

September 24, 2010

Mr. Larry Rose
NC DENR - DWM
Solid Waste Section
1646 Mail Service Center
Raleigh, NC 27699-1646



RE: Semiannual Groundwater Monitoring
Permit No. 97-03
Louisiana Pacific Corporation

Dear Mr. Rose:

Attached are the analytical results from the semiannual groundwater monitoring associated with the boiler ash landfill; Permit No. 97-03 located at Louisiana Pacific's manufacturing facility in Roaring River, NC. The samples were collected on 08/20/2010. The monitoring wells are described in Table 1 and the field measurements recorded the day of the sampling is listed in Table 2.

Table 1 – Groundwater well descriptions

Site	Location	Description
1	FA2	Old downstream well, below east section of landfill
2	FA3	New downstream well, below west section of landfill
3	FA4	New upstream well
4	STREAM	Sampled from the spring/seep below the landfill

Table 2 – Field Measurements

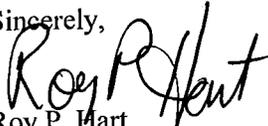
Location	Depth	Conductivity (umhos/cm)	pH	Temperature (deg C)	Turbidity (NTU)
FA2	17'8"	350	6.12	25*	6.5
FA3	16'8"	165	5.92	25*	136
FA4	50'6"	384	5.95	14.6	5.0
STREAM	N/A	1596	5.93	25*	**

* - Temperature readings were improperly taken – data not valid

** - Parameter was measured but not written down.

If there are any questions regarding this report, please contact me at (336) 696-3464.

Sincerely,


Roy P. Hart
EHS Manager

ADDRESS P.O. Box 98
Roaring River, NC 28669

TEL 336.696.2751
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BUILD WITH US.

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6081

L P CORPORATION (LANDFILL)
ATTN: ROY HART
P.O. BOX 98
ROARING RIVER ,NC 28669

DATE COLLECTED: 08/20/10
DATE REPORTED : 09/13/10

REVIEWED BY: 

PARAMETERS	MDL	SWSL	Site #1	Site #2	Site #3	Site #4	Analysis		Method
							Date	Analyst	Code
Antimony, ug/l	0.22	6.0	--- U	--- U	--- U	--- U	08/31/10	LFJ	EPA200.8
Arsenic, ug/l	0.04	10.0	1.4 J	---	0.3 J	---	08/31/10	LFJ	EPA200.8
Barium, ug/l	0.03	100.0	171	54.7 J	54.4 J	7.8 J	08/31/10	LFJ	EPA200.8
Beryllium, ug/l	0.02	1.0	0.1 J	---	0.1 J	---	08/31/10	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	0.3 J	0.1 J	0.2 J	0.2 J	08/31/10	LFJ	EPA200.8
Cobalt, ug/l	0.10	10.0	10	0.6 J	1.8 J	0.2 J	08/31/10	LFJ	EPA200.8
Copper, ug/l	0.03	10.0	4.8 J	1 J	6.3 J	1 J	08/31/10	LFJ	EPA200.8
Total Chromium, ug/l	0.03	10.0	0.4 J	1.8 J	10	0.2 J	08/31/10	LFJ	EPA200.8
Lead, ug/l	0.01	10.0	1.2 J	0.2 J	0.7 J	0.1 J	08/31/10	LFJ	EPA200.8
Nickel, ug/l	0.05	50.0	4.8 J	4.5 J	6.1 J	0.5 J	08/31/10	LFJ	EPA200.8
Selenium, ug/l	0.32	10.0	0.7 J	---	---	---	08/31/10	LFJ	EPA200.8
Silver, ug/l	0.03	10.0	---	---	---	---	09/01/10	LFJ	EPA200.8
Thallium, ug/l	0.05	5.5	---	---	---	---	08/31/10	LFJ	EPA200.8
Vanadium, ug/l	0.03	25.0	3.1 J	1.7 J	6.6 J	1.6 J	08/31/10	LFJ	EPA200.8
Zinc, ug/l	0.08	10.0	100	5.3 J	17	15	08/31/10	LFJ	EPA200.8

All QC requirements were not met: * No dilution depleted at least 2.0 mg/l with a residual of at least 1.0 mg/l.

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

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CLIENT: L P CORPORATION (LANDFILL)
ATTN: ROY HART
P.O. BOX 98
ROARING RIVER, NC 28669

CLIENT ID: 6081
ANALYST: MAO
DATE COLLECTED: 08/20/10
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REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Site #1	Site #2	Site #3	Site #4
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	10.00	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

SAMPLING INSTRUCTIONS AND FORM COMPLETION

FAILURE TO PROPERLY CHILL, CHEMICALLY PRESERVE, COLLECT IN PROPER BOTTLE TYPES, MEET REQUIRED HOLDING TIMES, NEUTRALIZE CHLORINE IN CHLORINE SENSITIVE SAMPLE, AND SEAL COOLERS WITH TAPE WILL RESULT IN SAMPLES BEING REJECTED BY THIS LABORATORY AS PER NORTH CAROLINA REGULATORY CODE.

1) Samples not falling within the established guidelines will need to be re-collected. The client will be contacted and informed of the deviation and asked to collect another set of samples. The client may wish for the laboratory to proceed with the analyses of the current samples. Any samples analyzed outside of the required guidelines will be “qualified”. This means that a note will be included on the sample result and “Chain of Custody” specifying the deviation. The laboratory is also **required** to send a letter to the State noting the deviations.

2) **Sample Temperature.** Samples for compliance monitoring must be chilled with wet ice to a temperature of 6C or less. Freezing is not permitted. Samples delivered to the lab shortly after collection may not have had enough time to be chilled below 6C. In this case the temperature at time of collection **must** be noted in the space provided. The samples will meet the requirements of the regulation if there is a temperature drop from the time of collection until received in the lab. Regardless, all samples should be packed in wet ice using as much ice as will fit in the cooler.

3) **Sample Chemical Preservation.** Many samples require a chemical preservation such as Sulfuric Acid or Sodium Hydroxide. The laboratory will either provide the preservative in the sample bottle, or in the case of 40 ml. Volatiles Vials, provide a bottle of Acid with detailed descriptions on how to collect the sample. Never rinse sample bottles before collecting samples. Any residue or liquid in the bottle is required for proper chemical preservation. The lab must verify proper chemical preservation upon arrival in the lab and will note this information in the spaces provided on the front of this form.

4) **Chlorine Neutralization.** Some samples require that any Total Chlorine Residual be removed at the time of collection. The lab will provide the proper neutralizing agent in the sample bottle when technically possible. There are some samples (**Total Kjeldahl Nitrogen and Ammonia Nitrogen**) where this is not possible due to interferences between the required chemical preservation (Acid) and the dechlorinating agent. Therefore, these samples **must** be de-chlorinated at the time of collection before being placed in our sample bottles. Sodium Thiosulfate is the chemical of choice to neutralize chlorine. It must be added to your sample and then the sample checked for Total Chlorine before the sample is poured in our bottle. Facilities using chlorine for disinfection should have a means of measuring Total Chlorine. Non-chlorinated sample sources will not need to be checked. The person neutralizing the chlorine must put his initials in the “**Chlorine Neutralized at Collection**” row on the front of this form above the proper parameter. Samples such as Coliforms (which have Thiosulfate in the bottles shipped from the lab) will be checked for proper neutralization upon arrival in the lab. It is also required that you note the “Total Chlorine at Collection” on the front of this form for any sample locations applicable. This value would be before any neutralization is performed.

5) A “C” for Composite Sample or a “G” for **Grab** Sample should be placed in the box for all requested parameters.

6) **Other information required to be completed by the client are:**

Collection Date and Collection Time for each sample location	Temperature at Time of Collection
Printed name of person or persons collecting samples	Signature, Date, and Time samples are relinquished
Other added sample locations and analyses required	Type Of Disinfection
Deletion on the form for any samples which are not needed (example: dry upstream location)	
Any other information felt to be pertinent should be included in the “Comments” section	

CONSIDERATIONS:

Coliform and Enterococci samples have a holding time of 6 hours from time of collection to time of analysis. Therefore, samples should be collected as late in the day as possible to allow enough time for transportation, checking in at the lab and analysis.

BOD samples have a 48 hour holding time and are set in the lab Monday through Friday.

Other samples such as Nitrate, Ortho Phosphorus, Settleable Matter, Turbidity, Color, and MBAS also have a 48 hour holding time. The lab reserves the right to establish required sample collection and delivery dates in order to meet the required holding times.

CAUTION

These sample bottles may contain acid or other corrosive and potentially harmful chemicals. Laboratories are required to add these chemicals for certain analyses in order to comply with EPA preservation requirements. Use extreme care when opening and handling the bottles. If any chemical should get on your skin or clothes, flush liberally with water and seek medical attention.