FEDERAL ON-SCENE COORDINATOR'S AFTER ACTION REPORT for the FOURCO GLASS SITE CLARKSBURG, HARRISON COUNTY, WEST VIRGINIA October 11, 2010 to October 25, 2010

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III
WHEELING, WEST VIRGINIA

Federal On-Scene Coordinator's Report
Fourco Glass Site

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ACRONYM LIST

Acronym	Definition
ARARS	Applicable or Relevant and Appropriate Requirements
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
EPA	United States Environmental Protection Agency
ERRS	Emergency and Rapid Response Services
ft	foot, feet
mg/kg	Milligrams per kilogram
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
OSC	U.S. EPA On-Scene Coordinator
pDR	Personal DataRam
PPE	Personal Protective Equipment
RM	Response Manager
SSAO	Senior Site Administrative Officer
START	Superfund Technical Assessment and Response Team
STEL	Short Term Exposure Limit
TCLP	Toxicity Characteristic Leaching Procedure
TWA	Time Weighted Average (8-hr)
WVDEP	West Virginia Department of Environmental Protection

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1.0 PURPOSE OF THE ON-SCENE COORDINATOR'S REPORT

The purpose of this report is to describe the situation and events surrounding the Removal Action conducted at the Fourco Glass Site (Site), located in Clarksburg, Harrison County, West Virginia. The U.S. Environmental Protection Agency (EPA) On-Scene Coordinator (OSC), Marjorie Easton, made the decision to prepare and submit this report in order to provide documentation of activities conducted during the Removal Action.

This Removal Action was initiated due to actual and threatened release of hazardous substances from the Site, which if not addressed, presented an imminent and substantial endangerment to public health, welfare, or the environment. The initial assessment of the Site revealed elevated levels of waste constituents, including arsenic, and lead, located along the recreational rails to trails (RTT) adjacent to the defunct glass factory buildings and storage buildings at the Site. Although the RTT recreational trail was officially closed, access to the Site was not restricted, as the RTT recreational trail was fully accessible from the entrance located along North 25th street. There was overwhelming evidence of trespassing and RTT recreational trail use at the Site, including trash and debris and visual observation of people using the RTT recreational trail.

The OSC determined that the Site met the criteria for a Removal Action under Section 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

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2.0 SUMMARY FACT SHEET

Site: Fourco Glass Site

Location: 114 Industry Drive
Clarksburg, West Virginia 26415

Size: Total property area: approximately 1 acre
Remediated area: approximately 0.7 acres (Site buildings)

Current Owner: State of West Virginia (Harrison County)

Site Status: Unzoned Property Right of Way (former railroad)

Funding Approval Date: September 28th, 2010

Response Action Period: October 11th, 2010 to October 25th, 2010

Project Description/ Response Activities: The surficial presence and potential release of hazardous substances at the Site was initially discovered by the West Virginia Department of Environmental Protection (WVDEP) during inspections of the rails to trails (RTT) recreational trail and was confirmed by follow-up sampling and analysis. WVDEP requested EPA's assistance in conducting a full assessment at the Site and performing any necessary actions to mitigate the threats at the Site. The EPA OSC and EPA Superfund Technical Assessment and Response Team (START) contractors mobilized to the Site to perform on-site screening of Site soils and collection of soils and sediments for laboratory analysis on August 18th, 2010. Based on the assessment results, the OSC determined that the Site met the emergency exemption criteria in Section 104(c)(1)(A) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §9604(c)(1)(A).

EPA directed its Emergency and Rapid Response Services (ERRS) contractor to mobilize personnel and heavy equipment required to clear the trail and apply the capping barrier at the Site. The Removal Action officially commenced on October 11th, 2010. ERRS installed an asphalt encapsulation barrier extending 1300 feet along the RTT recreational trail. ERRS utilized an excavator and a skid steer to assist in clearing and grading the RTT recreational trail for the application of a road bed/asphalt encapsulating layer. Trash and debris that was in the path of the RTT recreational trail was placed into a roll-off for disposal. EPA and its contractors completed the Removal Action on October 25th, 2010.

Hazardous Substances: arsenic and lead

Quantities Removed: **Hazardous waste**: None (contamination encapsulated in place).

Non-Hazardous waste: Total: general refuse; brush and debris

OSC: Marjorie Easton

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START Contractor: TechLaw, Inc., Wheeling, WV

Removal Contractor: Guardian Environmental Services, Bear, Delaware

Disposal Locations: None

Project Ceiling: $250,000

Project Costs: $180,680

Comments: The overall success of this project was the result of good coordination between federal, state, and local authorities whose cooperation and participation effected a timely, efficient response.

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Marjorie Easton

3.0 SUMMARY OF INCIDENT

3.1 Initial Situation

The Site is located west of North 25th Street in the "North View" area of Clarksburg, Harrison County, West Virginia. The site primarily consists of the RTT recreational trail and the adjacent slag pile along the northern reach of the site. This delineation consists of approximately 5 acres of land. The site is bound by industrial property parcels to the south and west, the continuation of the RTT recreational trail to the north, and residential/public roadway property to the east. The Site was a vertically oriented flat glass (or window glass) manufacturing facility that was in operation from the 1910 until 1980. While in operation, the facility had many names including AFG Industries, Inc., Fourco Glass Company, Rolland Glass Company, Rolland Sheet Glass Company, and Peerless Window Glass Company. The former Fourco Glass facility/property is currently operated as a warehouse depot and by King's Tire Service, Inc., which sells a variety of tires and conducts automobile repair and maintenance work.

In early 2010, the WVDEP requested assistance from the EPA in cleaning up and addressing the hazardous chemicals and constituents remaining at the Site. The location of the Site is depicted in Figure 1, Site Location Map. The Site features are depicted in Figure 2, Site Feature Map.

3.2 Site Ownership History

The Fourco Glass Plant (Fourco Glass Company) property, now owned by the Harrison Warehouse Services Company, Inc., consists of four parcels appearing on Coal District Map 09 which were formerly owned as follows:

- Parcel Number 09-0001 (6.29 acres), owned by Fourco Glass Company in 1935 and originally operated as the Clarksburg Zinc Company from 1911 to 1916;
- Parcel Number 09-0262 (5.5 acres), and Parcel Number 09-0366 (1.25 AC), owned by Rolland Sheet Glass Company in 1928;
- Parcel Number 09-0165 (8.17 acres) owned by Peerless Window Glass Company in 1915.

