

May 5, 2006
File No. 04.0024129.00



US Environmental Protection Agency
RGP-NOC Processing
Municipal Assistance Unit (CMU)
1 Congress Street, Suite 1100
Boston Massachusetts 02114-2023

Re: Application and Notice of Intent
Remediation General Permit
Sturm Ruger - Dorr Business Unit
529 Sunapee Street
Newport, New Hampshire

MAY 10 2006

380 Harvey Road
Manchester
New Hampshire
03103-3347
603-623-3600
FAX 603-624-9463
www.gza.net

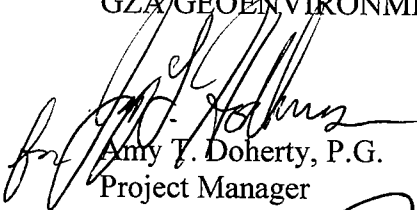
To Whom It May Concern:

On behalf of Sturm, Ruger and Co., Inc. (Sturm Ruger), GZA GeoEnvironmental, Inc. (GZA) hereby provides the required application and Notice of Intent (NOI) for discharge of treated effluent to the Sugar River associated with remedial activities at the above-referenced Site located in Newport, New Hampshire. Two NOIs have been included: one for Sturm Ruger as owner of the facility and operator of the treatment system, and a second for GZA as an additional operator of the treatment system.

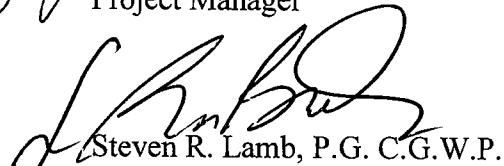
Please do not hesitate to contact us should you have any questions regarding this matter.

Very truly yours,

GZA/GEOENVIRONMENTAL, INC.


Amy T. Doherty, P.G.
Project Manager


Kenneth D. Boivin
Senior Project Manager


Steven R. Lamb, P.G. C.G.W.P.
Principal

Enclosures

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cc: Andrews, Jeff; New Hampshire Department of Environmental Services
Town Clerk, Town of Newport
Karg, Alan; Sturm, Ruger & Co., Inc.

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: Sturm Ruger-Dorr Business Unit		Facility/site address:	
Location of facility/site: longitude: <u>-72.139</u> latitude: <u>43.376</u>	Facility SIC code(s): <u>3369</u>	Street: <u>529 Sunapee Street</u>	
b) Name of facility/site owner: Sturm, Ruger and Company, Inc.		Town: <u>Newport</u>	
Email address of owner: <u>akarg@ruger.com</u>		State: <u>NH</u>	Zip: <u>03773</u> County: <u>Sullivan County</u>
Telephone no. of facility/site owner: <u>603-865-2341</u>	Owner is (check one): 1. Federal ☐ 2. State/Tribal ☐ 3. Private ☒ 4. other, if so, describe: _____		
Fax no. of facility/site owner: <u>603-863-9470</u>			
Address of owner (if different from site): _____			
Street: _____			
Town: _____	State: _____	Zip: _____	County: _____
c) Legal name of operator: Sturm, Ruger and Company, Inc.		Operator telephone no: <u>603-863-3600</u>	
		Operator fax no.: <u>603-863-9470</u>	Operator email: <u>akarg@ruger.com</u>
Operator contact name and title: <u>Alan Karg, Corporate Environmental Engineer</u>			

Address of operator (if different from owner):		Street:	
Town:	State:	Zip:	County:
d) Check "yes" or "no" for the following: 1. Has a prior NPDES permit exclusion been granted for the discharge? Yes <u> </u> No <u> </u> , if "yes," number: 2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes <u> </u> No <u> </u> , if "yes," date and tracking #: 3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Yes <u> </u> No <u> </u> 4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes <u> </u> No <u> </u>			
e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes <u> </u> No <u> </u> 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 <u> </u> N <u> </u> , if Y, number: NHR05A897 2. phase I or II construction storm water general permit? Y <u> </u> N <u> </u> , if Y, number: 3. individual NPDES permit? Y <u> </u> N <u> </u> , if Y, number: NH0100307 4. any other water quality related permit? Y <u> </u> N <u> </u> , 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:
Refer to Attachment A.

b) Provide the following information about each discharge:	1) Number of discharge points:	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)? Max. flow <u>0.28ft³/S</u> Average flow <u>0.04ft³/S</u> Is maximum flow a design value? Y <u> </u> N <u> </u> For average flow, include the units and appropriate notation if this value is a design value or estimate if not available.
3) Latitude and longitude of each discharge within 100 feet: pt. 1: long. <u>-72.1399</u> lat. <u>43.3763</u> ; pt. 2: long. <u> </u> lat. <u> </u> ; pt. 3: long. <u> </u> lat. <u> </u> ; pt. 4: long. <u> </u> lat. <u> </u> ; pt. 5: long. <u> </u> lat. <u> </u> ; pt. 6: long. <u> </u> lat. <u> </u> ; pt. 7: long. <u> </u> lat. <u> </u> ; pt. 8: long. <u> </u> lat. <u> </u> ; etc.		

4) If hydrostatic testing, total volume of the discharge (gals): N/A	5) Is the discharge intermittent _____ or seasonal No _____? Is discharge ongoing Yes ☒ No _____?
c) Expected dates of discharge (mm/dd/yy): start 05/17/06 _____ end _____ undetermined _____	
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).	

Refer to Figure 1.

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 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		☒	5	Grab	160.2	5 mg/L	260,000	0.39	84.2	0.00003
2. Total Residual Chlorine	☒									
3. Total Petroleum Hydrocarbons	☒									
4. Cyanide	☒									
5. Benzene	☒									
6. Toluene	☒									
7. Ethylbenzene ⁴	☒									
8. (m,p,o) Xylenes	☒									
9. Total BTEX ⁴	☒									

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

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)
10. Ethylene Dibromide (1,2- Dibromo-methane)	✓									
11. Methyl-tert-Butyl Ether (MtBE)	✓									
12. tert-Butyl Alcohol (TBA)	✓									
13. tert-Amyl Methyl Ether (TAME)	✓									
14. Naphthalene	✓									
15. Carbon Tetra-chloride	✓									
16. 1,4 Dichlorobenzene	✓									
17. 1,2 Dichlorobenzene	✓									
18. 1,3 Dichlorobenzene	✓									
19. 1,1 Dichloroethane	✓									
20. 1,2 Dichloroethane	✓									
21. 1,1 Dichloroethylene	✓									
22. cis-1,2 Dichloro-ethylene		✓	7	Grab	8260B	1	39	0.000059	16.2	2.45E-05
23. Dichloromethane (Methylene Chloride)	✓									
24. Tetrachloroethylene	✓									

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)
25. 1,1,1 Trichloroethane	✓									
26. 1,1,2 Trichloroethane	✓									
27. Trichloroethylene		✓	11	Grab	8260B	1	28	0.000042	10.2	1.54E-05
28. Vinyl Chloride		✓	11	Grab	8260B	1	12	0.000018	6.2	9.39E-06
29. Acetone	✓									
30. 1,4 Dioxane	✓									
31. Total Phenols	✓									
32. Pentachlorophenol	✓									
33. Total Phthalates ⁵ (Phthalate esters)	✓									
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	✓									
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	✓									
a. Benzo(a) Anthracene	✓									
b. Benzo(a) Pyrene	✓									
c. Benzo(b)Fluoranthene	✓									
d. Benzo(k) Fluoranthene	✓									
e. Chrysene	✓									

⁵The sum of individual phthalate compounds.

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		Average daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
f. Dibenzo(a,h) anthracene	✓									
g. Indeno(1,2,3-cd) Pyrene	✓									
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)										
h. Acenaphthene	✓									
i. Acenaphthylene	✓									
j. Anthracene	✓									
k. Benzo(ghi) Perylene	✓									
l. Fluoranthene	✓									
m. Fluorene	✓									
n. Naphthalene-	✓									
o. Phenanthrene	✓									
p. Pyrene	✓									
37. Total Polychlorinated Biphenyls (PCBs)	✓									
38. Antimony	✓									
39. Arsenic	✓									
40. Cadmium	✓									
41. Chromium III	✓									
42. Chromium VI	✓									

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)
43. Copper	✓									
44. Lead	✓									
45. Mercury	✓									
46. Nickel	✓									
47. Selenium	✓									
48. Silver	✓									
49. Zinc	✓									
50. Iron	✓									
Other (describe):	✓									

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

<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 ___ N ___	If yes, which metals?
<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: _____ 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 "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:

Refer to Attachment B and Figure 3.

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):			

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 20 gpm Maximum flow rate of treatment system 125 gpm Design flow rate of treatment system 125 gpm

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):
 None

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

From the treatment system, treated effluent will be discharged via gravity through approximately 60 feet of 4-inch PVC subsurface piping directly to the Sugar River. The location of the discharge point is illustrated on Figure 2.

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water: Refer to Figure 2.

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 7.93 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 ✓ Refer to Attachment D.

Has any consultation with the federal services been completed? Yes ✓ 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

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. Refer to Attachment C for the analytical data associated with raceway water collected between 2004 and 2006.

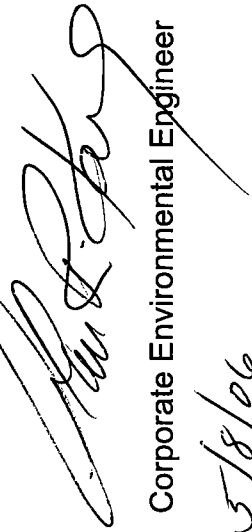
8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

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:

Sturm Ruger - Dorr Business Unit

Operator signature:



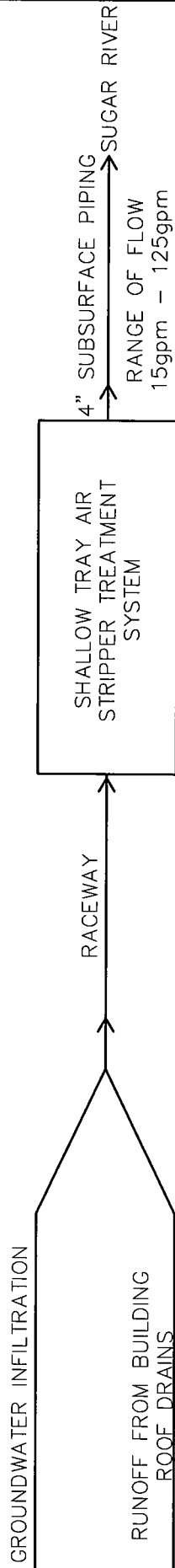
Title:

Corporate Environmental Engineer

Date:

5/8/06

FIGURES



SOURCES OF INTAKE WATER

TREATMENT UNIT

DISCHARGE POINTS AND
RECEDING WATER

REMEDICATION GENERAL PERMIT APPLICATION
STURM RUGER - DORR BUSINESS UNIT
NEWPORT, NEW HAMPSHIRE

SCHEMATIC OF TREATMENT SYSTEM

JOB NO.

24129

FIGURE NO.

1

PROJ MGR: KDB OPERATOR: BJC
DESIGNED BY: ATD
REVIEWED BY: KDB DATE: APR 2006

GZA
GeoEnvironmental, Inc.