



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

**Region 1
5 Post Office Square, Suite 100
BOSTON, MA 02109-3912**

CERTIFIED MAIL RETURN RECEIPT REQUESTED

MAR 27 2013

Richard Browne
Environmental Protection Coordinator
Champlain Oil Company
45 San Remo Drive
South Burlington, VT 05403

Re: Authorization to discharge under the Remediation General Permit (RGP) –
NHG910000. Jiffy Mart site located at 6 Littleton Road, Whitefield, NH 03598, Coos
County, Authorization # NHG910062

Dear Mr. Browne:

Based on the review of a Notice of Intent (NOI) submitted on behalf of Champlain Oil Company by the firm KAS, Inc. for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Owner and Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

The checklist enclosed with this RGP authorization indicates the pollutants for which you are required to monitor. Also indicated on the checklist are the effluent limits, test methods and minimum levels (MLs) for each pollutant. Please note that the checklist does not represent the complete requirements of the RGP. Operators must comply with all of the applicable requirements of this permit, including influent and effluent monitoring, narrative water quality standards, record keeping, and reporting requirements, found in Parts I and II, and Appendices I – VIII of the RGP. See EPA's website for the complete RGP and other information at:
<http://www.epa.gov/region1/npdes/mass.html#dgp>.

Please note the enclosed checklist includes parameters that exceeded Appendix III limits.

EPA and New Hampshire Department of Environmental Services (NHDES) have approved the proposed discharge and requests the permittee to provide the necessary treatment technology to meet the pH limits of the RGP at the end of pipe prior to entering into the pH impaired waters at John's River.

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on selected dilution ranges and technology-based ceiling limitations. For each parameter the dilution factor 89.7 for this site is within a dilution range greater than fifty to one hundred ($<50 - 100$), established in the RGP. (See the RGP Appendix IV for New Hampshire facilities). Therefore, the limits for lead of 27 ug/L, and iron of 5,000 ug/L, are required to achieve permit compliance at your site.

Finally, please note the checklist of pollutants attached to this authorization is subject to a recertification if the operations at the site result in a discharge lasting longer than six months. A recertification can be submitted to EPA within six (6) to twelve (12) months of operations in accordance with the 2010 RGP regulations.

This general permit and authorization to discharge will expire on September 9, 2015. You have reported that this project will terminate on July 31, 2013. If for any reason the discharge terminates sooner you are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

Thank you in advance for your cooperation in this matter. Please contact Victor Alvarez at 617-918-1572 or Alvarez.Victor@epa.gov, if you have any questions.

Sincerely,



Thelma Murphy, Manager
Storm Water and Construction
Permits Section

Enclosure

cc: Jeffrey Andrews, NHDES
Shawn White, DPW
Toni Poquette, KAS, Inc.

**2010 Remediation General Permit
Summary of Monitoring Parameters^[1]**

NPDES Authorization Number:		NHG910062
Date Authorization Issued:	March, 2013	
Facility/Site Name:	Jiffy Mart	
Facility/Site Address:	6 Littleton Road, Whitefield, NH 03598	
	Owner's email address: info@champlainoil.com	
Legal Name of operator:	Champlain Oil Company	
Operator contact name, title, and Address:	Richard Browne, Environmental Protection Coordinator 45 San Remo Drive, South Burlington, VT 05403, Chittenden County	
Estimated Date of Completion:	July 31, 2013	
Category and Sub-Category:	Category I- Petroleum Related Site Remediation. Sub-category A. Gasoline Only Sites.	
Receiving Water:	John's River	

Monitoring & Limits are applicable if checked. All samples are to be collected as grab samples

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit); Minimum Levels =ML
✓	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/l) **, 50 mg/l for hydrostatic testing **, Me#60.2/5mL
	2. Total Residual Chlorine (TRC) ¹	Freshwater = 11 ug/l ** Saltwater = 7.5 ug/l **/ Me#330.5/ML 20 ug/L
✓	3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/l/Me# 1664A/ML 5.0 mg/L
	4. Cyanide (CN) ^{2,3}	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/l **/ Me#335.4/ML 5ug/L
✓	5. Benzene (B)	5ug/L /50.0 ug/l for hydrostatic testing only/ Me#8260C/ML 2 ug/L
✓	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ ML 2 ug/L
✓	7. Ethylbenzene (E)	(limited as ug/L total BTEX))/ Me#8260C/ ML 2 ug/L
✓	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX))/ Me#8260C/ ML 2 ug/L

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit); Minimum Levels =ML
✓	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) ⁴	100 ug/l)/ Me#8260C/ ML 2 ug/L
✓	10. Ethylene Dibromide (EDB) (1,2-Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10 ug/L
✓	11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l /Me#8260C/ ML 10ug/L
✓	12.tert-Butyl Alcohol (TBA) (TertiaryButanol)	Monitor Only (ug/L)/ Me#8260C/ ML 10 ug/L
✓	13. tert-Amyl Methyl Ether (TAME)	Monitor Only (ug/L) /Me#8260C/ ML 10 ug/L
✓	14. Naphthalene ⁵	20 ug/l /Me#8260C/ML 2 ug/L
	15. Carbon Tetrachloride	4.4 ug/l /Me#8260C/ML 5 ug/L
	16. 1,2 Dichlorobenzene (o-DCB)	600 ug/l /Me#8260C/ML 5 ug/L
	17. 1,3 Dichlorobenzene (m-DCB)	320 ug/l /Me#8260C/ML 5 ug/L
	18. 1,4 Dichlorobenzene (p-DCB)	5.0 ug/l /Me#8260C/ML 5 ug/L
	18a. Total dichlorobenzene	763 ug/l - NH only /Me#8260C/ ML5 ug/L
	19. 1,1 Dichloroethane (DCA)	70 ug/l /Me#8260C/ML 5 ug/L
	20. 1,2 Dichloroethane (DCA)	5.0 ug/l /Me#8260C/ML 5 ug/L
	21. 1,1 Dichloroethene (DCE)	3.2 ug/l/Me#8260C/ML 5 ug/L
	22. cis-1,2 Dichloroethene (DCE)	70 ug/l /Me#8260C/ML 5 ug/L
	23. Methylene Chloride	4.6 ug/l/Me#8260C/ML 5 ug/L
	24. Tetrachloroethene (PCE)	5.0 ug/l /Me#8260C/ML 5 ug/L
	25. 1,1,1 Trichloro-ethane (TCA)	200 ug/l/Me#8260C/ML 5 ug/L
	26. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/l /Me#8260C/ML 5 ug/L
	27. Trichloroethene (TCE)	5.0 ug/l /Me#8260C/ML 5 ug/L
	28. Vinyl Chloride (Chloroethene)	2.0 ug/l /Me#8260C/ML 5 ug/L
	29. Acetone	Monitor Only (ug/L) /Me#8260C/ML 50 ug/L
	30. 1,4 Dioxane	Monitor Only /Me#1624C/ML 50 ug/L
	31. Total Phenols	300 ug/l Me#420.1&420.2/ML 2ug /L/ Me# 420.4 /ML 50 ug/L
	32. Pentachlorophenol (PCP)	1.0 ug/l /Me#8270D/ML 5 ug/L, Me#604 &625/ML 10 ug/L
	33. Total Phthalates (Phthalate esters) ⁶	3.0 ug/L ** /Me#8270D/ML 5ug/L, Me#606/ML 10 ug/L & Me#625/ML 5 ug/L
	34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	6.0 ug/l /Me#8270D/ML5ug/L,Me#606/ML 10 ug/L& Me#625/ML 5 ug/L
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/l
	a. Benzo(a) Anthracene ⁷	0.0038 ug/l /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L&

