



---

west virginia department of environmental protection

---

Office of Environmental Remediation  
601 57th Street SE  
Charleston, WV 25304  
Phone: 304-926-0455

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
dep.wv.gov

April 30, 2015

Certified Mail #91 7199 9991 7033 6612 2796

Mr. Mark Welch, CRO  
Freedom Industries  
1015 Barlow Drive  
Charleston, WV 25311

RE: VRRP Interim Measures Work Plan Comments, VRP# 15017  
Freedom Industries, Charleston, Kanawha County

Dear Mr. Welch:

A review of the above referenced document dated April 22, 2015, and received by the Office of Environmental Remediation on 4/22/2015, has been completed. Our comments are provided as follow:

First and foremost, the plan does not contain any proposed excavation of MCHM/PPH impacted soils, as had been discussed during the VRP Initial Site Visit held April 6, 2015. It is WVDEP Office of Environmental Remediation's (WVDEP/OER) understanding that an addendum will be submitted to this plan with a proposal for contaminated soil excavation.

Section 1.1 – Chemicals of Potential Concern (COPC's)

1. Remedial actions taken by Freedom Industries (Freedom) have caused the former engineering control (cap/paving) to be removed, allowing infiltration and potential mobilization of the contaminants formerly controlled by the cap and Land Use Covenant (LUC) established under Voluntary Remediation Program Project #04506. Therefore Freedom must analyze for these constituents (petroleum compounds) to determine if mobilization has occurred as part of the VRP interim measures and site investigations.

## Section 2.1 – Storm Water Collection Trench Installation

WVDEP/OER had initially stated that we were not opposed to an additional trench installation. However, the trench proposed in this VRP Interim Measures Work Plan is not what was discussed in the initial site visit on April 6, 2015. WVDEP cannot approve the plan as proposed for the following reasons:

- The new trench is proposed to be installed “further downslope” of the existing trench – this places the trench on the riverbank below the gravel road and existing trench.
  - WVDEP has serious concerns about the stability of the riverbank, should a new trench be attempted. A slope stability analysis would be needed to determine if the riverbank materials could support a trench.
  - Removal of riverbank vegetation to install the trench will increase the instability of the area.
  - Installation of a trench could cause the entire riverbank in this area to collapse, including the existing trench.
  - WVDEP also has serious concerns about inundation/breaching of the trench by the river if it were able to be installed.
  - Should a trench be attempted, a permit may be needed from the US Army Corps of Engineers – this would need to be explored along with the slope stability analysis previously mentioned.
2. Why not excavate the old (current) trench now instead of just covering this “secondary” source?
  3. Rather than trying to install a new trench for storm water runoff evaluation, why not select an area upgradient of the current trench to conduct this evaluation?

WVDEP/OER has the following questions/concerns with regard to the currently proposed new storm water collection trench installation:

4. Will there be a way to sample the old trench once the new trench is installed? (Sampling the old trench after the new trench is installed will help determine if there is subsurface migration of impacted water to this trench.)
5. Is the old/current trench able to be pumped “dry”?
6. How much further downslope will the new trench be located?
7. What will be the relief (difference in elevation) between the normal pool elevation of the river and the new trench? (legitimate flooding concerns, as noted above)
8. Is the trench even able to be installed on the riverbank below the current trench level? (legitimate stability concerns, as noted above)

9. What are the criteria to determine an “appropriate sample” to demonstrate that storm water runoff does not impact the Elk River? (As previously discussed, neither Freedom nor WVDEP can control the use of the river; therefore potential impact to the river should not be evaluated in terms of risk alone. WVDEP has stated there should be no current or future impact to the river as a result of the January 2014 spill. Sample results for all media flowing to or in contact with the river must demonstrate MCHM and other contaminants related to the spill are “non-detectable” - ND - to the lowest possible detection limits – at the Elk River.)
10. Due to the potential for historical spills at the site, and previous and current excavation and demolition activities, storm water samples must be sampled for all site COPC’s listed in Section 1.1 of the plan, as well as for the petroleum constituents previously stored at the site.
11. The figure with the location of the new trench is Figure 1 (not Figure 2).
12. The Figure with the details (configuration) of the new trench is Figure 2 (not Figure 3).