On June 29, 1970, all of the above property parcels were deeded to the Fourco Glass Company. At this time, the company again operated a glass manufacturing facility at this location. On November 13, 1986, the above property parcels were deeded to AFG industries, Inc. (AFG). AFG operated the facility until its closure. On January 3, 1989, the property parcels were ceded to the Harrison Warehouse Services Company, Inc. Although named for the adjacent former glass factory and industrial property parcels, the site primarily involves the RTT recreational trail and slag pile areas. The RTT recreational trail comprises of a strip of land approximately 6.9 miles in length with varying widths, consisting of approximately 95.3 acres. The RTT is currently operated through a lease agreement between the property owner, the West Virginia Railroad Maintenance Authority (RMA), and the lessee, the Harrison County Parks and

Recreation Commission (HCPRC). The RMA was deeded the property on April 15, 1983. The property was
formerly owned and operated as an active railroad by the Baltimore and Ohio Railroad Company (B&O). B&O acquired this rail line from the Monongahela River Railroad Company on November 12, 1912.

In August of 2009, Triad Engineering, Inc. (TRIAD) conducted a Site Inspection Reassessment of the Fourco Glass Plant site. This report was submitted to the West Virginia Department of Environmental Protection (WVDEP). The report indicated the presence of elevated levels of arsenic, lead, and zinc in surface soil sample results. Results from surface soil sample locations in the vicinity of the RTT recreational trail indicated elevated lead and arsenic.

In March of 2010, WVDEP requested EPA assistance with evaluating potential risks from soil exposure along the RTT recreational trail adjacent to the former Fourco Glass Plant.

On April 13, 2010, EPA and START personnel accompanied WVDEP personnel on a site visit. Numerous media and other stakeholders/stakeholder representatives were present at the meeting. EPA, START, and WVDEP walked the RTT recreational trail, slag pile area and the facility grounds. WVDEP provided EPA with a package of background information which included the Site Inspection Reassessment report pertaining to the work listed above. The EPA OSC for the site indicated to WVDEP that EPA would review the information and determine if EPA assistance is warranted.

3.3 EPA Assessment (August 2010)

In order to answer the WVDEP request for assistance, and to establish whether a potential threat to human health and the environment was present, EPA directed its Superfund Technical Assessment and Response Team (START) contractor, TechLaw, Inc., to perform a sampling event at the site. On August 18, 2010, EPA and START personnel performed a removal evaluation sampling assessment at the Site. START collected a total of 38 soil samples for in-situ Field Portable X-Ray Fluorescence analysis, and laboratory samples for TAL metals analysis. Eight (8) Slag samples were collected for TAL metals analysis. Soil samples were collected from the RTT recreational trail entrance area, from areas along the trail using a 100 foot spacing scheme, and from a drainage area observed along the RTT recreational trail. Slag samples were collected from 8 locations in the slag pile area. Validated laboratory sample analytical data indicated elevated levels of arsenic and lead in both the soil and slag samples. Some of the validated analytical reported for the slag samples indicated lead levels in the percent range. A comparison of XRF data results to validated laboratory analytical data indicated favorable correlations. Based on the analytical results, the OSC determined it appropriate for EPA to perform a Removal Action at the Site.

3.4 EPA Removal Action (October 2010)

EPA successfully attempted to gain access to the Site from the West Virginia State Rail Authority (part of the West Virginia Department of Transportation) prior to implementing the

removal action at the site. The OSC determined that conditions at the Site posed an imminent and substantial threat to public health, welfare, and the environment. Under Delegation of Authority 14-2 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the OSC initiated a Removal Action on September 28th, 2010, initiating funds of $250,000 through a special bulletin (Special Bulletin A, Polrep 1) to prevent, minimize, stabilize or eliminate the release or threat of release of hazardous materials into the environment. This funding was issued under the warrant authority of the OSC.

As specified in 40 Code of Federal Regulations (CFR) §300.415(a)(2), EPA provided an opportunity for the property owner, the state of West Virginia, to attend to the threat present at the site. However, the State of West Virginia did not have the resources available to perform a Removal Action of this magnitude. No other federal or state response mechanisms were available to perform the Removal Action.

3.4.1 Narrative of Events

This section summarizes the different types of actions that were completed at the Site, and are not in chronological order. Section 3.4.2 details specific actions completed on-Site, in a chronological order.

RTT Recreational Trail

The RTT recreational trail was the primary concern and removal feature to be remediated at the site. Prior to the removal action, the RTT recreational trail (site portion) was in disrepair and exhibited areas of mounding and ponding, loose coal or ash-like material, and debris/refuse. Sections along the trial were overgrown with trees, brush and high grass. The site portion of the RTT recreational trail extended 1300 linear feet from the trail entrance, located just off of North 25th Street in Clarksburg, WV.

Upon arrival and commencement of removal operations, access to the RTT recreational trail was unrestricted despite having been closed by the Harrison County Planning Commission. ERRS contractors installed a caution tape barrier at the entrance to the RTT recreational trail, and began clearing the trail of debris/refuse and brush, trees, and high grass. Areas of the RTT recreational trail were demarcated with marking paint to indicate where areas of fencing was to be installed. Fencing was needed along the RTT recreational trail in order to prevent unauthorized access to former glass factory buildings and storage areas. Some signs of vandalism were also evident in these areas.

Once the initial brush and debris removal was complete, ERRS contractors began preparing the RTT recreational trail for installation of an asphalt cap. ERRS contractors worked to improve the drainage/swale area, an area located about half-way up the extent of the site portion of the RTT recreational trail. Railroad ties present at the site were used to help stabilize the downslope side of the swale area, and riprap was brought in and applied to add stability to this section of the RTT recreational trail bed. Corrugated plastic drainage pipe was also installed along this area to assist in directing drainage across the RTT recreational trail.

ERRS contractors prepared the RTT recreational trail bed for asphalt cap application. Gravel was applied evenly and rolled/compacted until a level consistent surface was achieved which was ideal for asphalt application. Following RTT recreational trail bed preparations, the asphalt was applied. A total of 1250 linear feet of asphalt was applied along the RTT recreational trail and at the entrance to the trail (remaining 50 feet was gravel only). The prepared RTT recreational trail gravel bed was approximately 10 feet wide at all sections, and the completed asphalt section was approximately 8 feet wide at all sections.

Slag Pile

One of the prominent features appearing along the RTT recreational trail was a large slag pile located adjacent to and downslope from the western side of the RTT recreational trail. Validated analytical data from samples of the slag material indicated percent levels of arsenic and lead. In order to restrict unauthorized access to the slag pile by RTT recreational trail users, EPA requested that ERRS contractors install a fencing barrier along the RTT recreational trail. ERRS procured 10-foot fence posts to be installed along the slag pile area. ERRS also installed a small and a large buttress along the slag pile boundary area, in order to establish a consistent grade along the base of the fencing barrier. Both the small and large buttress areas were constructed using existing railroad ties for stability. The buttress areas were backfilled with riprap. A total of 17 fence posts were installed resulting in an approximately 170 foot long fencing barrier.