	<u>Parameter</u>	<u>Effluent Limit/Method# /ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit); Minimum Levels =ML
		Me#625/ML 5 ug/L
	b. Benzo(a) Pyrene ⁷	0.0038 ug/l /Me#8270D/ ML 5ug/L, Me#610/ML 5 ug/L& Me#625/ML 5 ug/L
	c. Benzo(b)Fluoranthene ⁷	0.0038 ug/l /Me#8270D/ ML 5ug/L, Me#610/ML 5 ug/L& Me#625/ML 5 ug/L
	d. Benzo(k)Fluoranthene ⁷	0.0038 ug/l /Me#8270D/ ML 5ug/L, Me#610/ML 5 ug/L& Me#625/ML 5 ug/L
	e. Chrysene ⁷	0.0038 ug/l /Me#8270D/ ML 5 ug/L, Me#610/ML 5 ug/L& Me#625/ML 5 ug/L
	f. Dibenzo(a,h)anthracene ⁷	0.0038 ug/l /Me#8270D/ ML 5ug/L, Me#610/ML 5 ug/L& Me#625/ML 5 ug/L
	g. Indeno(1,2,3-cd) Pyrene ⁷	0.0038 ug/l /Me#8270D/ ML 5 ug/L, Me#610/ML 5 ug/L& Me#625/ML 5 ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/l
	h. Acenaphthene	5 ug/L/Me#8270D/ML 5 ug/L/Me#610/ML 5 ug/L & Me#625/ML 5 ug/L & Me#610 (HPLC)/ ML 2 ug/L
	i. Acenaphthylene	5 ug/L/Me#8270D/ML 5 ug/L,Me#610/ML 5 ug/L & Me#625/ML 5 ug/L
	j. Anthracene	X/Me#8270D/ML5ug/L,Me#610/ML 5 ug/L & Me#625/ML 5 ug/L
	k. Benzo(ghi) Perylene	X/Me#8270D/ML5ug/L,Me#610/ML 5 ug/L & Me#625/ML 5 ug/L
	l. Fluoranthene	X/Me#8270D/ML5ug/L,Me#610/ML 5 ug/L & Me#625/ML 5 ug/L
	m. Fluorene	X/Me#8270D/ML5ug/L,Me#610/ML 5 ug/L & Me#625/ML 5 ug/L
	n. Naphthalene ⁵	20 ug/l / Me#8270D/ ML 5ug/L, Me#610/ML 5 ug/L & Me#625/ML 5 ug/L
	o. Phenanthrene	X/Me#8270D/ML5ug/L,Me#610/ML 5 ug/L & Me#625/ML 5 ug/L
	p. Pyrene	X/Me#8270D/ML5ug/L,Me#610/ML 5 ug/L & Me#625/ML 5 ug/L
	37. Total Polychlorinated Biphenyls (PCBs) ^{8,9}	0.000064 ug/L /Me# 608/ ML 0.5ug/L
✓	38. Chloride	Monitor only/Me# 300.0/ML 0.1

<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit); Minimum Levels =ML
	ug/L

	<u>Metal parameter</u>	<u>ML= Minimum Levels</u>	<u>Total Recoverable Metal Limit @ H¹⁰ = 25 mg/l CaCO₃ for Discharges in New Hampshire (ug/l)¹¹</u>	
			<u>Freshwater</u>	
	39. Antimony		5.6/ML	10
	40. Arsenic **		10/ML	20
	41. Cadmium **		0.8/ML	10
	42. Chromium III (trivalent) **		27.7/ML	15
	43. Chromium VI (hexavalent) **		11.4/ML	10
	44. Copper **		2.9/ML	15
✓	45. Lead **		27 ug/L	
	46. Mercury **		0.9/ML	0.2
	47. Nickel **		16.1/ML	20
	48. Selenium **		5.0/ML	20
	49. Silver		0.4/ML	10
	50. Zinc **		37/ML	15
✓	51. Iron		1,000 ug/L	

	<u>Other Parameters</u>	<u>Limit</u>
✓	52. Instantaneous Flow	Site specific in CFS
✓	53. Total Flow	Site specific in CFS
	54. pH Range for Class A & Class B Waters in MA	6.5-8.3; 1/Month/Grab ¹³
	55. pH Range for Class SA & Class SB Waters in MA	6.5-8.3; 1/Month/Grab ¹³
✓	56. pH Range for Class B Waters in NH	6.5-8; 1/Month/Grab ¹³
	57. Daily maximum temperature - Warm water fisheries	83°F; 1/Month/Grab ¹⁴
	58. Daily maximum temperature - Cold water fisheries	68°F; 1/Month/Grab ¹⁴
	59. Maximum Change in Temperature in MA - Any Class A water body	1.5°F; 1/Month/Grab ¹⁴
	60. Maximum Change in Temperature in MA - Any Class B water body- Warm Water	5°F; 1/Month/Grab ¹⁴
	61. Maximum Change in Temperature in MA - Any Class B water body - Cold water and	3°F; 1/Month/Grab ¹⁴

	Lakes/Ponds	
	62. Maximum Change in Temperature in MA – Any Class SA water body - Coastal	1.5°F; 1/Month/Grab ¹⁴
	63. Maximum Change in Temperature in MA – Any Class SB water body - July to September	1.5°F; 1/Month/Grab ¹⁴
	64. Maximum Change in Temperature in MA – Any Class SB water body - October to June	4°F; 1/Month/Grab ¹⁴
✓	1,2,4 - Trimethylbenzene	Monitor Only

Footnotes:

¹ Although the maximum values for TRC are 11ug/l and 7.5 ug/l for freshwater, and saltwater respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.5, 20 ug/l).

² Limits for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.

³ Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the Method 335.4 as listed in Appendix VI (i.e., 10 ug/l).

⁴ BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.

⁵ Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.

⁶ The sum of individual phthalate compounds(not including the #34, Bis (2-Ethylhexyl) Phthalate . The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.

Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.

⁷ Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.

⁸ In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologue, all isomer, all congener, or all "Oroclor analyses." Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measure of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.

⁹ Although the maximum value for total PCBs is 0.000064 ug/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 ug/l for Method 608 or 0.00005 ug/l when Method 1668a is approved).

¹⁰ Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.