#### Figure 1 – Proposed Storm Water Collection Trench Layout

13. Why is the new trench shorter than the existing trench?
14. What was the basis for determining the northern and southern extent of the trench?
15. What is the estimated volume of the trench, both empty and filled with DOH #1 coarse aggregate?
16. Has the volume of the trench been considered in determining the pump capacity needed to dewater the trench, especially during a large precipitation event?

#### Figure 2 - Proposed Storm Water Collection Trench Details

17. The collection trench detail shows the 40 ml geomembrane sloping back under the toe of the slope – won’t this allow subsurface drainage to the east under the slope?
18. Will there be discharge at the northern and southern ends of the geomembrane at the toe of the slope? How will this be controlled?
19. Shouldn’t the geomembrane cover the wall of the western side of the trench so that there is no seepage through this wall of the trench to the river?

#### Section 2.2 – Storm Water and Surface Water Sampling

20. A baseline sample should be collected from the old/existing trench prior to covering. (If the trench is to be excavated, both pre- and post-excavation water samples should be obtained, as well as confirmatory soil samples.)
21. The new trench should be sampled both during precipitation events and during dry weather (minimum of 2 sampling events for each over a one month period), to determine

- if storm water collection and disposal may cease. Surface water samples (see below) should be collected during both events. A post-storm water collection monitoring plan must also be proposed to demonstrate that storm water is not impacting the river.
22. Surface water samples should be obtained for each twenty-five feet (25') of riverbank beginning with the northern end of the trench, with the final sample taken just downriver of the southern end of the trench (in lieu of the 100' sample). Also, one upriver sample relative to the trench is needed. [6 total samples – upriver, northern end of trench (0'), 25', 50', 75', and just downriver of southern end of trench (in lieu of 100')]. Precise descriptions of surface water sampling locations (depth, distance from shore) must be provided as well as located on a figure.
  23. Sediment samples should also be obtained, preferably during the initial surface water sampling event. Precise descriptions of sediment sampling locations must be provided as well as located on a figure. (If sediment is not sampled at the same time as surface water, how do you know if any detections in surface water are from storm water runoff or leaching from sediment?)
  24. River bank samples are also needed since the majority of the initial impact to surface water was a result of overland (surface) flow, and there may be impacts in soil below the collection trench. Precise descriptions of river bank sampling locations must be provided as well as located on a figure.
  25. Sampling procedures and equipment are required for media not included in the current work plan.
  26. For all proposed sample media, the following tables are needed:
    - a. Table listing chemicals of potential concern, analytical methods, detection limits, reporting limits and VRP De Minimis Standards (as applicable).
    - b. Table with sample matrix, analytical method, parameter, minimum sample volume, sample container, preservative and holding times.
  27. For all required sample media, the lowest possible detection limits for laboratory analyses are required to ensure there will be no impact to the river. A West Virginia Certified Laboratory is required to conduct all sample analyses.

### Section 3.1 – Laboratory Scheduling

28. TestAmerica, Inc. should be contacted immediately to determine if they are able to analyze for the COPC's and to determine what detection and reporting limits they can achieve. The goal for surface water is no detections at the lowest detection limits possible. The WVTAP report stated that Eurofins, Lancaster Laboratories Environmental, LLC was able to achieve a .5 ppb detection limit and 1 ppb reporting limit for MCHM in tap water samples, while ALS Environmental Laboratory could only achieve 2.7ppb and 5 ppb, respectively, for detection and reporting limits. As noted above, detection and reporting limits for all site media should be the lowest possible.

Section 3.3.2 – Storm Water Sampling Procedures

29. Surface water sampling – note that the 5-gallon bucket will need to be decontaminated and new rope used for each surface water sample collected.

Section 4.4 – Data Validation

30. Please specify who will be conducting the third party data validation.

Schedule

31. A schedule must be included for all activities proposed in the revised work plan.

For the reasons noted herein, WVDEP/OER cannot approve the VRRP Interim Measures Work Plan at this time. A Response to Comments document as well as a Revised VRRP Interim Measures Work Plan must be submitted by May 8, 2015. WVDEP/OER personnel are available to discuss the VRRP Interim Measures Work Plan and proposed revisions. I can be contacted by phone at 304-926-0499, ext. 1265 or email at David.W.Long@wv.gov.

Sincerely,



Dave Long  
Project Manager

cc: Ira Buchanan, LRS  
Charleston File # 15017  
ec: Patty Perrine, Interim Program Manager, WVDEP/OER