

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

MAG910328

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

a) Name of facility/site: Pierce Oil and Gas, Inc.		Facility/site address:	
Location of facility/site: longitude: 42 19' 10" latitude: -71 38' 48"	Facility SIC code(s):	Street: 61- 63 West Main Street	
b) Name of facility/site owner: Pierce Family Trust		Town: Northborough	
Email address of owner: None	State: MA	Zip: 01532	County: Worcester
Telephone no. of facility/site owner:			
Fax no. of facility/site owner: None	Owner is (check one): 1. Federal ___ 2. State/Tribal ___		
Address of owner (if different from site):	3. Private <input checked="" type="checkbox"/> 4. other, if so, describe:		
Street: 22 Wilder Lane			
Town: East Longmeadow	State: MA	Zip: 01028	County: Hampden
c) Legal name of operator: ESS Group, Inc.	Operator telephone no: 401.330.1254		
	Operator fax no.: 401.434.8158	Operator email: sdriscoll@essgroup.com	
Operator contact name and title: Sean Driscoll			
Address of operator (if different from owner):	Street: 401 Wampanoag Trail, Suite 400		
Town: East Providence	State: RI	Zip: 02915	County: Providence
d) Check "yes" or "no" for the following:			
1. Has a prior NPDES permit exclusion been granted for the discharge? Yes ___ No <input checked="" type="checkbox"/> , if "yes," number:			
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes ___ No <input checked="" type="checkbox"/> , if "yes," date and tracking #:			
3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Yes <input checked="" type="checkbox"/> No ___			
4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes <input checked="" type="checkbox"/> No ___			

<p>e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If "yes," please list: MADEP 310CMR 40.0000 RTN 2-0587; RTN 2-10694; RTN 2-10839</p> <p>1. site identification # assigned by the state of NH or MA:</p> <p>2. permit or license # assigned: None</p> <p>3. state agency contact information: name, location, and telephone number: MADEP, 627 Main St., Worcester, MA 01608 (508) 792-7650</p>	<p>f) Is the site/facility covered by any other EPA permit, including:</p> <p>1. multi-sector storm water general permit? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>, if Y, number:</p> <p>2. phase I or II construction storm water general permit? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>, if Y, number:</p> <p>3. individual NPDES permit? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>, if Y, number:</p> <p>4. any other water quality related permit? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>, if Y, number:</p>
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2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed) including:

<p>a) Describe the discharge activities for which the owner/applicant is seeking coverage:</p> <p>See attached additional Information</p>		
<p>b) Provide the following information about each discharge:</p>	<p>1) Number of discharge points: 1</p>	<p>2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft³/s)? Max. flow <u>0.669 ft³/s</u> Average flow <u>0.223 ft³/s</u> Is maximum flow a design value? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> For average flow, include the units and appropriate notation if this value is a design value or estimate if not available.</p> <p>See attached additional information</p>
<p>3) Latitude and longitude of each discharge within 100 feet: pt.1: long. <u>42 19' 10"</u> lat. <u>-71 38' 47"</u>; 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.</p>		
<p>4) If hydrostatic testing, total volume of the discharge (gals): NA</p>	<p>5) Is the discharge intermittent <input checked="" type="checkbox"/> or seasonal _____? Is discharge ongoing Yes _____ No <input checked="" type="checkbox"/> ?</p>	
<p>c) Expected dates of discharge (mm/dd/yy): start <u>03/15/08</u> end <u>06/15/08</u></p>		
<p>d) Please attach a line drawing or flow schematic showing water flow through the facility including: SEE Figure 2 and Figure 3</p> <p>1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s).</p>		

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. SEE Attached Laboratory Reports

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	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		✓	1	grab	2540d	5.0 mg/L	97000	158.5	97000	79.3
2. Total Residual Chlorine	✓		1	grab	4500CL-D	20 ug/L	0	0	0	0
3. Total Petroleum Hydrocarbons	✓		1	grab	1664a	5.0 mg/L	0	0	0	0
4. Cyanide		✓	1	grab	4500cn-ce	10 ug/L	6.0	0.0098	6.0	0.005
5. Benzene	✓		1	grab	624	2.0 ug/L	0	0	0	0
6. Toluene	✓		1	grab	624	2.0 ug/L	0	0	0	0
7. Ethylbenzene	✓		1	grab	624	2.0 ug/L	0	0	0	0
8. (m,p,o) Xylenes		✓	1	grab	624	10 ug/L	232	0.379	232	0.379
9. Total BTEX ⁴	✓		1	grab	624					

