



west virginia department of environmental remediation
Office of Environmental Remediation

VRP Project #: **15017**
Brownfield Site: Yes No
Report Date: **9-17-15**
Page 1 of 7

OFFICE OF ENVIRONMENTAL REMEDIATION
VOLUNTARY REMEDIATION PROJECT
SITE VISIT/INSPECTION REPORT

APPLICANT

LRS

NAME: Freedom Industries			NAME: Matt Ford			LRS# 240					
ADDRESS: 1015 Barlow Drive			ADDRESS: 533 N. Jefferson St., Suite 3								
CITY: Charleston		STATE: WV		ZIP: 25311		CITY: Lewisburg		STATE: WV		ZIP: 24901	
PHONE: (412)498-8258						PHONE: (304) 520-4260					
CONTACT: Mark Welch, Chief Restructuring Officer											

LOCATION

FACILITY: Freedom Industries			STREET ADDRESS: 1015 Barlow Drive					
CITY: Charleston			COUNTY: Kanawha			PHONE: ()		
DATE OF VISIT: August 26, 2015			TIME IN: ~12:15 pm			TIME OUT: ~ 5:30 pm		

SITE STATUS: Abandoned <input checked="" type="checkbox"/> Active <input type="checkbox"/>			UST's: Existing <input type="checkbox"/> Former <input checked="" type="checkbox"/>			SURFACE SOIL STAINING: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
SURFACE WATER ON OR ADJACENT TO PROPERTY: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			EXISTING MONITORING WELLS: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
Existing Structures Including Dimensions and Use: 1. Former/current office building (offices, small coal testing lab and storage) - ~125'L x ~85'W x ~30'H; 2. Garage/maintenance and vehicle storage building - ~225'L x ~55'W x ~20'H								
Chemicals of Potential Concern: 4-methylcyclohexanemethanol (MCHM), propylene glycol phenyl ether (PPH), calcium chloride, ethylene glycol, glycerin, polychlorinated biphenyls (PCB's), lead, petroleum hydrocarbons, volatile organic compounds (VOC's) and semi-volatile organic compounds (SVOC's)								
DRINKING WATER SOURCE: GW <input type="checkbox"/> Public <input checked="" type="checkbox"/> Other			SURROUNDING LAND USE: Residential <input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Industrial <input type="checkbox"/> Recreational <input type="checkbox"/> Agricultural <input type="checkbox"/> Other <input type="checkbox"/>					
OTHER AREAS OF CONCERN:								

COMMENTS

On-site ~ 12:15 pm to observe test pit installations as proposed in the VRRP Interim Site Assessment Work Plan - Revision #1. The purpose of the test pits was to determine the extent of the "cobble fill" material referenced in previous reports and determine the extent of MCHM/PPH impacted material. Verbal approval to proceed with the work plan was communicated to Core on 8-25-15. Matt Ford, LRS, Jared Sommers, Field Tech, Maggie Gorczynska, Staff Scientist and Sotero Svingos, PG, Senior Scientist with CORE Environmental Services, Inc on-site. Gary Houseman of SPSI West, Inc also on-site running backhoe. Currently excavating test pit #4, however, order of test pit excavations is not the same as test pit numbers on the figure included in the work plan (Figure - Proposed Supplemental Site Assessment Activities - see attached). Order of test pit excavations with respect to the figure is as follows: Excavation/Test Pit #1 is #11 on the figure, Test Pit #2 is #12 on the figure, #3 is #13, #4 is #10, #5 is #1, #6 is #9, #7 is #2, #8 is #8, #9 is #6, #9A is an additional test pit dug perpendicular to #9, #10 is #3, #11 is #7, and #12 is located between #'s 4&5 on the figure. For this report, the test pits will be referenced in the order in which they were excavated.

- Test Pit #'s 1-3 were excavated before I was on-site - these 3 were located on the upper portion of the site where the aboveground storage tanks (AST's) were previously located. Test pits 2 & 3 were actually located beneath where AST's #394 and #393, respectively, sat. AST's #394 and #393 most recently contained glycerin. Very little "cobble fill" material was found during the excavation of test pits #1-3, however, petroleum odors were strong and heavy staining was clearly evident. No MCHM odors were present

- Test Pit #4 was located on the upper portion of the site along the remaining southern-most portion of the northern extent of the western secondary containment wall (see test pit #10 on the figure). Soil fill material (silty to sandy clay) was present to 4 feet. At 4 feet, yellow, grey and red brick remnants were encountered and a moderate to strong MCHM/PPH odor was noted; this appears to be what was previously referenced as "cobble fill"; for purposes of this report, this material will be referred to as construction and demolition debris (C&D debris). The C&D debris was very loosely compacted and in fact caved into the excavation as it deepened.

