MAG910333

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

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

a) Name of **facility/site**: Shell Service Station		**Facility/site** address: 491 E. Main Street, Southbridge, Massachusetts		
Location of **facility/site**: longitude:_____ latitude:_____ 72d 00' 38.53"W 42d 04' 9.29"N	Facility SIC code(s): 4471	Street: 491 E. Main Street		
b) Name of **facility/site owner:** Francis Marcoux		Town: Southbridge		
Email address of owner: franm52@aol.com		State: MA	Zip: 01550	County: Worcester
Telephone no.of facility/site **owner**: (508) 335-6339				
Fax no. of facility/site **owner**:		**Owner** is (check one): 1. Federal____ 2. State/Tribal_____ 3. Private ✓ 4. other, if so, describe:		
Address of **owner** (if different from site):				
Street: 77 East Main Street				
Town: Webster	State: MA	Zip: 01570	County: Worcester	
c) Legal name of **operator**: SRS Petroleum Services, LLC	**Operator** telephone no: (508) 279-1700			
	Operator fax no.: (508) 279-1711	**Operator** email: Andy@srspetroleum.com		
Operator contact name and title: Andy Bissonnette, Principal				

Address of **operator** (if different from owner):	Street: 59A Elm Street		
Town: Goffstown	State: NH	Zip: 03045	County: Hillsborough

d) Check "yes" or "no" for the following:
1. Has a prior NPDES permit exclusion been granted for the discharge? Yes___ No✓, if "yes," number: 1
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes___ No✓, if "yes," date and tracking #:
3. Is the discharge a "new discharge"as defined by 40 CFR 122.2? Yes ✓ No___
4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes__ No✓

e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes___ No✓ If "yes," please list: 1. site identification # assigned by the state of NH or MA: 2. permit or license # assigned: 3. state agency contact information: name, location, and telephone number:	f) Is the site/facility covered by any other EPA permit, including: 1. multi-sector storm water general permit? Y___ N✓, if Y, number: 2. phase I or II construction storm water general permit? Y___ N✓, if Y, number: 3. individual NPDES permit? Y___ N✓, if Y, number: 4. any other water quality related permit? Y___ N✓, if Y, number:

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage:

Dewatering for purposes of underground storage tank installation and placement of backfill. Discharge to catchbasin adjacent to project site will follow treatment by settling, sediment filtration, and carbon filtration. Low levels of petroleum-related contaminants have been detected in groundwater by the limited sampling conducted to date. RGP coverage is desired in the event that contaminated groundwater is encountered during construction.

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 .178 Average flow .111 Is maximum flow a **design value**? Y ✓ N___ For average flow, include the units and appropriate notation if this value is a design value or estimate if not available. Dewatering system is designed to extract groundwater at a rate of 0.111 cfs (50 gpm) during working hours. Treatment system is designed to process this flow, but may continue operation beyond working hours. Attenuation/storage provided by frac tank.

3) Latitude and longitude of each discharge within 100 feet: pt.1:long._____ lat._____; pt.2: long._____ lat._____; pt.3: long._____ lat._____; pt.4:long._____ lat._____; pt.5: long._____ lat._____; pt.6:long._____ lat._____; pt.7: long._____ lat._____; pt.8:long._____ lat._____; etc.

Pt. 1 72d 00' 38.53"W 42d 04' 9.29"N

4) If hydrostatic testing, total volume of the discharge (gals): NA	5) Is the discharge intermittent_____or seasonal_____? Is discharge ongoing Yes ____ No_____?
c) Expected dates of discharge (mm/dd/yy): start 11/05/07 end 12/15/07	
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).	

3. Contaminant information. In order to complete this section, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for **all** of the parameters listed in Appendix III. Historical data, (i.e., data taken no more than 2 years prior to the effective date of the permit) may be used if obtained pursuant to: i. Massachusetts' regulations 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E"); ii. New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act; or iii. an EPA permit exclusion letter issued pursuant to 40 CFR 122.3, provided the data was analyzed with test methods that meet the requirements of this permit. Otherwise, a new sample shall be taken and analyzed.

a) Based on the analysis of the sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within.

Gasoline Only	VOC Only	Primarily Metals	Urban Fill Sites	Contaminated Sumps	Mixed Contaminants	Aquifer Testing
Fuel Oils (and Other Oils) only	VOC with Other Contaminants	Petroleum with Other Contaminants	Listed Contaminated Sites	Contaminated Dredge Condensates	Hydrostatic Testing of Pipelines/Tanks	Well Development or Rehabilitation

b) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids	✓									
2. Total Residual Chlorine	✓									
3. Total Petroleum Hydrocarbons		✓	1	grab	8015M	10	10	1.5e-4	10	9.6e-5
4. Cyanide	✓									
5. Benzene		✓	1	grab	8260	1.0	1.0	1.5e-5	1.0	9.6e-6
6. Toluene	✓		1	grab	8260	1.0	1.0	1.5e-5	1.0	9.6e-6
7. Ethylbenzene	✓		1	grab	8260	1.0	1.0	1.5e-5	1.0	9.6e-6
8. (m,p,o) Xylenes	✓		1	grab	8260	3.0	3.0	4.6e-5	3.0	2.9e-3
9. Total BTEX[4]		✓	1	grab	8260	6.0	6.0	9.2e-5	6.0	5.8e-3

