2-Chlorotoluene	ND
Acetonitrile	ND	4-Chlorotoluene	ND
Acrolein	ND	Crotonaldehyde	ND
Acrylonitrile	ND	1,2-Dibromo-3-chloropropane	ND
Allyl alcohol	ND	Dibromochloromethane	ND
Allyl chloride	ND	1,2-Dibromoethane	ND
n-Amyl acetate	ND	Dibromomethane	ND
Benzene	26.5	1,2-Dichlorobenzene	ND
Benzyl chloride	ND	1,3-Dichlorobenzene	ND
Bis(2-chloroethyl)sulfide	ND	1,4-Dichlorobenzene	ND
Bromoacetone	ND	Cis-1,4-dichloro-2-butene	ND
Bromobenzene	ND	Trans-1,4-dichloro-2-butene	ND
Bromochloromethane	ND	Dichlorodifluoromethane	ND
Bromodichloromethane	ND	1,1-Dichloroethane	ND
Bromoform	ND	1,2-Dichloroethane	ND
Bromomethane	ND	1,1-Dichloroethene	ND
n-Butanol	ND	cis-1,2-Dichloroethene	ND
2-Butanone	ND	Trans-1,2-Dichloroethene	ND
t-Butyl Alcohol	ND	1,2-Dichloropropane	ND
n-Butylbenzene	ND	1,3-Dichloropropane	ND
sec-Butylbenzene	ND	2,2-Dichloropropane	ND
tert-Butylbenzene	ND	1,3-Dichloro-2-propanol	ND
Carbon disulfide	ND	1,1-Dichloropropene	ND
Carbon tetrachloride	ND	Cis-1,3-dichloropropene	ND
Chloral hydrate	ND	Trans-1,3-dichloropropene	ND
Chlorobenzene	ND	1,2,3,4-Diepoxybutane	ND
2-Chloro-1,3-butadiene	ND	Diethyl ether	ND
Chlorobromomethane	ND	Diisopropyl ether	ND
Chloroethane	ND	1,4-Dioxane	ND
2-Chloroethanol	ND	Epiclhorohydrin	ND
2-Chloroethyl vinyl ether	ND	Ethanol	ND
Chloroform	ND	Ethyl acetate	ND
Chloromethane	ND	Ethylbenzene	ND
Chloropropene	ND	Ethylene oxide	ND
3-Chloropropionitrile	ND	Ethyl methacrylate	ND

#### EPA Method 8260 Volatile Organic Compounds

Lab ID:	108387	
Client ID:	232135 - Discharge	

#### **Analytical Results**

Parameter	Results	Parameter	Results
	ug/L		ug/L
Ethyl tert-butyl ether	ND	Propargyl alcohol	ND
Hexachlorobutadiene	ND	β-Propiolactone	ND
Hexachloroethane	ND	Propionitrile	ND
2-Hexanone	ND	N-Propylamine	ND
2-Hydroxypropionitrile	ND	N-Propylbenzene	ND
lodomethane	ND	Pyridine	ND
Isobutyl alcohol	ND	Styrene	ND
Isopropyl acetate	ND	1,1,1,2-Tetrachloroethane	ND
Isopropylbenzene	ND	1,1,2,2-Tetrachloroethane	ND
p-Isopropyltoluene	ND	Tert-Amyl methyl ether	ND
Malononitrile	ND	Tetrachloroethene	ND
Methacrylonitrile	ND	Tetrahydrofuran	ND
Methanol	ND	Toluene	ND
Methylene Chloride	ND	o-Toluidine	ND
Methyl iodide	ND	1,2,3-Trichlorobenzene	ND
Methyl methacrylate	ND	1,2,4-Trichlorobenzene	ND
4-Methyl-2-pentanone	ND	1,1,1-Trichloroethane	ND
MTBE	ND	1,1,2-Trichloroethane	ND
Naphthalene	ND	Trichloroethene	ND
Nitrobenzene	ND	Trichlorofluoromethane	ND
2-Nitropropane	ND	1,2,3-Trichloropropane	ND
n-Nitroso-di-n-butylamine	ND	1,3,5-Trimethylbenzene	ND
Paraldehyde	ND	1,2,4-Trimethylbenzene	ND
Pentachloroethane	ND	Vinyl Acetate	ND
2-Pentanone	ND	Vinyl Chloride	ND
2-Picoline	ND	M&P Xylene	ND
1-Propanol	ND	o-Xylene	ND
2-Propanol	ND		· •

#### Surrogate Standard Recoveries (%)

Benzene-d6	105
4-Bromofluorobenzene	98
1,2-Dichlorobenzene-d4	97

Note: This sample exhibited excessive foaming and could not be analyzed at a lower detection limit.