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

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							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
10. Ethylene Dibromide ⁵ (1,2- Dibromo-methane)	✓		1	grab	504.1	0.01 ug/L	<0.019	NC	<0.019	NC
11. Methyl-tert-Butyl Ether (MtBE)		✓	1	grab	624	5.0 ug/L	<20	NC	<20	NC
12. tert-Butyl Alcohol (TBA)	✓		1	grab	624	100 ug/L	0	0	0	0
13. tert-Amyl Methyl Ether (TAME)	✓		1	grab	624	0.5 ug/L	<20	NC	<20	NC
14. Naphthalene	✓		1	grab	8270	5.0 ug/L	0	0	0	0
15. Carbon Tetrachloride	✓		1	grab	624	2.0 ug/L	0	0	0	0
16. 1,4 Dichlorobenzene	✓		1	grab	624	2.0 ug/L	<5.0	NC	<5.0	NC
17. 1,2 Dichlorobenzene	✓		1	grab	624	2.0 ug/L	<5.0	NC	<5.0	NC
18. 1,3 Dichlorobenzene	✓		1	grab	624	2.0 ug/L	<5.0	NC	<5.0	NC
19. 1,1 Dichloroethane	✓		1	grab	624	1.0 ug/L	<1.5	NC	<1.5	NC
20. 1,2 Dichloroethane	✓		1	grab	624	2.0 ug/L	<1.5	NC	<1.5	NC
21. 1,1 Dichloroethylene	✓		1	grab	624	2.0 ug/L	0	0	0	0
22. cis-1,2 Dichloroethylene	✓		1	grab	624	2.0 ug/L	0	0	0	0
23. Dichloromethane (Methylene Chloride)	✓		1	grab	624	2.0 ug/L	0	0	0	0
24. Tetrachloroethylene	✓		1	grab	624	2.0 ug/L	0	0	0	0

⁵EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

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							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
25. 1,1,1 Trichloroethane	✓		1	grab	624	2.0 ug/l	0	0	0	0
26. 1,1,2 Trichloroethane	✓		1	grab	624	2.0 ug/l	0	0	0	0
27. Trichloroethylene	✓		1	grab	624	2.0 ug/l	0	0	0	0
28. Vinyl Chloride	✓		1	grab	624	2.0 ug/l	0	0	0	0
29. Acetone	✓		1	grab	624	10.0 ug/l	0	0	0	0
30. 1,4 Dioxane	✓		1	grab	624	50 ug/l	<2000	NC	<2000	NC
31. Total Phenols	✓		1	grab	420.1	1.0 ug/l	60		60	
32. Pentachlorophenol	✓		1	grab	8270c	5.0 ug/l	0	0	0	0
33. Total Phthalates ⁶ (Phthalate esters)	✓		1	grab	8270c	10 ug/l	0	0	0	0
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	✓		1	grab	8270c	5.0 ug/L	0	0	0	0
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		✓	1	grab	8270M					
a. Benzo(a) Anthracene		✓	1	grab	8270M	0.05 ug/L	0.36 ug/L	0.00059	0.36 ug/L	0.00029
b. Benzo(a) Pyrene	✓		1	grab	8270M	2.0 ug/L	0	0	0	0
c. Benzo(b)Fluoranthene	✓		1	grab	8270M	0.1 ug/L	<0.2	NC	<0.2	NC
d. Benzo(k) Fluoranthene	✓		1	grab	8270M	2.0 ug/L	0	0	0	0
e. Chrysene	✓		1	grab	8270M	5.0 ug/L	0	0	0	0

⁶The sum of individual phthalate compounds.