This material was present to approximately 8-9 feet in depth, where soil fill (or possibly native soil) was encountered. The excavation was extended toward the northern end of the site to determine the extent of the C&D debris - the debris extended approximately 27 feet past the southern end of the northern extent of the western secondary containment wall, and appeared to thin-out in this direction. For all test pits, Core screened a sample of material each two feet in depth from the surface to the total depth of the test pit with a photoionization detector (PID). Soil samples were obtained for lab analysis from the sample with the highest field-screening reading and from .5 to 1 foot below the bottom of the C&D debris. If no debris was encountered, samples were taken from the highest field-screened interval and from the deepest soil interval. All excavations were backfilled after sampling. Once the test pits were backfilled, wooden stakes were used to mark the test pit locations for later surveying.

- Test Pit #5 was located on the upper portion of the site and in-between but further west of test pits 2 and 3 (see pit #1 on the figure). C&D debris was encountered at about 2 feet, but only extended to about 4 feet. A moderate petroleum odor and a slight MCHM odor were noted in this test pit. A second test pit was excavated at the northern end of #5 (#5A), but perpendicular to #5 and extended east towards Barlow Drive. C&D debris was present to the furthest extent of this excavation (approximately 25' from the eastern secondary containment wall) but the excavation was halted due to the presence of a marked natural gas line. This excavation extended further east than test pits 2 and 3, where no C&D debris was found. A petroleum odor was present, but no noticeable MCHM odor.

- Test Pit #6 was excavated in the area of the former fire house in the path of the spill from the AST to the top of the slope (see test pit #9 on the figure). This was also the northern extent of the southern section of the remaining western secondary containment wall. Concrete was removed in a portion of this area and MCHM/PPH odors were very strong. No C&D debris was found in this area, but an attempt was made to determine the depth of MCHM/PPH-impacted soil. Odors were strong to overpowering as the excavation deepened. Soil was moist at 10 feet and wet at 12 feet. The excavation continued an additional 2 feet and was halted; odors were still very strong to overpowering at 14 feet, total depth.

- Test Pit #7 was located on the top of the slope leading down to the lower terrace (trench location), just below the southern end of Test Pit #4 (see Test pit #2 on the figure). C&D debris is present on the surface of the slope in this area mixed with soil fill material - no MCHM/PPH odors at the surface. C&D debris and soil fill present to 8 feet where first petroleum odors were noticed, but no MCHM/PPH odors. C&D debris/soil fill continued to 10 feet which appeared to be the base of the C&D debris - a slight MCHM/PPH odor and moderate petroleum odor was detected at the base of the C&D debris. A grey sand zone was encountered at approximately 11 feet with a moderate to strong petroleum odor. Encountered what appeared to be native soil (silty red/brown clay) at 12 feet, where both petroleum and MCHM/PPH odors were present. Excavation stopped at 12'.

Test Pits completed for today, depart ~ 5:30 pm.

A numbered list of photos taken during the site visit follows, with the photos attached below:

1. View of Test Pit locations 1-3, looking north
2. View of initial C&D debris encountered in Test Pit #4
3. Extent of C&D debris in Test Pit #4
4. Extending Test Pit #4 towards northern end of site; location with respect to northern end of site
5. Initial C&D debris in Test Pit #5
6. Extending Test Pit #5A towards eastern side of site (towards Barlow Drive)
7. Eastern extent of Test Pit #5A
8. View of Test Pit #5 looking north
9. Location of Test Pit #6 looking south; also shown is sump access for upper sump & pump installed at the end of July
10. Location of Test Pit #6 looking southwest towards Elk River
11. Test Pit #6 at 12 feet - wet at bottom
12. Location of Test Pit #7, looking downslope (southwest) towards Elk River
13. C&D debris/soil pile from excavation of Test Pit #7
14. Obtaining samples for screening - Test Pit #7, looking north
15. C&D debris caving in Test Pit #7
16. Continuing to excavate Test Pit #7, looking northeast

Project Manager's Signature:



Date: 8-26-15

1.



3.



2.