ND = < Method Detection Limit

NA = Not Analyzed

Method Detection Limit: 5 ug/L

\*Acetone Method Detection Limit = 50 ug/L

MA does not offer certification for this method.

Electronically signed and approved by: Mr. Bruce A. Bornstein, Lab Director



## CERTIFICATE OF ANALYSIS

D1H2320

Nashoba A alytical LLC

Project Name: 232135

Maria Braun 31A Willow Road Ayer, MA 01432

roject / PO Number: 232135 Received: 08/24/2021 Reported: 09/02/2021

#### **Analytical Testing Parameters**

Client Sample ID: 5 - Discharge Sample Matrix: Wastewater

Collected By: Client

Lab Sample ID: D1H2320-01 **Collection Date:** 08/20/2021 9:49

F Inorganics To al RL Units Result Note **Prepared** Analyzed A alyst EPA 335.4, Rv. 1 (1993) Cyanide - Total < 0.0100 0.0100 1 Q11 CLW mg/L 08/26/21 2057 08/27/21 1 8

Client Sample ID: 5 - Discharge Sample Matrix: Wastewater

Collected By: Client D1H2320-02 **Collection Date:** 

08/20/2021 9:49 Lab Sample ID:

RL Units Analyzed Metals Total by CVAA Result Note Prepared A alyst **EPA 245.2** Method Notes: D1 Mercury < 0.00100 0.00100 mg/L 08/31/21 1244 08/31/21 1507 MMC

Client Sample ID: 5 - Discharge Sample Matrix: Wastewater Collected By: Client

Lab Sample ID: D1H2320-03 **Collection Date:** 08/20/2021 9:49

Inorganics To al	Result	RL	Units	F	Note	Prepared	Analyzed	A alyst
EPA 1664A								
Oil & Grease	<2.1	.1	mg/L	1		08/25/21 1206	08/26/21 1533	HEP



# CERTIFICATE OF ANALYSIS D1H2320

Client Sample ID: 5 - Discharge
Sample Matrix: Wastewater

Collected By: Client

**Lab Sample ID:** D1H2320-04 **Collection Date:** 08/20/2021 9:49

Inorganics To al	Result	RL	Units	F	Note	Prepared	Analyzed	A alyst
EPA 420.1		N	lethod Not	es: D1				
henols	<0.0600	0.0600	mg/L	1		08/30/21 0924	08/30/21 1226	CLW
Pesticides and Polychlorinated Biphenyls (PCBs) by GC/ECD	Result	RL	Units	F	Note	Prepared	Analyzed	A alyst
EPA 608.3 GC-ECD								
Aroclor-1016 (PCB-1016)	<0.400	0.400	ug/L	1		08/26/21 1000	08/27/21 2106	MRB
Aroclor-1016 (PCB-1016)	<2.00	.00	ug/L	1		08/26/21 1000	08/27/21 2041	MRB
Aroclor-1221 (PCB-1221)	<0.400	0.400	ug/L	1		08/26/21 1000	08/27/21 2041	MRB
Aroclor-1221 (PCB-1221)	<2.00	.00	ug/L	1		08/26/21 1000	08/27/21 2041	MRB
Aroclor-1232 (PCB-1232)	< 0.400	0.400	ug/L	1		08/26/21 1000	08/27/21 2041	MRB
Aroclor-1232 (PCB-1232)	<2.00	.00	ug/L	1		08/26/21 1000	08/27/21 2041	MRB
Aroclor-1242 (PCB-1242)	<0.400	0.400	ug/L	1		08/26/21 1000	08/27/21 2041	MRB
Aroclor-1242 (PCB-1242)	<2.00	.00	ug/L	1		08/26/21 1000	08/27/21 2041	MRB
Aroclor-1248 (PCB-1248)	< 0.400	0.400	ug/L	1		08/26/21 1000	08/27/21 2041	MRB
Aroclor-1248 (PCB-1248)	<2.00	.00	ug/L	1		08/26/21 1000	08/27/21 2041	MRB
Aroclor-1254 (PCB-1254)	< 0.400	0.400	ug/L	1		08/26/21 1000	08/27/21 2041	MRB
Aroclor-1254 (PCB-1254)	<2.00	.00	ug/L	1		08/26/21 1000	08/27/21 2041	MRB
Aroclor-1260 (PCB-1260)	<0.400	0.400	ug/L	1		08/26/21 1000	08/27/21 2106	MRB
Aroclor-1260 (PCB-1260)	<2.00	.00	ug/L	1		08/26/21 1000	08/27/21 2041	MRB
Surrogate: Decachlorobiphenyl (BZ-209)	8.8	Limit: 30-130	% Rec	1	M, S2	08/26/21 1000	08/27/21 2106	MRB
Surrogate: Decachlorobiphenyl (BZ-209)	9.4	Limit: 30-130	% Rec	1		08/26/21 1000	08/27/21 2041	MRB
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	72.1	Limit: 30-130	% Rec	1		08/26/21 1000	08/27/21 2041	MRB
Surrogate: 2,4,5,6-Tetrachloro-m-xylene	72.1	Limit: 30-130	% Rec	1		08/26/21 1000	08/27/21 2041	MRB
Semivolatile Organic Compounds by GCMS	Result	RL	Units	F	Note	Prepared	Analyzed	A alyst
EPA 625.1								
Acenaphthene	<2.00	.00	ug/L	1	н	09/01/21 1000	09/01/21 2048	GMP
Acenaphthylene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Anthracene	<2.00	.00	ug/L	1	н	09/01/21 1000	09/01/21 2048	GMP
Azobenzene	<2.00	.00	ug/L	1	H,Y1	09/01/21 1000	09/01/21 2048	GMP
Benzidine	<10.0	0.0	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Benzo[a]anthracene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Benzo[a]pyrene	<2.00	.00	ug/L	1	н	09/01/21 1000	09/01/21 2048	GMP
Benzo[b]fluoranthene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Benzo[g,h,i]perylene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Benzo[k]fluoranthene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
-Bromophenyl phenyl ether	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Butyl benzyl phthalate	<2.00	.00	ug/L	1	н	09/01/21 1000	09/01/21 2048	GMP
-Chloro-3-methylphenol	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
			-					
bis(2-Chloroethoxy)methane	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP

Microbac Laboratories, Inc.



# CERTIFICATE OF ANALYSIS D1H2320

Client Sample ID: 5 - Discharge

Sample Matrix: Wastewater Collected By: Client

**Lab Sample ID:** D1H2320-04 **Collection Date:** 08/20/2021 9:49

Semivolatile Organic Compounds by GCMS	Result	RL	Units	F	Note	Prepared	Analyzed	A alyst
-Chloronaphthalene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
-Chlorophenol	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
-Chlorophenyl phenylether	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Chrysene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Dibenz(a,h) anthracene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Di-n-butyl phthalate	4.32	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
,3-Dichlorobenzidine	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
,4-Dichlorophenol	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Diethyl phthalate	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
,4-Dimethylphenol	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Dimethyl phthalate	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
,4-Dinitrophenol	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
,4-Dinitrotoluene (2,4-DNT)	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
,6-Dinitrotoluene (2,6-DNT)	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Di-n-octyl phthalate	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
bis(2-Ethylhexyl)phthalate	<1.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Fluoranthene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Fluorene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Hexachlorobenzene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Hexachlorobutadiene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Hexachlorocyclopentadiene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Hexachloroethane	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Indeno(1,2,3-cd) pyrene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Isophorone	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
-Methyl-4,6-dinitrophenol	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Naphthalene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Nitrobenzene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
-Nitrophenol	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
-Nitrophenol	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
n-Nitrosodimethylamine	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
n-Nitrosodiphenylamine	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
n-Nitrosodi-n-propylamine	<5.00	5.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
,2'-Oxybis(1-Chloropropane)	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
entachlorophenol	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
henanthrene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
henol	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
yrene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
1,2,4-Trichlorobenzene	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
2,4,6-Trichlorophenol	<2.00	.00	ug/L	1	Н	09/01/21 1000	09/01/21 2048	GMP
Surrogate: -Fluorobiphenyl	7.1	Limit: 5-1	% Rec	1	н	09/01/21 1000	09/01/21 2048	GMP
Surrogate: -Fluorophenol	9.1	Limit: 12-67	% Rec	1	Н	09/01/21 1000	09/01/21 2048	GMP
Surrogate: Nitrobenzene-d5	6.8	Limit: 15-314	% Rec	1	Н	09/01/21 1000	09/01/21 2048	GMP
Surrogate: henol-d6	.1	Limit: 12-46	% Rec	1	Н	09/01/21 1000	09/01/21 2048	GMP