Air Monitoring Activities

During the Removal Action, START performed particulate air monitoring along the perimeters of the Site with two DataRam 4 particulate air monitors and in the Site work area with one pDR-1000 particulate air monitor. Air monitoring was not performed during precipitation events. At no time during the Removal Action did the Site work area or Site perimeter monitoring reveal particulate levels of concern. The highest short term exposure limit (STEL) concentration from the work area was 0.040 mg/m^3, which was recorded on October 20th, 2010, approximately 2 hours after operations began on that day. The highest Site perimeter monitoring indicated a concentration of 173.89 ug/m^3 at 1454 hours on October 20th, 2010. This was determined to be a spike due to the occurrence of vehicle traffic only a few feet from the monitoring location. Furthermore, these concentrations were less than the Site action level which was set by the OSC at 2 mg/m^3. A map depicting air monitoring locations is depicted in Figure 3, Air Monitoring Locations Map.

Restoration Activities

Minimal disturbance occurred during the Removal Action. The parking lot adjacent to King's Tire Service, which was used as the command and equipment staging area, was cleared of all debris and the gravel was smoothed out. No other restoration was necessary due to the absence of earth excavation during the Removal Action at this Site.

3.4.2 Chronology of Events

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Week of October 11th, 2010

On October 11th, 2010, START and ERRS contractors mobilized to the site to initiate the removal action activities. START mobilized the Wheeling EPA Mobile Command Post (MCP) from Wheeling, WV. The MCP was mobilized to serve as administrative office space for EPA, and workspace for START contractors. The MCP was set up in the staging area which is a concrete pad located on the former Fourco Glass manufacturing facility property. The current property owner and leaseholder had given EPA permission to use of this area. ERRS mobilized all the necessary equipment necessary to perform a Removal Action at the Site. ERRS visited the Site to unload and prepare equipment to begin operations on the following day. ERRS brought a skid steer and an excavator to assist with cleanup operations. START demobilized from the site at 1720 hours. The weather was partly cloudy with temperatures in the high 70's.

On October 12th, 2010, the OSC (1), START (1), and ERRS (7) commenced removal operations at the site. ERRS began operations by sweeping and cleaning off the staging area and unloading/preparing their equipment. ERRS started clearing and grubbing operations along the RTT recreational trail. ERRS demarcated the areas of the RTT recreational trail that will be capped with aggregate and asphalt paving, and also delineated areas where fencing is to be installed. Clearing and grubbing consisted of using a track mounted skid steer with a mower deck attachment, weedeaters, and a chainsaw. Wood that was cut along the RTT recreational trail was staged at the trail head for future residential use. START met with residents to procure property access to perform dataRam particulate air monitoring. START conducted written and photographic documentation of all Site activities. The weather was partly to mostly cloudy with temperatures in the upper 70s.

On October 13th, 2010, the OSC (1), START (1) and ERRS (6) continued removal operations at the site. ERRS continued clearing and grubbing, and tree cutting operations during this day. ERRS utilized the excavator to move loads of cut wood to the RTT recreational trail head area for staging. ERRS installed an underflow pipe and riprap in the drainage/swale area which is located about one-third the way up the site portion of the RTT recreational trail. WVDEP Inspector Pasupathy Ramanan arrived at the site to inspect site operations and progress. The inspector indicated no major issues or concerns during his visit. START collected site feature GPS location data using a Trimble GPS receiver. START conducted written and photographic documentation of site activities. START deployed two DataRams to monitor airborne particulate levels at perimeter locations. START downloaded the air monitoring data collected during this day. No particulate levels of concern (TWA) were detected on this day. The weather was partly cloudy with temperatures in the low 70s.

On October 14th, 2010, START (1) and ERRS (6) continued removal operations at the site. ERRS continued and completed clearing and grubbing, and tree cutting operations during this day. Cut wood was again delivered and staged along the RTT recreational trail head for residential use. START did not conduct air monitoring during this day due to precipitation and saturated conditions along the RTT recreational trail. ERRS continued to dispose of refuse and debris from the RTT recreational trail as necessary. ERRS continued with some weeding and

clearing operations. The OSC, one START, and five ERRS were on-site during this day. START conducted written and photographic documentation of Site activities. No air monitoring was conducted during this day due to precipitation and saturated conditions. The weather was rain early with clearing late and temperatures were in the low 60s.

On October 15th, 2010, OSC (1), START (1), ERRS (6) continued removal operations at the site. ERRS procured a load of riprap which was delivered to the site to be applied in the drainage/swale area, and the slag area buttress construction. The riprap was staged in the RTT recreational trail head area prior to being utilized. ERRS procured 10-foot fence posts to be installed along the slag pile area. ERRS also worked on installing a small and a large buttress along the slag pile boundary area. This boundary is located on the western side of the RTT recreational trail. Both the small and large buttress areas were constructed using existing railroad ties for stability. The buttress areas were backfilled with riprap. ERRS also added some riprap to the underflow pipe area. START conducted written and photographic documentation of site activities. START deployed two DataRams to monitor airborne particulate levels at perimeter locations. START downloaded the air monitoring data collected during this day. No particulate levels of concern (TWA) were detected. The weather was mostly cloudy and temperatures were in the high 50s.

On October 16th, 2010, OSC (1), START (1), and ERRS (6) continued removal operations at the site. ERRS began and completed installation of the 10-foot fence posts (10-foot spacing) along the slag area boundary. The fence posts were installed using an auger attachment for the skid steer. ERRS stabilized each individual fence post through the application of approximately 80 pounds of concrete. A total of 17 fence posts were installed along the slag pile boundary. START conducted written and photographic documentation of site activities. START deployed two DataRams to monitor airborne particulate levels at perimeter locations. START downloaded the air monitoring data collected during this day. No particulate levels of concern (TWA) were detected. The weather was partly cloudy with a slight breeze and temperatures were in the low 60s.

No work was conducted on October 17th, 2010.

Week of October 18th, 2010

On October 18, 2010, the EPA (1), START (2), and ERRS (6), resumed the emergency response removal action from a temporary site shut down on Sunday, October 17, 2010. ERRS received crush-and-run aggregate and had it dumped directly onto the RTT recreational trail. A roller was then used to compact the crush-and-run material in preparation for a planned asphalt cover. Approximately 420 feet of the RTT recreational trail was covered with crush-and-run aggregate and subsequently compacted. ERRS continued work on a chain-link fence which was to be constructed near the slag pile. Wooden boards were secured at the base of the fence to prevent crush-and-run material from falling through a gap between the edge of the RTT recreational trail and the fence. Horizontal support bars were installed on the fence. As requested by WVDEP, EPA directed START to collect two samples to be analyzed for TCLP Metals at a later date. The samples were collected from the slag pile and from the RTT recreational trail prior to it

being covered. The sample locations were recorded with a Trimble GPS unit. START deployed two DataRams to monitor airborne particulate levels at perimeter locations. START performed perimeter air monitoring during this day. No particulate levels of concern (TWA) were detected. START conducted written and photographic documentation of site activities. START updated the OSC website for this project. The weather was partly to mostly cloudy with temperatures in the low 60s.