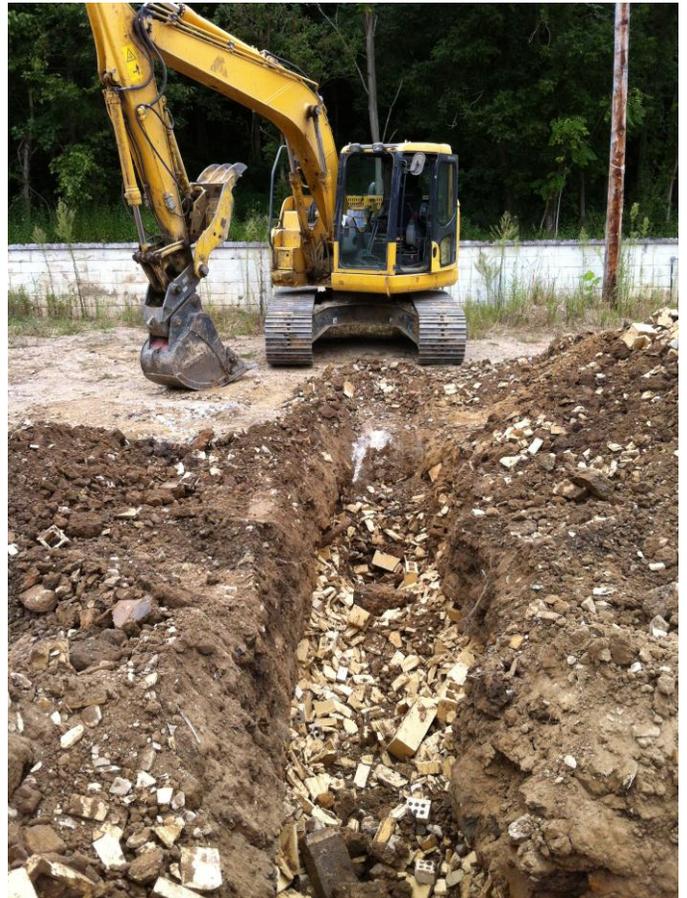
4.



5.



7.



6.



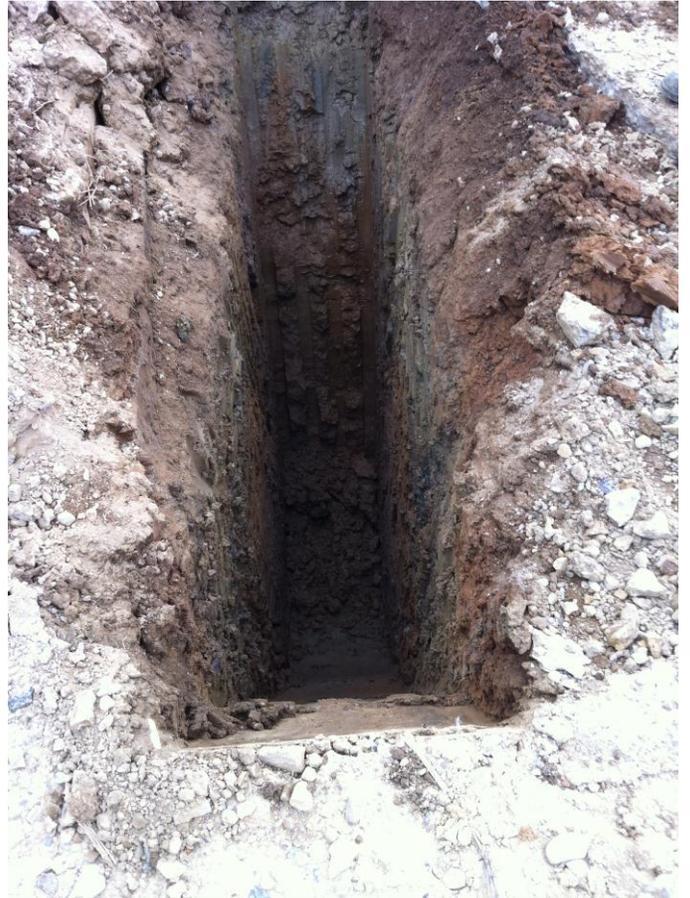
8.



9.



11.



10.



12.



13.



15.