PO Box 787
368 Avenue D
Suite 15
Williston, VT 05495
Ph. 802.383.0486
Fax 802.383.0490



www.kas-consulting.com

ENVIRONMENTAL & GEOLOGICAL
CONSULTING

March 15, 2013

US Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, MA 02109-3912
ATTN: Remediation General Permit NOI Processing

RE: Notice of Intent for Discharges for the Remediation General Permit at the
Whitefield Jiffy Mart, Whitefield, New Hampshire

To Whom It May Concern:

KAS, Inc. (KAS) is the environmental consulting firm working with Champlain Oil Company (COCO) at the Whitefield Jiffy Mart facility in Whitefield, New Hampshire during site construction activities. COCO would like to discharge from the excavation associated with the installation of new underground storage tanks (USTs) and contaminated soil removal at the Site. KAS is submitting the enclosed Notice of Intent (NOI) form along with the supporting information.

In summary, groundwater that accumulates within the excavation area during the installation of the new USTs will be pumped from the excavation into a 18,000-gallon weir frac tank. After the sediment has settled the water will then be treated through two 55-gallon granulated activated carbon vessels prior to discharge into the John's River located along the northern property border of the Site.

A copy of the NOI has also been mailed to the New Hampshire Department of Environmental Services (NHDES) and the Whitefield Town Clerk's Office. COCO would like to begin discharge activities by 4/15/13. Please contact me if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Toni Poquette".

Toni Poquette
Project Geologist

Enclosure

cc: Mr. Dick Browne, Champlain Oil Company
Mr. Jeffrey Andrews, NHDES
Whitefield Town Clerk
KAS #401130481

B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

1. General facility/site information. Please provide the following information about the site:

a) Name of facility/site: JIFFY Mart		Facility/site mailing address:	
Location of facility/site:		Street: 6 Littleton Road	
Longitude: N 71° 36' 43.4248"	Facility SIC code(s): 5541		
Latitude: N 44° 32' 30.5089"			
b) Name of facility/site owner: Champlain Oil Company		Town: Whitefield	
Email address of facility/site owner: info@Champlainoil.com		State: NH	County: COOS
Telephone no. of facility/site owner: (802) 864-5380		Zip: 03598	
Fax no. of facility/site owner: (802) 864-0535		Owner is (check one): 1. Federal ☐ 2. State/Tribal ☐	
Address of owner (if different from site):		3. Private ☒ 4. Other ☐ if so, describe:	
Street: 45 San Remo Drive			
Town: South Burlington	State: VT	Zip: 05403	County: Chittenden
c) Legal name of operator:		Operator telephone no: (802) 864-5380	
Champlain Oil Company		Operator fax no.: (802) 864-0535	Operator email: info@Champlainoil.com
Operator contact name and title: Richard Browne, Environmental Protection Coordinator			
Address of operator (if different from owner):		Street:	
Town:	State:	Zip:	County:

d) Check Y for "yes" or N for "no" for the following: 1. Has a prior NPDES permit exclusion been granted for the discharge? Y ☐ N ☒, if Y, number: 2. Has a prior NPDES application (Form I & 2C) ever been filed for the discharge? Y ☐ N ☒, if Y, date and tracking #: 3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Y ☒ N ☐ 4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y ☐ N ☐	
e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y ☒ N ☐ If Y, please list: 1. site identification # assigned by the state of NH or MA: 199707601 2. permit or license # assigned: 0103915 3. state agency contact information: name, location, and telephone number: NHDES; Concord, NH; (603) 271-3644	f) Is the site/facility covered by any other EPA permit, including: 1. Multi-Sector General Permit? Y ☐ N ☒, if Y, number: 2. Final Dewatering General Permit? Y ☐ N ☒, if Y, number: 3. EPA Construction General Permit? Y ☐ N ☒, if Y, number: 4. Individual NPDES permit? Y ☐ N ☒, if Y, number: 5. any other water quality related individual or general permit? Y ☐ N ☒, if Y, number:
g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y ☐ N ☒	
h) Based on the facility/site information and any historical sampling data, identify the sub-category into which the potential discharge falls.	
Activity Category I - Petroleum Related Site Remediation II - Non Petroleum Site Remediation III - Contaminated Construction Dewatering	Activity Sub-Category A. Gasoline Only Sites ☒ B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) ☐ C. Petroleum Sites with Additional Contamination ☐ A. Volatile Organic Compound (VOC) Only Sites ☐ B. VOC Sites with Additional Contamination ☐ C. Primarily Heavy Metal Sites ☐ A. General Urban Fill Sites ☐ B. Known Contaminated Sites ☐

IV - Miscellaneous Related Discharges	A. Aquifer Pump Testing to Evaluate Formerly Contaminated Sites ☐ B. Well Development/Rehabilitation at Contaminated/Formerly Contaminated Sites ☐ C. Hydrostatic Testing of Pipelines and Tanks ☐ D. Long-Term Remediation of Contaminated Sumps and Dikes ☐ E. Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit) ☐
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2. Discharge information. Please provide information about the discharge, (attaching additional sheets as necessary) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage:	
The owner will be replacing underground storage tanks at the facility and due to the excavation depth planned on being lower than the groundwater table, the groundwater will need to be pumped. The NHOES has also requested the removal of the contaminated soils from the excavation pit.	
b) Provide the following information about each discharge:	
1) Number of discharge points: 1	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)? Max. flow 0-0223 Is maximum flow a design value? Y ☒ N ☐ Average flow (include units) 10 gpm Is average flow a design value or estimate? design
3) Latitude and longitude of each discharge within 100 feet:	
pt. 1: lat. 44° 23' 20.76" long. 71° 36' 44.73"	pt. 2: lat. long. ;
pt. 3: lat. long.	pt. 4: lat. long. ;
pt. 5: lat. long.	pt. 6: lat. long. ;
pt. 7: lat. long.	pt. 8: lat. long. ; etc.
4) If hydrostatic testing, total volume of the discharge (gals):	5) Is the discharge intermittent ☒ or seasonal ☐ ? Is discharge ongoing? Y ☐ N ☒
c) Expected dates of discharge (mm/dd/yy): start Apr 1, 2013 end July 31, 2013	
d) Please attach a line drawing or flow schematic showing water flow through the facility including: 1. sources of intake water 2. contributing flow from the operation 3. treatment units, and 4. discharge points and receiving waters(s) See Attached	

3. Contaminant information.

a) Based on the sub-category selected (see Appendix III), indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids (TSS)		☐	☒	1	Grab	SM18 2540D	5mg/L	230,000	12.6	Assumed	Same
2. Total Residual Chlorine (TRC)		☒	☐								
3. Total Petroleum Hydrocarbons (TPH)		☐	☒	2	Grab	8260B	5mg/L	28,700	1.6	Assumed	Same
4. Cyanide (CN)	57125	☒	☐								
5. Benzene (B)	71432	☐	☒	2	Grab	8260B	2ug/L	437	0.024	Assumed	Same
6. Toluene (T)	10883	☐	☒	2	Grab	8260B	2ug/L	129	0.007	Assumed	Same
7. Ethylbenzene (E)	100414	☐	☒	2	Grab	8260B	2ug/L	1,420	0.078	Assumed	Same
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☐	☒	2	Grab	8260B	4ug/L	8,430	0.460	Assumed	Same
9. Total BTEX ²	n/a	☐	☒	2	Grab	8260B	2ug/L	10,416	0.569	Assumed	Same
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934	☒	☐								
11. Methyl-tert-Butyl Ether (MTBE)	1634044	☐	☒	2	Grab	8260B	10 ug/L	4,530	0.247	Assumed	Same
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☐	☒	2	Grab	8260B	10ug/L	574	0.032	Assumed	Same

* Numbering system is provided to allow cross-referencing to Effluent Limits and Monitoring Requirements by Sub-Category included in Appendix III, as well as the Test Methods and Minimum Levels associated with each parameter provided in Appendix VI.

² BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

³ EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508	☒	☐								
14. Naphthalene	91203	☐	☒	2	grab	8260B	2ug/l	628	0.034	Assumed	Same
15. Carbon Tetrachloride	56235	☒	☐								
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐								
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐								
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐								
18a. Total dichlorobenzene		☒	☐								
19. 1,1 Dichloroethane (DCA)	75343	☒	☐								
20. 1,2 Dichloroethane (DCA)	107062	☒	☐								
21. 1,1 Dichloroethene (DCE)	75354	☒	☐								
22. cis-1,2 Dichloroethene (DCE)	156592	☒	☐								
23. Methylene Chloride	75092	☒	☐								
24. Tetrachloroethene (PCE)	127184	☒	☐								
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐								
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐								
27. Trichloroethene (TCE)	79016	☒	☐								

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
28. Vinyl Chloride (Chloroethene)	75014	☒	☐								
29. Acetone	67641	☒	☐								
30. 1,4 Dioxane	123911	☒	☐								
31. Total Phenols	108952	☒	☐								
32. Pentachlorophenol (PCP)	87865	☒	☐								
33. Total Phthalates (Phthalate esters) ⁴		☒	☐								
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☒	☐								
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐								
a. Benzo(a) Anthracene	56553	☒	☐								
b. Benzo(a) Pyrene	50328	☒	☐								
c. Benzo(b)Fluoranthene	205992	☒	☐								
d. Benzo(k)Fluoranthene	207089	☒	☐								
e. Chrysene	21801	☒	☐								
f. Dibenzo(a,h)anthracene	53703	☒	☐								
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐								
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐								

⁴ The sum of individual phthalate compounds.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
h. Acenaphthene	83329	☒	☐								
i. Acenaphthylene	208968	☒	☐								
j. Anthracene	120127	☒	☐								
k. Benzo(ghi) Perylene	191242	☒	☐								
l. Fluoranthene	206440	☒	☐								
m. Fluorene	86737	☒	☐								
n. Naphthalene	91203	☒	☐								
o. Phenanthrene	85018	☒	☐								
p. Pyrene	129000	☒	☐								
37. Total Polychlorinated Biphenyls (PCBs)	85687;										
	84742;										
	117840;	☒	☐								
	84662;										
	131113;										
	117817.										
38. Chloride	16887006	☒	☐								
39. Antimony	7440360	☒	☐								
40. Arsenic	7440382	☒	☐								
41. Cadmium	7440439	☒	☐								
42. Chromium III (trivalent)	16065831	☒	☐								
43. Chromium VI (hexavalent)	18540299	☒	☐								
44. Copper	7440508	☒	☐								
45. Lead	7439921	☒	☐								
46. Mercury	7439976	☒	☐								
47. Nickel	7440020	☒	☐								
48. Selenium	7782492	☒	☐								
49. Silver	7440224	☒	☐								
50. Zinc	7440666	☒	☐								
51. Iron	7439896	☐	☒	1	grab	EPA 200.7	20 ug/L	9,500	0.519	Assumed	Same
Other (describe): See Attached											

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
		☐	☐								
		☐	☐								

b) For discharges where **metals** are believed present, please fill out the following (attach results of any calculations):

<i>Step 1:</i> Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y ☒ N ☐		If yes, which metals? <u>Iron</u>								
<i>Step 2:</i> For any metals which exceed the Appendix III limits, calculate the dilution factor (DF) using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? <table> <tr> <td>Metal: <u>Iron</u></td> <td>DF: <u>89.7</u></td> </tr> <tr> <td>Metal:</td> <td>DF:</td> </tr> <tr> <td>Metal:</td> <td>DF:</td> </tr> <tr> <td>Metal:</td> <td>DF:</td> </tr> </table> Etc.		Metal: <u>Iron</u>	DF: <u>89.7</u>	Metal:	DF:	Metal:	DF:	Metal:	DF:	Look up the limit calculated at the corresponding dilution factor in Appendix IV. Do any of the metals in the influent have the potential to exceed the corresponding effluent limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y ☒ N ☐ If Y, list which metals: <u>Iron</u>
Metal: <u>Iron</u>	DF: <u>89.7</u>									
Metal:	DF:									
Metal:	DF:									
Metal:	DF:									

4. Treatment system information. Please describe the treatment system using separate sheets as necessary, including:

a) A description of the treatment system, including a schematic of the proposed or existing treatment system: <u>Groundwater will be pumped into a weir float tank that will allow the settling of sediment. The water will then be treated through two granulated activated carbon (GAC) drums at 10 gpm. The treated groundwater will then be discharged into the John's River adjacent to the site</u>												
b) Identify each applicable treatment unit (check all that apply): <table> <tr> <td>Frac. tank ☒</td> <td>Air stripper ☐</td> <td>Oil/water separator ☐</td> <td>Equalization tanks ☐</td> <td>Bag filter ☐</td> <td>GAC filter ☒</td> </tr> <tr> <td>Chlorination ☐</td> <td>De-chlorination ☐</td> <td colspan="4">Other (please describe):</td> </tr> </table>	Frac. tank ☒	Air stripper ☐	Oil/water separator ☐	Equalization tanks ☐	Bag filter ☐	GAC filter ☒	Chlorination ☐	De-chlorination ☐	Other (please describe):			
Frac. tank ☒	Air stripper ☐	Oil/water separator ☐	Equalization tanks ☐	Bag filter ☐	GAC filter ☒							
Chlorination ☐	De-chlorination ☐	Other (please describe):										

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate(s)** (gallons per minute) of the treatment system:
Average flow rate of discharge 10 gpm Maximum flow rate of treatment system 10 gpm
Design flow rate of treatment system 10 gpm

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):
No chemical additives will be used.

5. Receiving surface water(s). Please provide information about the receiving water(s), using separate sheets as necessary:

a) Identify the discharge pathway:	Direct to receiving water ☒	Within facility (sewer) ☐	Storm drain ☐	Wetlands ☐	Other (describe): <u></u>
------------------------------------	---	--	--------------------------------------	-----------------------------------	---------------------------

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:
Groundwater will be discharged from a frac tank through two GAC drums directly into the John's River.

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:
1. For multiple discharges, number the discharges sequentially.
2. For indirect discharges, indicate the location of the discharge to the indirect conveyance and the discharge to surface water
The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.

d) Provide the state water quality classification of the receiving water Class B

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 2.2 cfs
Please attach any calculation sheets used to support stream flow and dilution calculations.

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Y ☒ N ☐ If yes, for which pollutant(s)? PH and mercury

Is there a final TMDL? Y ☒ N ☐ If yes, for which pollutant(s)? Mercury

6. ESA and NHPA Eligibility.

Please provide the following information according to requirements of Permit Parts I.A.4 and I.A.5 Appendices II and VII.

a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit?

A ☐ B ☒ C ☐ D ☐ E ☐ F ☐

b) If you selected Criterion D or F, has consultation with the federal services been completed? Y ☐ N ☐ Underway ☐

c) If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received? Y ☒ N ☐

d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.

e) Using the instructions in Appendix VII, under which criterion listed in Part II.C are you eligible for coverage under this general permit?

1 ☐ 2 ☒ 3 ☐

f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.

7. Supplemental information.

Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

- Endangered Species Consultation: attached.
- Laboratory Analytical Report: attached.
- Site location map with proposed discharge location: attached.
- Dilution Factor Calculation: attached.
- Additional contaminants reported above laboratory limits: attached.

8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

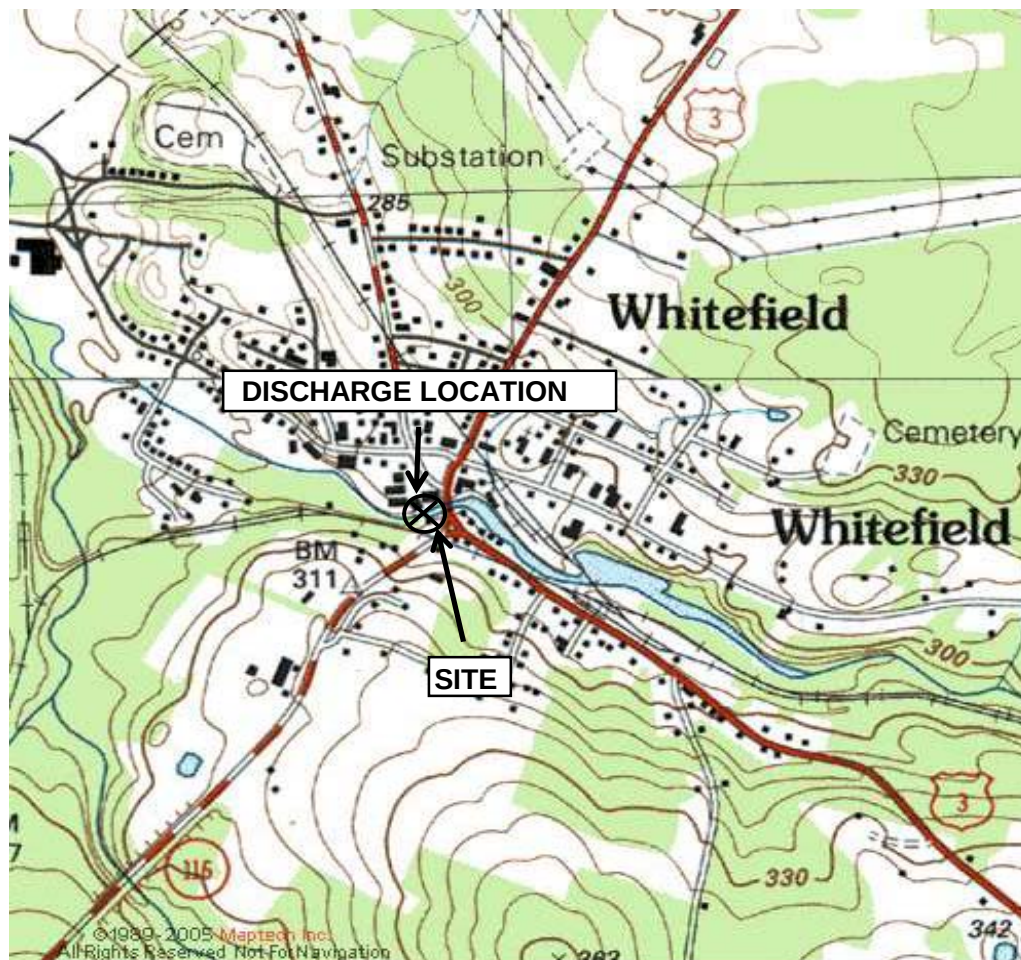
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage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

Facility/Site Name:	Jiffy Mart, Whitefield
Operator signature:	
Printed Name & Title:	Richard Browne, COCO Environmental Protection manager
Date:	3/14/13

Attachment 1

Site Location Map with Proposed Discharge Location

N
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H



NHDES Site #97-07001

KAS Job Number: 410040047

Source: USGS Mapping Bethlehem Quadrangle, Maptech 1997



Whitefield Jiffy Mart
Whitefield, New Hampshire

Site Location Map
USGS Mapping

Date: 02/22/13

Figure: 1

Scale: 1:24,000

By: TP

Attachment 2

Section 3. Additional Contaminants

Section 3. Contaminant Information Supplement

Parameter	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., Grab)	Analytical Method Used	Maximum daily value		Average daily value	
						concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
Ethyl-t-butyl ether (ETBE)		X	2	Grab	8260B	43.4	0.002	Assumed	Same
n-Propylbenzene		X	2	Grab	8260B	340	0.019	Assumed	Same
1,2,4-Trimethylbenzene (TMB)		X	2	Grab	8260B	2,840	0.155	Assumed	Same
4-Isopropyltoluene		X	2	Grab	8260B	11.6	0.001	Assumed	Same
Isopropylbenzene		X	2	Grab	8260B	134	0.007	Assumed	Same
1,3,5-Trimethylbenzene (TMB)		X	2	Grab	8260B	409	0.022	Assumed	Same
s-Butylbenzene		X	2	Grab	8260B	15.6	0.0009	Assumed	Same

*Minimum Level of Test Method not included in table (not listed in Appendic IV).

*Includes additional contaminants present above laboratory detection limit.

Attachment 3

Laboratory Analytical Report



Laboratory Report

KAS, Inc. 100306
PO Box 787
Williston, VT 05495

Atten: Toni Paquette

PROJECT: 401130481 Whitefield JM
WORK ORDER: **1302-02740**
DATE RECEIVED: February 27, 2013
DATE REPORTED: March 13, 2013
SAMPLER: Joe Martell

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. All required method quality control elements including instrument calibration were performed in accordance with method requirements and determined to be acceptable unless otherwise noted.