On October 19, 2010, the OSC (1), START (2), and ERRS (6) continued removal operations at the site. ERRS continued to install a chain-link fence near the slag pile, continued to compact the RTT recreational trail, and received a rental auger attachment to be used to dig fence post holes. A fence was planned to be constructed near the RTT recreational trail head and adjacent to the building and the concrete roof/platform where a large drop-off exists. The fence will serve as a barrier to prevent anyone from inadvertently falling off the drop-off. START deployed a personal Dataram (pDR) to monitor airborne particulate levels in the work area, and deployed two DataRams to monitor airborne particulate levels at perimeter locations. No particulate levels of concern (TWA) were detected. START conducted written and photographic documentation of site activities. The weather was mostly cloudy with rain early, and temperatures in the low 60s.

On October 20, 2010, the OSC (1), START (1), and ERRS (6) continued removal operations at the site. ERRS completed covering the site portion of the RTT recreational trail (1,300 feet) with crush-and-run aggregate material, and continued to compact it in preparation for asphalt operations. Additionally, ERRS began to level the RTT recreational trail, fill in low spots, and ensure the prepared bed was approximately 10 feet wide. The construction of the chain-link fence near the slag pile was completed. Using an auger attachment on the skid steer, the holes for the fence posts were dug near the building at the RTT recreational trail head. A total of 14 holes were dug, fence posts were set in the holes, and the holes were backfilled with concrete. START conducted written and photographic documentation throughout the day. Air monitoring was conducted until the RTT recreational trail was covered with crush-and-run aggregate thereby eliminating the potential for offsite migration of airborne contaminants. START performed hot zone and perimeter air monitoring during this day. No particulate levels of concern (TWA) were detected. START conducted written and photographic documentation of site activities. The weather was partly cloudy with temperatures in the lower 60s.

On October 21, 2010, the OSC (2), START (1), and ERRS (6) continued removal operations at the site. ERRS completed the compaction and leveling process of the crush-and-run aggregate on the RTT recreational trail. Asphalt paving was scheduled for October 22, 2010. ERRS continued to construct the chain-link fence located near the RTT recreational trail head. START conducted written and photographic documentation throughout the day. START performed hot zone and perimeter air monitoring during this day. No particulate levels of concern (TWA) were detected. START conducted written and photographic documentation of site activities. The weather was mostly cloudy with temperatures in the high 50s.

On October 22, 2010, the OSC (1), START (2), and ERRS (7) completed all removal operations at the site. Asphalt paving operations on the RTT recreational trail began and was completed today. A total of 1,250 feet on the RTT recreational trail was covered with approximately 2 to 4

inches of asphalt. ERRS completed the construction of the chain-link fence near the RTT recreational trail head. EPA, START, and ERRS completed a site walk through and agreed that the removal actions were completed. The support zone began to be dismantled in preparations for a site demobilization. ERRS demobilized all equipment and personnel. START performed work area and perimeter air monitoring during this day. No particulate levels of concern (TWA) were detected. START conducted written and photographic documentation of site activities. The weather was mostly clear with temperatures in the low 50s.

No work was performed on October 23rd or October 24th, 2010.

Week of October 25th, 2010

On October 25, 2010, START mobilized to the site, performed shutdown procedures on the MCP, and demobilized the MCP back to Wheeling. No further removal actions scheduled. No particulate levels of concern (TWA) were detected. START conducted written and photographic documentation of site activities The weather was light rain with temperatures in the low 60s.

4.0 ANALYTICAL SUMMARY

4.1 Supplemental Slag Material Sampling

On October 18th, 2010, START contractors conducted supplemental TCLP slag material sampling at the request of the OSC, at the behest of a request from WVDEP Inspector Ramanan. START collected a total of 2 samples for TCLP analysis. One sample (RT1) was collected from the RTT recreational trail in a location just north of the slag pile and consisted of primarily soil mixed with some slag material. The other sample (ST1) was collected from directly within the slag pile and consisted primarily of slag material. All of the samples were analyzed for TCLP metals through the CLP at Liberty Analytical Corporation laboratory in Cary, NC.

Validated analytical data from both samples indicated only one analyte in one sample with a data result higher than the regulatory limit. That result was associated with the slag material sample (ST1), indicating a lead concentration of 143 mg/L, which is higher than the 5 mg/L regulatory limit for categorizing a characteristic hazardous waste. The slag material sample locations are depicted in Figure 4, Sample Location Map - 10/18/2010 Sampling Event. This data was submitted to WVDEP for their review and follow-up.

5.0 RESOURCES COMMITTED

5.1 Initial Funding Request

OSC Marjorie Easton conducted a Removal Evaluation sampling assessment at the site on August 18th, 2010. The OSC assessed the situation in accordance with the NCP, 40 CFR Part 300. Analytical data generated from on-site soil samples indicated chemical constituents (arsenic and lead) that were present along the RTT recreational trail, and posed a threat to the

public health, welfare, and the environment. Based on validated analytical laboratory data of slag samples collected from within the slag pile, arsenic and lead were detected at significantly high concentrations, some in percent levels. Arsenic and lead are hazardous substances as defined in Section 101 (14) CERCLA, as amended 42 U. S. C. § 9601 (14). The OSC determined that the site met the criteria of Section 300.415 of the NCP for initiating a time-critical Removal Action.

On September 28th, 2010, CERCLA funds in the amount of $250,000 were initiated by OSC Marjorie Easton under warrant authority. This approval was granted upon the submission of a Special Bulletin A (Polrep 1) by the OSC.

5.2 Estimated Total Cost Summary

Extramural Costs	**Costs**	**Ceiling**
ERRS - Cleanup Contractor (as of 1/1/11)	$100,522	$209,750
START (as of 6/23/11)	$22,654	$40,250
TOTAL Extramural Costs	$ 123,176	$ 250,000

PERCENT OF EXTRAMURAL CEILING EXPENDED: 49.8%

6.0 ROSTER OF AGENCIES, ORGANIZATIONS, AND INDIVIDUALS

The following table provides a list of federal, state, and local agencies and contractors involved in this Removal Action. The table also includes a brief description of duties involving this Removal Action.

TABLE 6-1 DESCRIPTION OF AGENCY ROLES

AGENCY	CONTACT	BRIEF DESCRIPTION OF DUTIES
U.S. EPA Region III 1060 Chapline Street Wheeling, WV 26003 (304) 234-0251	Marjorie Easton	On-Scene Coordinator: Performed initial assessment. Coordinated all aspects of the project. Responsible for integrating various agencies and contractors and for the overall success of the project.
U.S. EPA Region III 1060 Chapline Street Wheeling, WV 26003 (304) 234-0239	Richard Messimer	EPA Senior Site Administrative Officer (SSAO). Managed and tracked all site costs.
West Virginia Department of Environmental Protection (WVDEP) 2031 Pleasant Valley Road Fairmont, WV 26554 (304) 368-2000 ext. 3730	Pasupathy Ramanan	Provided periodic inspections of Removal Action progress and coordinated with OSC to ensure that all State issues and/or concerns were addressed.
West Virginia Department of Environmental Protection (WVDEP) 601 57th Street Charleston, WV 25304 (304) 926-0499, ext. 1275	Donald Martin	Coordinated with OSC to ensure that all State applicable, relevant, and appropriate requirements (ARARS) were addressed. Conducted the initial site walkthrough in April of 2010. Requested EPA assistance with the site.

TABLE 6-1 DESCRIPTION OF AGENCY ROLES		
AGENCY	**CONTACT**	**BRIEF DESCRIPTION OF DUTIES**
Harrison County Planning Commission 301 W Main Street # 504 Clarksburg, WV (304) 624-8690	Terry Schulte	Representative of Harrison County Commission who served as liaison to County executives.
West Virginia State Rail Authority 120 Water Plant Drive Moorefield, WV 26836 (304) 538-2305	Charles Hill	Granted site access permission (verbal) on behalf of Cindy Butler from site owner (State of WV).
Harrison County Parks and Recreation 43 Recreation Drive Clarksburg, WV 26301 (304) 624-0485	Michael Book	Rails to Trails property lessee (site property leased from WVDOT-SRA) contact for Harrison County. Granted permission for site work to occur on behalf of lessee.
TechLaw, Inc. EPA/START III - Western Area 131 Peninsula Street, Suite B Wheeling, WV 26003 (304) 230-1230	William Huggins, Jr., Suddha Graves,	Members of EPA's START who provided oversight of removal activities, conducted written and photographic documentation, air monitoring, sampling, and analytical services coordination.
Guardian Environmental Services, Inc., EPA ERRS Contractor 1208 Porter Road Bear, DE 19701 (800) 345-4395	Jack Wilson	Response Manager who coordinated or otherwise provided the overall labor, materials, and services to the OSC to encapsulate the RTT recreational trail and to erect a fence to prevent unauthorized access to the buildings and slag pile located adjacent to the Site.

6.1 Organization of the Response

OSC Marjorie Easton coordinated with other EPA personnel, federal, state, and local agencies, and directed the daily activities of ERRS and START personnel during the removal activities at the site. Site costs were tracked by Richard Messimer, EPA Region III Senior Site Administrative Officer (SSAO).

Mr. Donald Martin of the WVDEP requested EPA assistance in completing a Removal Evaluation at the former glass factory facility. The results of the EPA Removal Evaluation led to the Removal Action being conducted by EPA. Mr. Martin was the primary State representative during the Removal Evaluation and Removal Action, and also assisted the OSC in coordinating with state and local agencies.

Mr. Pasupathy Ramanan of the WVDEP served as lead inspector to the Removal Action being conducted by EPA. Mr. Ramanan coordinated with EPA and removal site personnel as the a state representative during the Removal Evaluation and Removal Action and ensured that all state concerns were addressed.

TechLaw, Inc., was the START contractor who provided technical support to the EPA, including air monitoring, supplemental perimeter soil sampling, laboratory services coordination, health and safety oversight, ERRS contractor monitoring, documentation of site activities, and assisting the OSC with reporting of site activities.

Guardian Environmental Services, Inc., was the prime contractor for the ERRS contract who supplied the manpower and equipment necessary to encapsulate the RTT recreational trail and to erect a fence to prevent unauthorized access to the buildings and slag pile located adjacent to the Site

7.0 WASTE TREATMENT AND DISPOSAL

Only non-hazardous municipal refuse was shipped off-site which included brush, debris (paper, plastic, metal) and site generated refuse materials. No manifested wastes were shipped off-site.

8.0 ANALYSIS OF ISSUES

The primary issue was the need to obtain access from both the property owner (WVSRA) and the property lessee (Harrison County Parks and Recreation). Once the proper contacts were determined, proper access for the removal action was granted by all parties. Other issues involved the need for construction of a buttress in order to prevent RTT recreational trail users from circumventing the slag pile barrier fence. ERRS contractors were able to install a large and a small buttress using components present at the site including rail road ties.

9.0 POTENTIAL ISSUES ASSOCIATED WITH SITE REUSE

There are presently no issues with site reuse considering the site will continue to be used as a RTT recreational trail for the foreseeable future. Should the site use change, future owners and/or lessees should be notified by the property owner of the contamination present beneath the asphalt cap, should that cap integrity be breached for any purpose. Additionally, the site owner should ensure, though the assistance with WVDEP, that the asphalt cap remain intact along with the fencing barriers installed along the site trail area.

10.0 REFERENCES

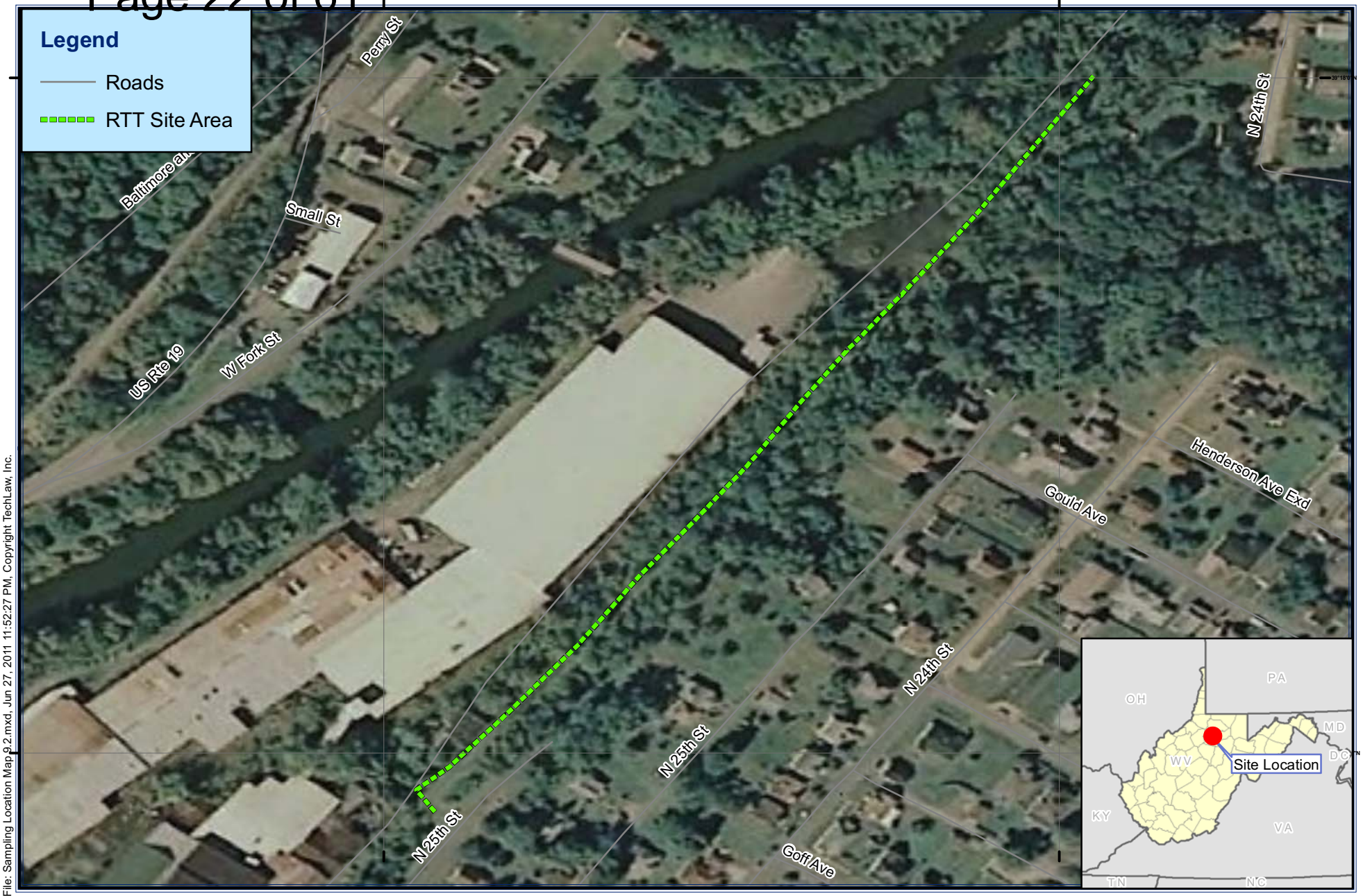
1. EPA (U.S. Environmental Protection Agency). June 2011. http://www.epaosc.org/site_profile.asp?site_id=6184. MAPS for Fourco Glass Site at EPA OSC Website