[4]BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
10. Ethylene Dibromide (1,2- Dibromo-methane)	✓		1	grab	8260	0.5	0.5	7.7e-6	0.5	4.8e-6
11. Methyl-tert-Butyl Ether (MtBE)	✓		1	grab	8260	1.0	1.0	1.5e-5	1.0	9.6e-6
12. tert-Butyl Alcohol (TBA)	✓		1	grab	8260	25.0	25.0	3.8e-4	25.0	2.4e-3
13. tert-Amyl Methyl Ether (TAME)	✓		1	grab	8260	0.5	0.5	7.7e-6	0.5	4.8e-6
14. Naphthalene	✓		1	grab	8260	2.0	2.0	3.1e-5	2.0	1.92e-5
15. Carbon Tetra-chloride	✓		1	grab	8260	1.0	1.0	1.5e-5	1.0	9.6e-6
16. 1,4 Dichlorobenzene	✓		1	grab	8260	1.0	1.0	1.5e-5	1.0	9.6e-6
17. 1,2 Dichlorobenzene	✓		1	grab	8260	1.0	1.0	1.5e-5	1.0	9.6e-6
18. 1,3 Dichlorobenzene	✓		1	grab	8260	1.0	1.0	1.5e-5	1.0	9.6e-6
19. 1,1 Dichloroethane	✓		1	grab	8260	1.0	1.0	1.5e-5	1.0	9.6e-6
20. 1,2 Dichloroethane	✓		1	grab	8260	1.0	1.0	1.5e-5	1.0	9.6e-6
21. 1,1 Dichloroethylene	✓		1	grab	8260	1.0	1.0	1.5e-5	1.0	9.6e-6
22. cis-1,2 Dichloro-ethylene	✓		1	grab	8260	1.0	1.0	1.5e-5	1.0	9.6e-6
23. Dichloromethane (Methylene Chloride)	✓		1	grab	8260	5.0	5.0	7.7e-5	5.0	4.8e-5
24. Tetrachloroethylene	✓		1	grab	8260	1.0	1.0	1.5e-5	1.0	9.6e-6

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily Value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
25. 1,1,1 Trichloroethane	✓		1	grab	8260	1.0	1.0	1.5e-5	1.0	9.6e-6
26. 1,1,2 Trichloroethane	✓		1	grab	8260	1.0	1.0	1.5e-5	1.0	9.6e-6
27. Trichloroethylene	✓		1	grab	8260	1.0	1.0	1.5e-5	1.0	9.6e-6
28. Vinyl Chloride	✓		1	grab	8260	2.0	2.0	3.1e-5	2.0	1.9e-5
29. Acetone	✓		1	grab	8260	50	50.0	7.7e-4	50.0	4.8e-4
30. 1,4 Dioxane	✓		1	grab	8260	50	50.0	7.7e-4	50.0	4.8e-4
31. Total Phenols	✓									
32. Pentachlorophenol	✓									
33. Total Phthalates [5] (Phthalate esthers)	✓									
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	✓									
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	✓		1	grab	8270	1.6	1.6	2.5e-5	1.6	1.5e-5
a. Benzo(a) Anthracene	✓		1	grab	8270	0.05	0.05	8.0e-7	0.05	4.8e-7
b. Benzo(a) Pyrene	✓		1	grab	8270	0.1	0.1	1.5e-6	0.1	9.6e-7
c. Benzo(b)Fluoranthene	✓		1	grab	8270	0.05	0.05	8.0e-7	0.05	4.8e-7
d. Benzo(k) Fluoranthene	✓		1	grab	8270	0.2	0.2	3.1e-6	0.2	1.9e-6
e. Chrysene	✓		1	grab	8270	0.2	0.2	3.1e-6	0.2	1.9e-6