The column labeled Lab/Tech in the accompanying report denotes the laboratory facility where the testing was performed and the technician who conducted the assay. A "W" designates the Williston, VT lab under NELAC certification ELAP 11263; "R" designates the Lebanon, NH facility under certification NH 2037 and "N" the Plattsburgh, NY lab under certification ELAP 11892. "Sub" indicates the testing was performed by a subcontracted laboratory. The accreditation status of the subcontracted lab is referenced in the corresponding NELAC and Qual fields.

The NELAC column also denotes the accreditation status of each laboratory for each reported parameter. "A" indicates the referenced laboratory is NELAC accredited for the parameter reported. "N" indicates the laboratory is not accredited. "U" indicates that NELAC does not offer accreditation for that parameter in that specific matrix. Test results denoted with an "A" meet all National Environmental Laboratory Accreditation Program requirements except where denoted by pertinent data qualifiers. Test results are representative of the samples as they were received at the laboratory

Endyne, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose.

Reviewed by:

Harry B. Locker, Ph.D.
Laboratory Director

www.endynelabs.com



160 James Brown Dr., Williston, VT 05495
Ph 802-879-4333 Fax 802-879-7103

56 Etna Road, Lebanon, NH 03766
Ph 603-678-4891 Fax 603-678-4893



Laboratory Report

CLIENT: KAS, Inc.
PROJECT: 401130481 Whitefield JM
REPORT DATE: 3/13/2013

WORK ORDER: **1302-02740**
DATE RECEIVED: 02/27/2013

001	Site: MW09-1R			Date Sampled: 2/26/13		Time: 13:40		
<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Analysis Date</u>		<u>Lab/Tech</u>	<u>NELAC</u>	<u>Qual.</u>
Solids, Total Suspended	230	mg/L	SM18 2540D	3/5/13	11:35	W JSS	A	
Iron, Total	9.5	mg/L	EPA 200.7	3/5/13		W LJF	A	
Lead, Total	< 0.001	mg/L	SM19 3113B	3/11/13		W lg	A	



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Laboratory Report

CLIENT: KAS, Inc.
PROJECT: 401130481 Whitefield JM
REPORT DATE: 3/13/2013

WORK ORDER: 1302-02740
DATE RECEIVED: 02/27/2013

TEST METHOD: EPA 8260B

001	Site: MW09-1R				Sampled: 2/26/13	13:40	Test Date: 2/28/13				W RBF
<u>Parameter</u>		<u>Result</u>	<u>Unit</u>	<u>Nelac</u>	<u>Qual</u>	<u>Parameter</u>		<u>Result</u>	<u>Unit</u>	<u>Nelac</u>	<u>Qual</u>
TPH Gas Range Organics (GRO)		28.7	mg/L	N							

TEST METHOD: EPA 8260B

001 Site: MW09-1R					Sampled: 2/26/13	13:40	Test Date: 2/28/13		W RBF
Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Dichlorodifluoromethane	< 50.0	ug/L	A		Chloromethane	< 30.0	ug/L	A	
Vinyl chloride	< 20.0	ug/L	A		Bromomethane	< 50.0	ug/L	A	
Chloroethane	< 50.0	ug/L	A		Trichlorofluoromethane	< 20.0	ug/L	A	
Diethyl ether	< 50.0	ug/L	N		1,1-Dichloroethene	< 10.0	ug/L	A	
Acetone	< 100	ug/L	A		Carbon disulfide	< 50.0	ug/L	A	
Methylene chloride	< 50.0	ug/L	A		t-Butanol	574	ug/L	N	
Methyl-t-butyl ether (MTBE)	4,530	ug/L	A		trans-1,2-Dichloroethene	< 10.0	ug/L	A	
Di-isopropyl ether (DIPE)	< 20.0	ug/L	N		1,1-Dichloroethane	< 10.0	ug/L	A	
Ethyl-t-butyl ether (ETBE)	43.4	ug/L	N		2-Butanone	< 100	ug/L	A	
2,2-Dichloropropane	< 20.0	ug/L	N		cis-1,2-Dichloroethene	< 10.0	ug/L	N	
Bromochloromethane	< 20.0	ug/L	N		Chloroform	< 10.0	ug/L	A	
Tetrahydrofuran	< 100	ug/L	U		1,1,1-Trichloroethane	< 10.0	ug/L	A	
Carbon tetrachloride	< 10.0	ug/L	A		1,1-Dichloropropene	< 10.0	ug/L	N	
Benzene	437	ug/L	A		t-Amylmethyl ether (TAME)	< 20.0	ug/L	N	
1,2-Dichloroethane	< 10.0	ug/L	A		Trichloroethene	< 10.0	ug/L	A	
1,2-Dichloropropane	< 20.0	ug/L	A		Dibromomethane	< 20.0	ug/L	N	
Bromodichloromethane	< 5.0	ug/L	A		cis-1,3-Dichloropropene	< 10.0	ug/L	A	
4-Methyl-2-pentanone (MIBK)	< 100	ug/L	N		Toluene	129	ug/L	A	
trans-1,3-Dichloropropene	< 20.0	ug/L	A		1,1,2-Trichloroethane	< 10.0	ug/L	A	
Tetrachloroethene	< 10.0	ug/L	A		1,3-Dichloropropane	< 10.0	ug/L	N	
2-Hexanone	< 100	ug/L	N		Dibromochloromethane	< 20.0	ug/L	A	
1,2-Dibromoethane	< 10.0	ug/L	A		Chlorobenzene	< 10.0	ug/L	A	
Ethylbenzene	1,420	ug/L	A		1,1,1,2-Tetrachloroethane	< 20.0	ug/L	N	
Xylenes, Total	8,430	ug/L	A		Styrene	< 10.0	ug/L	N	
Bromoform	< 20.0	ug/L	A		Isopropylbenzene	134	ug/L	A	
1,1,2,2-Tetrachloroethane	< 20.0	ug/L	A		Bromobenzene	< 10.0	ug/L	N	
n-Propylbenzene	340	ug/L	A		1,2,3-Trichloropropane	< 20.0	ug/L	N	
2-Chlorotoluene	< 10.0	ug/L	N		1,3,5-Trimethylbenzene	409	ug/L	A	
4-Chlorotoluene	< 10.0	ug/L	N		t-Butylbenzene	< 10.0	ug/L	A	
1,2,4-Trimethylbenzene	2,840	ug/L	A		s-Butylbenzene	15.6	ug/L	A	
4-Isopropyltoluene	11.6	ug/L	A		1,3-Dichlorobenzene	< 10.0	ug/L	A	
1,4-Dichlorobenzene	< 10.0	ug/L	A		n-Butylbenzene	< 10.0	ug/L	A	
1,2-Dichlorobenzene	< 10.0	ug/L	A		1,2-Dibromo-3-Chloropropane	< 20.0	ug/L	A	
1,2,4-Trichlorobenzene	< 20.0	ug/L	A		1,3,5-Trichlorobenzene	< 20.0	ug/L	U	
Hexachlorobutadiene	< 5.0	ug/L	N		Naphthalene	628	ug/L	A	
1,2,3-Trichlorobenzene	< 20.0	ug/L	N		Surr. 1 (Dibromofluoromethane)	107	%	A	
Surr. 3 (4-Bromofluorobenzene)	103	%	A		Surr. 2 (Toluene d8)	104	%	A	
Unidentified Peaks	> 10		U						

TEST METHOD: EPA 8260B

001	Site: MW09-1R				Sampled: 2/26/13	13:40	Test Date: 3/4/13	W MGT			
<u>Parameter</u>		<u>Result</u>	<u>Unit</u>	<u>Nelac</u>	<u>Qual</u>	<u>Parameter</u>		<u>Result</u>	<u>Unit</u>	<u>Nelac</u>	<u>Qual</u>
1,2-Dibromoethane		< 0.5	ug/L	A		Surr. 1 (Dibromofluoromethane)		102	%	A	
Surr. 2 (Toluene d8)		101	%	A		Surr. 3 (4-Bromofluorobenzene)		98	%	A	



ENDYNE Inc.

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Laboratory Report

CLIENT: KAS, Inc.
PROJECT: 401130481 Whitefield JM
REPORT DATE: 3/13/2013

WORK ORDER: 1302-02740
DATE RECEIVED: 02/27/2013

TEST METHOD: EPA 8260B

002 Site: Trip Blank					Sampled: 2/26/13	9:00	Test Date: 2/28/13	W	RBF
Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Dichlorodifluoromethane	< 5.0	ug/L	A		Chloromethane	< 3.0	ug/L	A	
Vinyl chloride	< 2.0	ug/L	A		Bromomethane	< 5.0	ug/L	A	
Chloroethane	< 5.0	ug/L	A		Trichlorofluoromethane	< 2.0	ug/L	A	
Diethyl ether	< 5.0	ug/L	N		1,1-Dichloroethene	< 1.0	ug/L	A	
Acetone	< 10.0	ug/L	A		Carbon disulfide	< 5.0	ug/L	A	
Methylene chloride	< 5.0	ug/L	A		t-Butanol	< 20.0	ug/L	N	
Methyl-t-butyl ether (MTBE)	< 2.0	ug/L	A		trans-1,2-Dichloroethene	< 1.0	ug/L	A	
Di-isopropyl ether (DIPE)	< 2.0	ug/L	N		1,1-Dichloroethane	< 1.0	ug/L	A	
Ethyl-t-butyl ether (ETBE)	< 2.0	ug/L	N		2-Butanone	< 10.0	ug/L	A	
2,2-Dichloropropane	< 2.0	ug/L	N		cis-1,2-Dichloroethene	< 1.0	ug/L	N	
Bromochloromethane	< 2.0	ug/L	N		Chloroform	< 1.0	ug/L	A	
Tetrahydrofuran	< 10.0	ug/L	U		1,1,1-Trichloroethane	< 1.0	ug/L	A	
Carbon tetrachloride	< 1.0	ug/L	A		1,1-Dichloropropene	< 1.0	ug/L	N	
Benzene	< 1.0	ug/L	A		t-Amylmethyl ether (TAME)	< 2.0	ug/L	N	
1,2-Dichloroethane	< 1.0	ug/L	A		Trichloroethene	< 1.0	ug/L	A	
1,2-Dichloropropane	< 2.0	ug/L	A		Dibromomethane	< 2.0	ug/L	N	
Bromodichloromethane	< 0.5	ug/L	A		cis-1,3-Dichloropropene	< 1.0	ug/L	A	
4-Methyl-2-pentanone (MIBK)	< 10.0	ug/L	N		Toluene	< 1.0	ug/L	A	
trans-1,3-Dichloropropene	< 2.0	ug/L	A		1,1,2-Trichloroethane	< 1.0	ug/L	A	
Tetrachloroethene	< 1.0	ug/L	A		1,3-Dichloropropane	< 1.0	ug/L	N	
2-Hexanone	< 10.0	ug/L	N		Dibromochloromethane	< 2.0	ug/L	A	
1,2-Dibromoethane	< 1.0	ug/L	A		Chlorobenzene	< 1.0	ug/L	A	
Ethylbenzene	< 1.0	ug/L	A		1,1,1,2-Tetrachloroethane	< 2.0	ug/L	N	
Xylenes, Total	< 2.0	ug/L	A		Styrene	< 1.0	ug/L	N	
Bromoform	< 2.0	ug/L	A		Isopropylbenzene	< 1.0	ug/L	A	
1,1,2,2-Tetrachloroethane	< 2.0	ug/L	A		Bromobenzene	< 1.0	ug/L	N	
n-Propylbenzene	< 1.0	ug/L	A		1,2,3-Trichloropropane	< 2.0	ug/L	N	
2-Chlorotoluene	< 1.0	ug/L	N		1,3,5-Trimethylbenzene	< 1.0	ug/L	A	
4-Chlorotoluene	< 1.0	ug/L	N		t-Butylbenzene	< 1.0	ug/L	A	
1,2,4-Trimethylbenzene	< 1.0	ug/L	A		s-Butylbenzene	< 1.0	ug/L	A	
4-Isopropyltoluene	< 1.0	ug/L	A		1,3-Dichlorobenzene	< 1.0	ug/L	A	
1,4-Dichlorobenzene	< 1.0	ug/L	A		n-Butylbenzene	< 1.0	ug/L	A	
1,2-Dichlorobenzene	< 1.0	ug/L	A		1,2-Dibromo-3-Chloropropane	< 2.0	ug/L	A	
1,2,4-Trichlorobenzene	< 2.0	ug/L	A		1,3,5-Trichlorobenzene	< 2.0	ug/L	U	
Hexachlorobutadiene	< 0.5	ug/L	N		Naphthalene	< 2.0	ug/L	A	
1,2,3-Trichlorobenzene	< 2.0	ug/L	N		Surr. 1 (Dibromofluoromethane)	106	%	A	
Surr. 2 (Toluene d8)	104	%	A		Surr. 3 (4-Bromofluorobenzene)	95	%	A	
Unidentified Peaks	0		U						



160 James Brown Drive
Williston, Vermont 05495
(802) 879-4333

Special Reporting Instructions/PO#:

64192 N^o

Relinquished by:

Date/Time

Received by:

Date/Time

Received by:

Date/Time

Relinquished by:
Jared M. Hall

2/26/13

Date/Time 16:45

Received by:

12

2/27

Date/Time 13 10:57

Received by:
Ella

Donna

2/27/00

ate/Time
10:50

(White - Laboratory / Yellow - Client)

Attachment 4

Calculation of Dilution Factor

Calculation of Dilution Factor

$$DF = [(Q_d + Q_s)/Q_d] \times 0.9$$

DF = Dilution Factor

Q_d = Maximum flow rate of the discharge in cubic feet per second (cfs) (1.0 gpm = 0.00223 cfs)