2. EPA (U.S. Environmental Protection Agency). June 2011. http://www.epaosc.org/site_profile.asp?site_id=6184. POLREPS for Fourco Glass Site at EPA OSC Website.

3. EPA 2010. *Special Bulletin A Polrep 1, Fourco Glass.* Western Response Branch, Hazardous Site Cleanup Division, Wheeling, WV. September 28.

Federal On-Scene Coordinator's Report
Fourco Glass Site

FIGURES



File: Sampling Location Map 2.mxd, Jun 27, 2011 11:52:27 PM, Copyright TechLaw, Inc.

TechLaw

TDD No. TL01-10-07-005
START Contract No. EP-S3-10-04

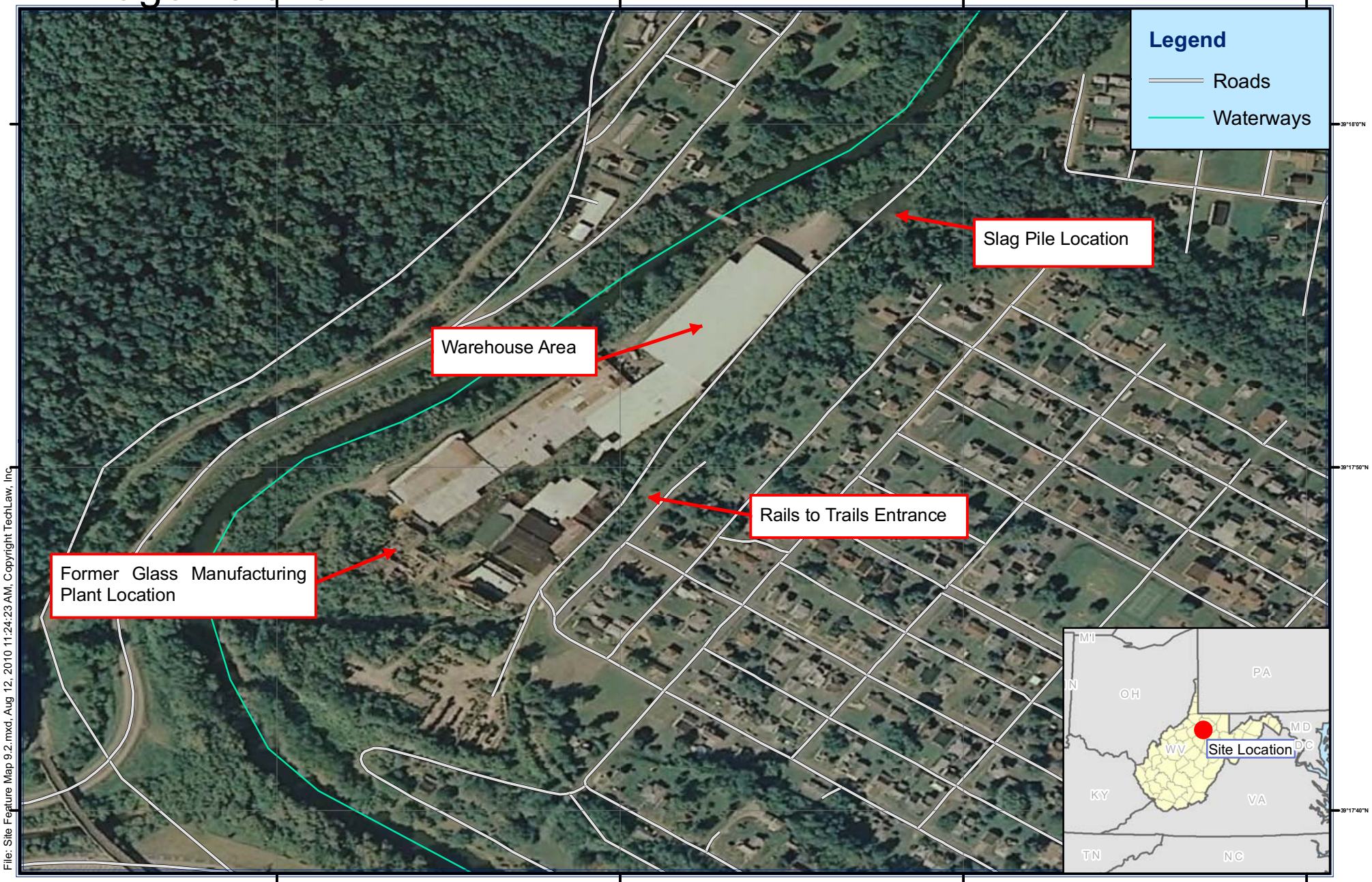
Figure : Site Location Map
Fourco Glass Plant Site
Clarksburg, Harrison County, West Virginia

0 130 260 520 Feet

Map By: WFH
Date Modified: 6/22/2011
Scale: 1:2,401

Source:
Base Layers procured from ESRI Online Resources.