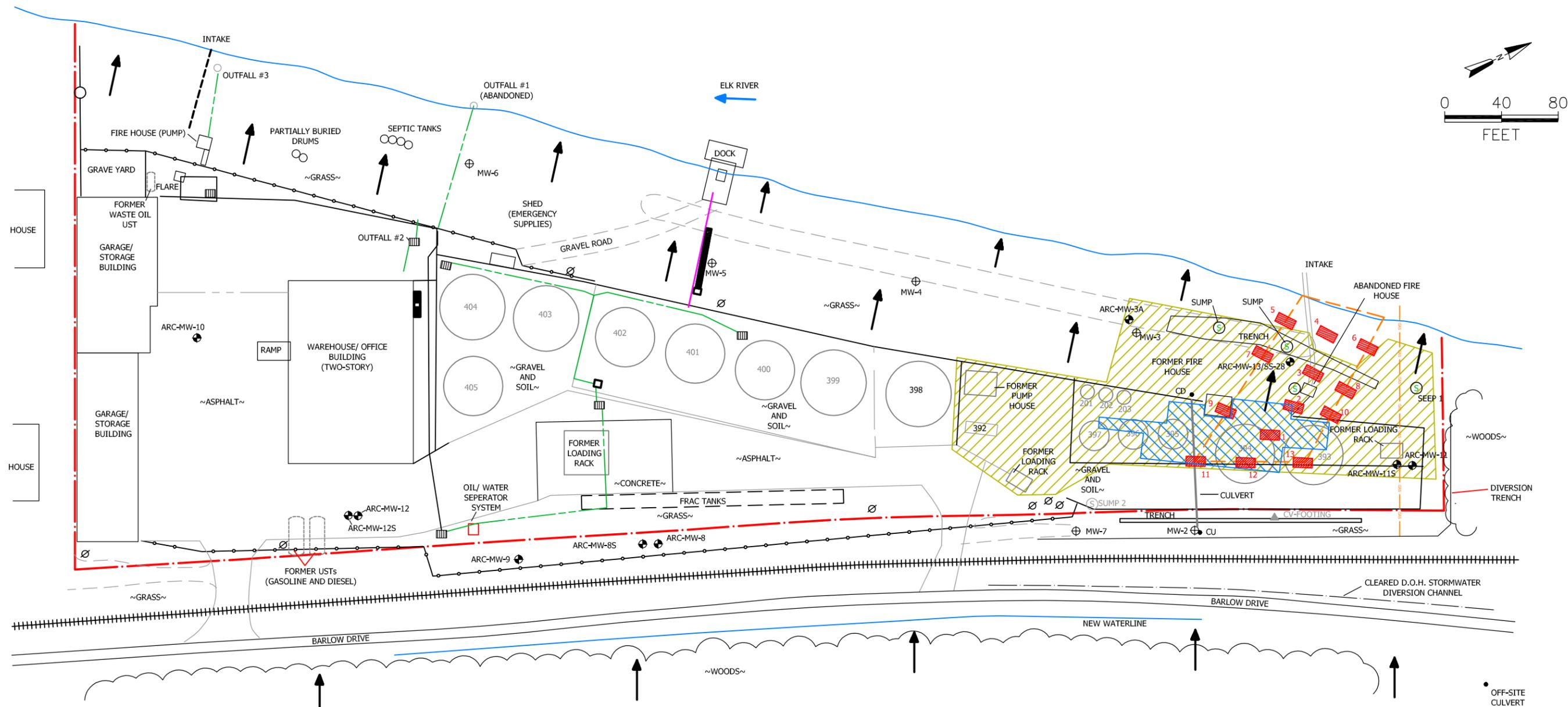


14.



16.





LEGEND

- · — · — · PROPERTY BOUNDARY
- FENCE
- RAILROAD TRACKS
- PROPANE PIPING
- SLOPE DIRECTION
- STORM SEWER LINE
- NATURAL GAS LINE
- ESTIMATED LIMITS OF COBBLE FILL
- FORMER SOIL EXCAVATION
- CATCH BASIN
- POLE
- MONITORING WELL
- MONITORING WELL (ARCADIS)
- SUMP
- CULVERT SAMPLE
- PROPOSED GEOPHYSICAL SURVEY AREA
- PROPOSED TEST PIT LOCATION

NOTES:

1. HISTORICAL SITE FEATURES ARE GRAY
2. ALL ASTs HAVE BEEN REMOVED
3. FUEL LOADING RACKS HAVE BEEN REMOVED
4. OIL LOADING RACK HAS BEEN REMOVED



TITLE:
PROPOSED SUPPLEMENTAL SITE ASSESSMENT ACTIVITIES
FREEDOM INDUSTRIES
1015 BARLOW DRIVE
CHARLESTON, WEST VIRGINIA

DWN: DF
 CHKD:
 DATE: 8/10/15

DES.:
 APPD.:
 REV.:

PROJECT NO.:
FRE-2015-363
 FIGURE NO.: