



Jeremiah W. (Jay) Nixon, Governor

Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

dnr.mo.gov

May 20, 2011

CERTIFIED MAIL – 7009 3410 0001 9259 0451
RETURN RECEIPT REQUESTED

Heidi Blischke, R.G., L.H.G.
Principal Hydrogeologist
GSI Water Solutions, Incorporated
55 Southwest Yamhill Street, Suite 400
Portland, OR 97204

RE: Comments on Sampling and Analysis Plan, Greenfield Environmental Multistate Trust LLC, Springfield, Missouri, EPA ID# MOD007129406

Dear Ms. Blischke:

The Missouri Department of Natural Resources' (Department) Hazardous Waste Program received the 2010 Annual Groundwater Corrective Action Report for the Greenfield Environmental Multistate Trust, LLC (Trust), Springfield, Missouri, site on April 1, 2011. The Department will send the Trust a checklist and comment letter on the report in the near future. Page 3-1 references the 2004 Sampling and Analysis Plan (SAP).

The Department reviewed a Class 2 Permit Modification request from Tronox, containing a draft revised SAP dated June 4, 2008. The Department determined that the Class 2 Permit Modification submitted was actually a Class 1 with prior director approval. This was due to the inability to determine that the additional wells added were due to the hazardous waste management units at the facility. The data of the off-site investigation found comingled constituents from the facility and other sources in the area.

A comment letter dated October 28, 2009, was sent to Mr. A. Keith Watson. The letter included advance comments on the revised SAP and approved Table 1, which listed the wells and frequency of sampling. At that time a more comprehensive SAP Checklist was being considered, and the Department instructed Tronox to wait for additional comments prior to submitting a revised SAP with updates to address the issues. Due to priorities, the updated checklist was not finalized; therefore, the Trust should address the following comments and submit appropriate updates to the revised 2008 SAP as a Class 1 with prior director approval permit modification. The Trust may also include additional changes to the revised SAP as long as they qualify as a Class 1 with prior director approval.



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Please note that RW-21 was approved for abandonment; however, after free product was discovered, the Department requested that annual sampling be continued. Additionally, WL-MW-02, WL-MW-03, and WL-MW-04 should be sampled semi-annually due to product being detected in WL-MW-03. Table 13, titled 2011 Planned Sampling Program, in the 2010 Annual Groundwater Corrective Action Report, does include these wells. Also, Appendix IX. sampling done on Wells SMW-17, SMW-22R, and PW-20 in 2010, is done every five years. As mentioned in our conference call on May 17, 2011, the WL series wells to be sampled are on Mr. Proctor's property. We understand the Trust has contacted Mr. Proctor about renewing or extending the agreement to allow the sampling to continue.

The SAP should contain an adequate level of detail to address all issues that might affect the quality of groundwater and surface water samples required by the Missouri Hazardous Waste Management Facility Part I Permit and the proper management of those samples. The SAP should include sufficient information to be able to serve as a complete guide to a new sampling team, if necessary.

The following issues were identified using the SAP Checklist. The Health and Safety Plan (HASP) needs revision, and the Quality Assurance Project Plan (QAPP) needs to be the most recent version.

1. Figure 1 referenced on page 1 of the SAP should be included.
2. Section 2.5.5 on trip blanks should include a protocol on how the trip blanks are prepared.
3. Surface water sampling locations discussed on page 9 should be shown on a figure.
4. On page 13, Section 4.2.1 and page 14, Section 5.2.1 Field Compositing of Surface Soil and Sub-Surface Soil, respectively, the last sentence indicates that the excess soil is discarded. How is the contaminated soil handled? Please revise to address this.
5. Figure 3, 4, and 5 referenced on page 17 should be included in the SAP.
6. RW-21 annual sampling and WL-MW-04 semi-annual sampling should be added to Table 1 of the revised 2008 SAP.
7. Appendices referenced in the draft need to be included.
8. The HASP, dated November 22, 2002, should be updated to reflect current conditions at the facility and to list the current staff involved in the groundwater and surface water monitoring. The HASP should be included in the appendices.

9. The most recent QAPP from Lancaster Laboratories that the Tronox 2004 SAP contained was revised October 4, 2002. The laboratory should have a more recent QAPP that should be included as an appendix in the current SAP.
10. The SAP does not discuss a medical monitoring program. Personnel should be enrolled in a medical monitoring plan and it should be discussed in the HASP.
11. During a sampling event, any deviations from the planned methodology prescribed in the SAP should be noted and presented in the Annual Groundwater Report so that these methods may be reviewed and verified by the Department.
12. Protocol for trip blank preparation should be included in the SAP.
13. The SAP should specify field procedures for collecting duplicate samples and indicate the frequency at which they should be taken.

The Trust should incorporate these comments in the next sampling event. Please revise the draft 2008 SAP, and submit appropriate updates within 60 days of receipt of this letter. Once a revised SAP is approved, the Trust will be notified by the Department. The Trust must send a notice of the modification to everyone on their facility mailing list and the appropriate units of state and local government within 90 calendar days after the approval, as outlined in Code of Federal Regulations 40 CFR 270.42(a)(1)(ii), incorporated by reference in Code of State Regulations 10 CSR 25-7.270(1).

If you have any questions regarding this letter, please contact me at the Missouri Department of Natural Resources, Hazardous Waste Program, P.O. Box 176, Jefferson City, MO 65102-0176, or by phone at (573) 751-3553 or 1-800-361-4827, or by e-mail at don.dicks@dnr.mo.gov. Thank you.

Sincerely,

HAZARDOUS WASTE PROGRAM

[Original signed by Donald L. Dicks]

Donald L. Dicks
Environmental Engineer
Permits Section

DLD:mj

c: Ms. Cindy Brooks, Greenfield Environmental Trust via e-mail
Mr. Ty Griffith, Greenfield Environmental Trust via e-mail
Mr. Kurt Limesand, Project Manager, U.S. EPA Region 7
Southwest Regional Office, Missouri Department of Natural Resources