U.S. Census road layer for West Virginia, updated June 2009.



File: Site Feature Map 9.2.mxd, Aug 12, 2010 11:24:23 AM, Copyright TechLaw, Inc.

TDD No. TL01-10-07-005
START Contract No. EP-S3-10-04

Figure 2: Site Feature Map
Fourco Glass Plant Site
Clarksburg, Harrison County, West Virginia

0 250 500 1,000 Feet

Map By: WFH
Date Modified: 8/12/2010
Scale: 1:4,642

Source:
Base Layers procured from ESRI Online Resources.

U.S. Census road layer for West Virginia, updated June 2009.

File: Air Monitoring Location Map 9.2.mxd, Jun 27, 2011 11:52:27 PM, Copyright TechLaw, Inc.

TechLaw

TDD No. TL01-10-07-005
START Contract No. EP-S3-10-04

Figure 3: Air Monitoring Locations Map
Fourco Glass Plant Site
Clarksburg, Harrison County, West Virginia

0 130 260 520 Feet

Map By: WFH
Date Modified: 6/22/2011
Scale: 1:2,401

Source:
Base Layers procured from ESRI Online Resources.

U.S. Census road layer for West Virginia, updated June 2009.

File: Sample Location Map 10_18_10 9.2.mxd, Jun 28, 2011 12:33:44 AM, Copyright TechLaw, Inc.

TDD No. TL01-10-07-005
START Contract No. EP-S3-10-04

Figure 4 : Sample Location Map - 10/18/10 Sampling Event
Fourco Glass Plant Site
Clarksburg, Harrison County, West Virginia

0 130 260 520 Feet

Map By: WFH
Date Modified: 6/27/2011
Scale: 1:2,401

Source:
Base Layers procured from ESRI Online Resources.

U.S. Census road layer for West Virginia, updated June 2009.

Federal On-Scene Coordinator's Report
Fourco Glass Site

APPENDIX 1
POLLUTION REPORTS

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Fourco Glass - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: **POLREP #1**
Special Bulletin A
Fourco Glass
A3NR
Clarksburg, WV
Latitude: 39.2956602 Longitude: -80.3556673

To:
From: Marjorie Easton, On-Scene Coordinator
Date: 9/28/2010
Reporting Period: 04/13/10 - 9/28/10

1. Introduction

1.1 Background

Site Number:	A3NR	**Contract Number:**	
D.O. Number:		**Action Memo Date:**	
Response Authority:	CERCLA	**Response Type:**	Emergency
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	10/11/2010	**Start Date:**	10/12/2010
Demob Date:		**Completion Date:**	
CERCLIS ID:	WVD988768693	**RCRIS ID:**	
ERNS No.:		**State Notification:**	WVDEP
FPN#:		**Reimbursable Account #:**	

A. Site Description

The Site is located west of North 25th Street in the “North View” area of Clarksburg, Harrison County, West Virginia. The site primarily consists of the RTT recreational trail and the adjacent slag pile along the northern reach of the site. This delineation consists of approximately 5 acres of land. The site is bound by industrial property parcels to the south and west, the continuation of the RTT recreational trail to the north, and residential/public roadway property to the east. The Site was a vertically oriented flat glass (or window glass) manufacturing facility that was in operation from the 1910 until 1980. While in operation, the facility had many names including

AFG Industries, Inc., Fourco Glass Company, Rolland Glass Company, Rolland Sheet Glass Company, and Peerless Window Glass Company. The site is currently operated as a warehouse depot and by King's Tire Service, Inc., which sells a variety of tires and conducts automobile repair and maintenance work.

B. Site Background

The following is a chronology of site ownership, followed by chronology of events that have led to this Special Bulletin. The Fourco Glass Plant (Fourco Glass Company) property, now owned by
the Harrison Warehouse Services Company, Inc., consists of four parcels appearing on Coal District
Map 09 which were formerly owned as follows:
• Parcel Number 09-0001 (6.29 acres), owned by Fourco Glass Company in 1935 and originally operated as the Clarksburg Zinc Company from 1911 to 1916;
• Parcel Number 09-0262 (5.5 acres), and Parcel Number 09-0366 (1.25 acres), owned by Rolland Sheet Glass Company in 1928;
• Parcel Number 09-0165 (8.17 acres) owned by Peerless Window Glass Company in 1915.

On June 29, 1970, all of the above property parcels were deeded to the Fourco Glass Company. At this time, the company again operated a glass manufacturing facility at this location.
On November 13, 1986, the above property parcels were deeded to AFG industries, Inc. (AFG). AFG operated the facility until its closure.

On January 3, 1989, the property parcels were deeded to the Harrison Warehouse Services Company, Inc., the current owner of the property. Although named for the adjacent former glass factory and industrial property parcels, the siteprimarily involves the Rails to Trails (RTT) trail and slag
pile areas. The RTT recreational trailcomprises of a strip of land approximately 6.9 miles in length with
varying widths, consisting of approximately 95.3 acres. The RTT recreational trail is currently operated
through a lease agreement between the property owner, the West Virginia Railroad Maintenance Authority
(RMA), and the lessee, the Harrison County Parks and Recreation Commission (HCPRC). The RMA was deeded the property on April 15, 1983. The property was formerly owned and operated as an active railroad by the Baltimore and Ohio Railroad Company (B&O). B&O acquired this rail line from the Monongahela River Railroad Company on November 12, 1912.

In August of 2009, Triad Engineering, Inc. (TRIAD) conducted a Site Inspection Reassessment of the Fourco Glass Plant site. This report was submitted to the West Virginia Department of Environmental Protection (WVDEP). The report indicated the presence of elevated levels of arsenic, lead, and zinc in surface soil sample results. Results from surface soil sample locations in the vicinity of the RTT recreational trail indicated elevated lead and arsenic.
In March of 2010, WVDEP requested EPA assistance with evaluating potential risks from soil exposure along the RTT recreational trail adjacent to the former Fourco Glass Plant.
On April 13, 2010, EPA and START personnel accompanied WVDEP personnel on a site visit. Numerous media and other stakeholders/stakeholder representatives were present at the meeting. EPA, START, and WVDEP walked the RTT recreational trail, slag pile area and the facility grounds. WVDEP provided EPA with a package of background information which included the Site Inspection Reassessment report pertaining to the work listed above. The EPA OSC for the site indicated to WVDEP that EPA would review the information and determine if EPA

assistance is warranted.