Q_s = Receiving water 7Q₁₀ flow, in cfs, where, the 7Q₁₀ equals the annual minimum flow for 7 consecutive days with a recurrence interval of 10 years

0.9 = Allowance for reserving 10% of the assets in the receiving stream as per Chapter ENV-Ws 1700, Surface Water Quality Regulations

Calculation:

$$DF = [(0.0223 + 2.2)/0.0223] \times 0.9$$

$$DF = 89.689$$

Notes:

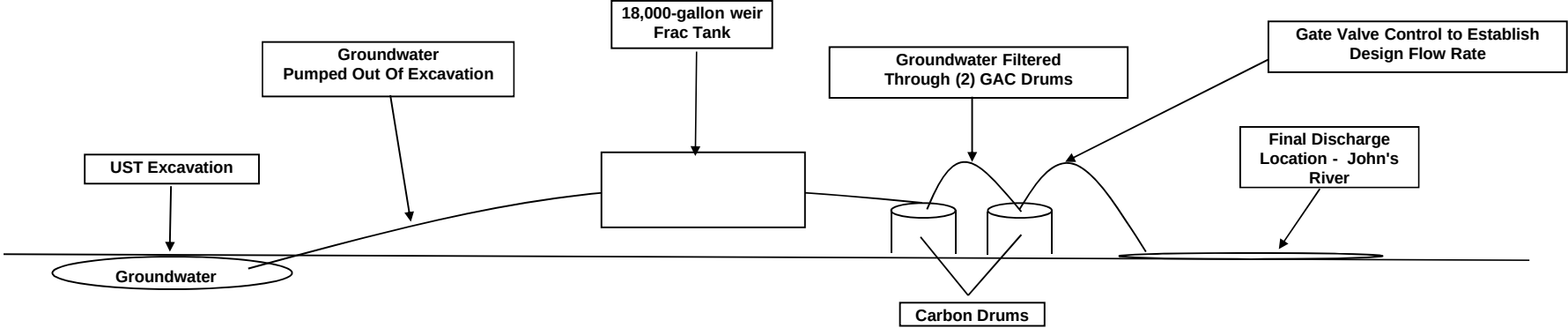
Q_d value based on maximum flow rate of 10 gpm

Q_s value based on estimate (2.2 cfs) received from Mr. Jeff Andrews of the NHDES on 2/25/13

Attachment 5

Treatment System Design

Treatment System Design
Whitefield Jiffy Mart



Attachment 6

Endangered Species Consultation

Toni Poquette

From: Hillman, Brett [brett_hillman@fws.gov]
Sent: Friday, March 08, 2013 11:48 AM
To: Toni Poquette
Subject: Re: Endangered Species Consultation for Whitefield Jiffy Mart, Whitefield, NH; KAS # 401130481

Thanks, Toni. Everything sounds good from the perspective of federally listed species!

Brett

Brett Hillman
Biological Science Technician
[U.S. Fish & Wildlife Service](#)
[New England Field Office](#)
70 Commercial Street, Suite 300
Concord, NH 03301

Phone: 603-223-2541, ext. 34
Fax: 603-223-0104
Email: brett_hillman@fws.gov



"working with others, to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people"

On Fri, Mar 8, 2013 at 9:00 AM, Toni Poquette <ToniP@kas-consulting.com> wrote:

The discharge will be occurring during underground storage tank replacement and soil removal at the site. We anticipate water discharge for one to two weeks. Federal and State requirements require influent and effluent sampling before the anticipated discharge and during the discharge to confirm that contaminant levels are below EPA standards. Please let me know if you require additional information to make the final determination.

Toni M. Poquette

Project Geologist

KAS, Inc.

368 Avenue D, Suite 15

Williston, VT 05495

P: 802-383-0486, F: 802-383-0490

ToniP@kas-consulting.com

From: Hillman, Brett [mailto:brett_hillman@fws.gov]

Sent: Wednesday, March 06, 2013 4:03 PM

To: Toni Poquette

Subject: Re: Endangered Species Consultation for Whitefield Jiffy Mart, Whitefield, NH; KAS #401130481

Hi Toni,

After reviewing this project and discussing it with a few of my colleagues, I can say that I do not anticipate any adverse impacts to the dwarf wedgemussel (*Alasmodonta heterodon*) or any other federally listed species. However, just to be on the safe side, could you tell me a little about the frequency and specifics of your water monitoring plan?

Best,

Brett

Brett Hillman

Biological Science Technician

[U.S. Fish & Wildlife Service](#)

[New England Field Office](#)

70 Commercial Street, Suite 300

Concord, NH 03301

Phone: 603-223-2541, ext. 34

Fax: 603-223-0104

Email: brett_hillman@fws.gov

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On Thu, Feb 28, 2013 at 3:43 PM, Toni Poquette <ToniP@kas-consulting.com> wrote:

The discharge will be petroleum impacted groundwater. The groundwater will be pumped into a weir frac tank where suspended particles will have time to settle. The water will then be pumped at a flow of 10 gpm through two granulated carbon drums that will remove the petroleum contaminants. The effluent will be discharged into the river with levels below all New Hampshire Ambient Groundwater Quality Standards.

Toni M. Poquette

Project Geologist

From: Hillman, Brett [mailto:brett_hillman@fws.gov]

Sent: Thursday, February 28, 2013 12:00 PM

To: Toni Poquette

Subject: Re: Endangered Species Consultation for Whitefield Jiffy Mart, Whitefield, NH; KAS #401130481

Thanks for this info, Toni. Is there anything else you can tell me about what will be pumped into the Johns River? The endangered dwarf wedgemussel (*Alasmodonta heterodon*) occurs in the Johns downstream of this project site.

Brett

Brett Hillman

Biological Science Technician

[U.S. Fish & Wildlife Service](#)

[New England Field Office](#)

70 Commercial Street, Suite 300

Concord, NH 03301

Phone: 603-223-2541, ext. 34

Fax: 603-223-0104

Email: brett_hillman@fws.gov

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On Thu, Feb 28, 2013 at 10:05 AM, Toni Poquette <ToniP@kas-consulting.com> wrote:

Mr. Brett Hillman,

Thank you for speaking with me regarding the endangered species consultation for our project. The project will occur at the Whitefield Jiffy Mart located at 6 Littleton Road in Whitefield, New Hampshire. The construction process will involve the removal and replacement of three gasoline underground storage tanks and contaminated soil removal. Due to the high groundwater, it will be pumped into a 18,000 frac tank and treated through two granulated carbon drums prior to discharge into the Jones River. Please feel free to contact me with any questions or if you require additional information in order to issue a determination.

Toni M. Poquette

Project Geologist

KAS, Inc.

368 Avenue D, Suite 15

Williston, VT 05495

P: 802-383-0486, F: 802-383-0490

ToniP@kas-consulting.com