Microbac Laboratories, Inc.



# CERTIFICATE OF ANALYSIS

D1H2320

Client Sample ID: 5 - Discharge
Sample Matrix: Wastewater Collected By: Client

**Lab Sample ID:** D1H2320-04 **Collection Date:** 08/20/2021 9:49

Semivolatile Organic Compounds by GCMS	Result	RL	Units	F	Note	Prepared	Analyzed	A alyst
Surrogate: p-Terphenyl-d14	8.7	Limit: 36-94	% Rec	1	H, S2	09/01/21 1000	09/01/21 2048	GMP
Surrogate: 2,4,6-Tribromophenol	78.7	Limit: 28-123	% Rec	1	Н	09/01/21 1000	09/01/21 2048	GMP

efinitions

D1: The sample was diluted during sample preparation (extraction, distillation or digestion) due to matrix interference.

H: Sample was analyzed past holding time.

M: Matrix interference is present.

mg/L: Milligrams per Liter

Q11: The recovery for the low level check standard was outside of the quality control range.

RL: Reporting Limit

**S2:** Surrogate recovery is below acceptance limits.

ug/L: Micrograms per Liter

Y1: Accreditation is not offered by the accrediting body for this analyte.

#### Project Requested Certification(s)

Microbac Laboratories, Inc. - Dayville M-CT008

Massachusetts Department of Environmental Protection

#### **Report Comments**

Samples were received in proper condition and the reported results conform to applicable accreditation standard unless otherwise noted.

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included. The services were provided under and subject to Microbac's standard terms and conditions which can be located and reviewed at <a href="https://www.microbac.com/standard-terms-conditions">https://www.microbac.com/standard-terms-conditions</a>.

Reviewed and Approved By:

(Montgomery

Melisa L. Montgomery Quality Assurance Officer Reported: 09/02/2021 15:19

Microbac Laboratories, Inc.

31A V D 1 H 2 3 2 Tel: 978 Nashoba Analytical LLC

PRESERVATIVE VERIFIED K6.

Cuam or curvey

Laboratory Number:

Client 31015 232135

Client/Project Name:

Sampled by:

						-					
	Comments	Non Potable									
l est Kequirements									_		
nirer	EbV 608				×						
t Ked	EPA 625				×						
l es	Phenol				×						
	(A4991) H9T			×							
	Mercury		×								
	Cyanide	×									
	Preservative	5	3	9	4						
	Container (Glass) (Plastic) (Sterile) (VOC)	Ъ	ď	2 A G	4 A G						
	Location	harge	232135 - Discharge		232135 - Discharge						
	Grab[G] or Composite[C]	G	G	G	G						
	Time	9:49	9:49	9:49	9:49						
	Date	8/20/2021	8/20/2021	8/20/2021	8/20/2021						
	Sample #	, <b>.</b>	2	3	4	5	9	7	8	6	10

Preservative: 1-Hydrochloric Acid, 2- Ice, 3-Nitric Acid, 4-None, 5-Sodium Hydroxide, 6-Sulfuric Acid, 7-Thiosulfate, 8-Filter Sterilized, 9-Ammonium Chloride

Special Notes/Requirements	Relinguished by: Date	
IF THIS BOX IS CHECKED, MCL EXCEEDANCES MUST	1. (Atm)   8/4/4	
BE REPORTED IMMEDIATELY. THANK YOU.	2. With mee & file	K-24-21 16:03
	3.	
	4.	
	ν.	
	Casped (	(25 16)