[5] The sum of individual phthalate compounds.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (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)
f. Dibenzo(a,h) anthracene	✓		1	grab	8270	0.5	0.5	8.0e-6	0.5	4.8e-6
g. Indeno(1,2,3-cd) Pyrene	✓		1	grab	8270	0.5	0.5	8.0e-6	0.5	4.8e-6
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	✓		1	grab	8270	4.85	4.85	7.5e-5	4.85	4.6e-5
h. Acenaphthene	✓		1	grab	8270	0.3	0.3	4.6e-6	0.3	2.9e-6
i. Acenaphthylene	✓		1	grab	8270	0.3	0.3	4.6e-6	0.3	2.9e-6
j. Anthracene	✓		1	grab	8270	0.2	0.2	3.1e-6	0.2	1.9e-6
k. Benzo(ghi) Perylene	✓		1	grab	8270	0.5	0.5	8.0e-6	0.5	4.8e-6
l. Fluoranthene	✓		1	grab	8270	0.5	0.5	8.0e-6	0.5	4.8e-65
m. Fluorene	✓		1	grab	8270	1.0	1.0	1.5e-5	1.0	9.6e-6
n. Naphthalene-	✓		1	grab	8260	1.0	1.0	1.5e-5	1.0	9.6e-6
o. Phenanthrene	✓		1	grab	8270	0.05	0.05	8.0e-7	0.05	4.8e-7
p. Pyrene	✓		1	grab	8270	1.0	1.0	1.5e-5	1.0	9.6e-6
37. Total Polychlorinated Biphenyls (PCBs)	✓									
38. Antimony	✓		1	grab	7041	2.0	2.0	3.1e-5	2.0	1.9e-5
39. Arsenic	✓		1	grab	7060	0.5	0.5	8.0e-6	0.5	4.8e-6
40. Cadmium	✓		1	grab	6010	0.5	1.0	1.5e-5	1.0	9.6e-6
41. Chromium III	✓		1	grab	6010	4.0	4.0	6.0e-5	4.0	4.0e-5
42. Chromium VI	✓		1	grab	6010	4.0	4.0	6.0e-5	4.0	4.0e-5

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
43. Copper	✓		1	grab	6010	0.5	0.5	8.0e-6	0.5	4.8e-6
44. Lead	✓		1	grab	6010	3.0	3..0	4.6e-5	3.0	2.9e-5
45. Mercury		✓	1	grab	7470	0.04	0.04	6.0e-7	0.04	4.0e-7
46. Nickel	✓		1	grab	6010	3.0	3.0	4.6e-5	3.0	2.9e-5
47. Selenium	✓		1	grab	6010	50	50	8.0e-4	50	4.8e-6
48. Silver	✓		1	grab	6010	5.0	5.0	8.0e-5	5.0	4.8e-5
49. Zinc		✓	1	grab	6010	5.0	5.0	8.0e-5	5.0	4.8e-5
50. Iron	✓									
Other (describe):										

c) For discharges where **metals** are believed present, please fill out the following:

Step 1: Do any of the metals in the influent have a **reasonable potential** to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y____ N✓	If yes, which metals?
Step 2: For any metals which have **reasonable potential** to 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? Metals: Antimony, Arsenic, Cadmium, Lead, Selenium, Silver DF: 59.4 See attached Table 2	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 "Yes," list which metals:

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:

See attached Figure for a schematic of the treatment train. Extracted groundwater will be routed to a 20,000-gallon fractionation tank. Water will be treated in batches to provide for settling of sediments in the frac tank. The treatment train will consist of dual 25-micron filter bags in pressure housings, followed by two 1000-lb granular activated carbon canisters in series. Final polishing will be provided by silt fencing and haybales. Influent, midfluent and effluent sample ports will be provided, along with a totalizing flow meter. Following treatment, water will be discharged by overland pipe to the Mill Brook.

b) Identify each applicable treatment unit (check all that apply):	Frac. tank ✓	Air stripper	Oil/water separator	Equalization tanks	Bag filter ✓	GAC filter ✓
	Chlorination	Dechlorination	Other (please describe): pH adjustment at bag filter as necessary			

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 50 gpm Maximum flow rate of treatment system 75 gpm Design flow rate of treatment system 75 gpm

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):

None planned. GAC is expected to be adequate to address all organic contaminants. Fine particulate filtration and carbon units are expected to reduce the total metals concentration to within acceptable discharge limits.

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

a) Identify the discharge pathway:	Direct____	Within facility__	Storm drain ✓	River/brook____	Wetlands____	Other (describe):

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:

Discharge via temporary overland pipe/hose from treatment system to final filter/haybale barrier and to catchbasin located in East Main Street, which eventually discharges to Quinebaug River, as shown on Figure 2. Actual project /discharge duration is expected to be less than two weeks. Requested permit dates are provided to accomodate construction delays if encounterd.

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 dischargers, 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 B,

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 10.4 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? Yes___ No✓ If yes, for which pollutant(s)?

Is there a TMDL? Yes___ No✓ If yes, for which pollutant(s)?

6. Results of Consultation with Federal Services: Please provide the following information according to requirements of Part I.B.4 and Appendices II and VII.

a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes___ No✓
Has any consultation with the federal services been completed ? No___ or is consultation underway? Yes✓ No___
What were the results of the consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (~~check~~ one):
a "no jeopardy" opinion? ___ or written concurrence✓ on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat?

b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge? Yes___ No___ Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes___ No___

State consultation submitted on November 1, 2007. No findings on Federal database.

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.

Attachments

Figure 1, Site Location Map
Figure 2, Site Plan showing treatment system and discharge location
Figure 3, Process & Instrumentation Diagram
Table 1, Groundwater Analytical Results, October 2007 groundwater grab sample
Table 2, Dilution Factor Calculations
Fish & Wildlife Concurrence
Historic Resources MACRIS on-line Database
Laboratory Analytical Data

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:	Shell Service Station
Operator signature:	[illegible]
Title:	[illegible]
Date:	10/31/2007