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							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
f. Dibenzo(a,h) anthracene	✓		1	grab	8270M	0.1 ug/L	<0.20	NC	<0.20	NC
g. Indeno(1,2,3-cd) Pyrene	✓		1	grab	8270M	0.15 ug/L	<0.20	NC	<0.20	NC
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		✓	1	grab	8270M					
h. Acenaphthene		✓	1	grab	8270M	0.5 ug/L	0.39	0.000637	0.39	0.000319
i. Acenaphthylene	✓		1	grab	8270M	0.2 ug/L	0	0	0	0
j. Anthracene		✓	1	grab	8270M	2.0 ug/L	0.51	0.000833	0.51	0.000417
k. Benzo(ghi) Perylene	✓		1	grab	8270M	0.1 ug/L	<0.20	NC	<0.20	NC
l. Fluoranthene		✓	1	grab	8270M	0.5 ug/L	0.70	0.0011	0.70	0.000572
m. Fluorene		✓	1	grab	8270M	0.1 ug/L	0.38	0.000621	0.38	0.000311
n. Naphthalene-		✓	1	grab	8270M	0.2 ug/L	2.9	0.0047	2.9	0.0024
o. Phenanthrene	✓		1	grab	8270M	0.05 ug/L	0	0	0	0
p. Pyrene		✓	1	grab	8270M	0.05 ug/L	0.74	0.0012	0.74	0.000605
37. Total Polychlorinated Biphenyls (PCBs)	✓		1	grab	608	0.5 ug/L	0	0	0	0
38. Antimony		✓	1	grab	6020	5.0 ug/L	0.0009	0.00000147	0.0009	0.000000735
39. Arsenic		✓	1	grab	6020	2.0 ug/L	0.0238	0.000389	0.0238	0.00194
40. Cadmium		✓	1	grab	6020	0.5 ug/L	0.0003	4.9e-7	0.0003	2.45e-7
41. Chromium III		✓	1	grab	6020	5.0 ug/L	0.0037 ug/L	6.05e-6	0.0037	3.02e-6
42. Chromium VI	✓		1	grab	3500CR-D	10 ug/L	0	0	0	0

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							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
43. Copper	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	6020	3.0 ug/l	8.1	0.013	8.1	0.0064
44. Lead	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	6020	3.0 ug/l	16.7	0.028	16.7	0.014
45. Mercury	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	6020	0.2 ug/l	0	0	0	0
46. Nickel	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	6020	5.0 ug/l	9.3	0.0152	9.3	0.0076
47. Selenium	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	6020	5.0 ug/l	0	0	0	0
48. Silver	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	6020	2.0 ug/l	0	0	0	0
49. Zinc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	6020	10 ug/l	0	0	0	0
50. Iron	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab	200.7	none	13000	21.25	13000	10.62
Other (describe):	<input type="checkbox"/>	<input type="checkbox"/>								

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

<p><i>Step 1:</i> 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 <input checked="" type="checkbox"/> N <input type="checkbox"/></p>	<p>If yes, which metals? Copper, Lead, Nickel, and Iron</p>
<p><i>Step 2:</i> 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: Copper, Lead, Nickel and Iron DF: <u>1.01</u></p>	<p>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 <input checked="" type="checkbox"/> N <input type="checkbox"/> If "Yes," list which metals: Copper, lead and Iron</p>

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 <input checked="" type="checkbox"/> Has any consultation with the federal services been completed? Yes ___ No <input checked="" type="checkbox"/> or is consultation underway? Yes ___ No <input checked="" type="checkbox"/> 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 <input checked="" type="checkbox"/> Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes ___ No <input checked="" type="checkbox"/>

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.

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: Pierce Oil and Gas, Inc.
Operator signature:
Title: Project Engineer/Lead Operator
Date:

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:						
b) Identify each applicable treatment unit (check all that apply):	Frac. tank <input checked="" type="checkbox"/>	Air stripper	Oil/water separator	Equalization tanks	Bag filter <input checked="" type="checkbox"/>	GAC filter <input checked="" type="checkbox"/>
	Chlorination	Dechlorination	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 <u>150 gpm</u> Maximum flow rate of treatment system <u>300 gpm</u> Design flow rate of treatment system <u>300 gpm</u>						
d) A description of chemical additives being used or planned to be used (attach MSDS sheets): <u>NA</u>						

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

a) Identify the discharge pathway:	Direct <input type="checkbox"/>	Within facility <input type="checkbox"/>	Storm drain <input checked="" type="checkbox"/>	River/brook <input checked="" type="checkbox"/>	Wetlands <input type="checkbox"/>	Other (describe):
b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters: See Attachment - Cold Harbor Brook						
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 <u>B</u> ,						
e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water <u>0.0067</u> 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 <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, for which pollutant(s)? Is there a TMDL? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, for which pollutant(s)?						