On August 18, 2010, EPA and START personnel performed a removal evaluation sampling event at the Site. START collected a total of 38 soil samples for in-situ prepared field portable X-Ray Fluorescence (XRF) analysis, and laboratory samples for TAL metals analysis. Eight (8) Slag samples were collected for TAL metals analysis. Soil samples were collected from the RTT recreational trail entrance area, from areas along the trail using a 100 foot spacing scheme, and from a drainage area observed along the trail. Slag samples were collected from 8 locations in the slag pile area. XRF data and validated laboratory sample analytical data indicated elevated levels of arsenic and lead in both the soil and slag samples. Analytical data results from eight samples (six slag samples and two soil samples) indicated lead results in the percent range. Based on validated analytical data, the highest slag sample result for lead was 29.400 parts per million (ppm), and the highest soil sample result for lead was 13,900 ppm.

C. Types of Substances Present
Based on laboratory analysis of samples collected from the recreational trail (soil samples) and the slag pile (slag waste samples), arsenic and lead were detected at significantly high levels, with lead being detected in percent levels. The samples were collected from various numerous locations along the recreational trail and the slag pile area. Arsenic and lead are hazardous substances as defined in Section 101 (14) CERCLA, as amended 42 U. S. C. § 9601 (14).

D. National Priorities List

The Site is not on the National Priorities List.

E. State and Local Authorities Role

The West Virginia Department of Environmental Protection requested and is supporting the EPA
removal action.

III. Threats to Public Health or Welfare or the Environment

Section 300.415 of the NCP lists the factors to be considered in determining the appropriateness of a Removal Action. Paragraph (b) (2) (I), (ii), (v), and (vii) of Section 300.415 directly apply to the conditions at the Site.

300.415 (b) (2) (I) “Actual or potential exposure to nearby human populations, animals or the food chain from hazardous substances of pollutants or contaminants”

The majority of the site serves as a “Rails to Trails” recreational trail. The Site is located in close proximity (<200 feet) with several residential properties. Also nearby is the North View Elementary School (<0.25 miles), King’s Tire Service (<50 feet), and other commercial or industrial use properties (<50 feet, not zoned). The trail is closed, however, access to the site is unrestricted and evidence of trail use and trespassing (slag pile) is present. Access to the Site is not secure as there is no gate, fence or warning sign posted at the trail head which begins along North 25th Street in Clarksburg, WV. Access to the trail and slag area is also possible along multiple openings and from the other end of the recreational trail. Waste constituents at the Site, especially slag containing arsenic and lead, are readily available to people, animals, and the environment.

300.415 (b) (2) (ii) “Actual or potential contamination of drinking water supplies or sensitive ecosystems”

The Site is situated upstream and within 200 feet of the West Fork River, which is a principle tributary to the Monongahela River. The West Fork River serves as the primary drinking water source for the Clarksburg Water Board. The Monongahela River serves as a drinking water supply to numerous municipalities. Also, a release of hazardous substances would directly impact the ecosystem associated with the stream and downstream targets. Arsenic and lead would easily contaminate these waters if significantly released from the Site.

300.415 (b) (2) (v) “Weather conditions may cause hazardous substances or pollutants or contaminants to migrate or release”

Both the RTT recreational trail and the slag pile area are in outdoor areas exposed to the weather.
Some areas of the RTT recreational trail are potentially subject to flooding via rainwater from upgradient locations. This flooding would directly expose the West Fork River, which is down gradient from the Site, to the hazardous substances thereby causing a release. The materials and wastes on Site will, upon entrainment or dissolving into surface water, harmfully affect water quality. This water, as mentioned above, is used as a public drinking water source. Arsenic and lead are contaminants listed in the National Primary Drinking Water Regulations contaminant list. Any of these contaminants would easily be dissolved and/or transported by water as explained above.

300.415 (b) (2) (vii) “The availability of other appropriate Federal or State response mechanisms to respond to the release”

The WVDEP requested EPA assistance to stabilize and secure the Site. The State does not have the resources available to conduct an emergency stabilization of the Site.

IV. Determination of Emergency

The OSC has determined, based upon the information gathered and the analytical data generated by the sampling assessment, that a significant threat of release of hazardous substances exists and that the threat will continue until appropriate measures are taken. The Site conditions constitute an emergency.

2. Current Activities

2.1 Operations Section

None to report.

2.2 Planning Section

V. Proposed Actions

Statement of work (SOW) for the Fourco Glass Plant Site:

The OSC will conduct immediate removal activities at the Site and will obtain the primary manpower, equipment, and resources through the ERRS and START contracting mechanisms.

Throughout the duration of Site activities, all personnel involved with execution of the SOW will
comply with the requirements of CERCLA and with all other applicable Federal, State, and local regulations.

Activities will begin at the Site in September, 2010. Mobilization of personnel, supplies and equipment to the Site are necessary to complete the following actions:

- Arrange for 24 hour security guard service if deemed necessary;
- Limit access to the Site by installing fencing and barriers to prevent exposure to the slag pile area from the recreational trail, and to temporarily restrict public access to the RTT recreational trail;
- Implement erosion control measures to prevent contaminated soils and/or residues potentially containing hazardous substances, pollutants or contaminants from migrating off Site;
- Conduct an extent of contamination study;
- Control and stabilize hazardous materials along the recreational trail that are exposed to the weather and readily available to people, animals, and the environment. This will require implementing a protective cap overtop the existing RTT recreational trail materials. This will be accomplished by implementing an asphalt cap that will begin at the trail entrance along North 25th Street, and extend approximately 1250 feet north to a location just beyond the slag pile area;
- Arrange for a command post/office set up with phones, fax and other communication equipment to the extent deemed necessary;
- Maintain close coordination with State officials and municipal authorities including local fire officials.

2.3 Logistics Section

None to report

2.4 Finance Section

2.5 Safety Officer

2.6 Liaison Officer

2.7 Information Officer

3. Participating Entities

3.1 Unified Command

3.2 Cooperating and Assisting Agencies

4. Personnel On Site

5. Definition of Terms

6. Additional sources of information

6.1 Internet location of additional information/reports

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Fourco Glass - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: **POLREP #2**
Fourco Glass
A3NR
Clarksburg, WV
Latitude: 39.2956602 Longitude: -80.3556673

To:
From: Marjorie Easton, On-Scene Coordinator
Date: 10/18/2010
Reporting Period: 10/11/10 - 10/16/10

1. Introduction

1.1 Background

Site Number:	A3NR	**Contract Number:**	
D.O. Number:		**Action Memo Date:**	
Response Authority:	CERCLA	**Response Type:**	Emergency
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	10/11/2010	**Start Date:**	10/12/2010
Demob Date:		**Completion Date:**	
CERCLIS ID:	WVD988768693	**RCRIS ID:**	
ERNS No.:		**State Notification:**	WVDEP
FPN#:		**Reimbursable Account #:**	

A. Site Description

The Site is located west of North 25th Street in the “North View” area of Clarksburg, Harrison County, West Virginia. The site primarily consists of the RTT recreational trail and the adjacent slag pile along the northern reach of the site. This delineation consists of approximately 5 acres of land. The site is bound by industrial property parcels to the south and west, the continuation of the RTT recreational trail to the north, and residential/public roadway property to the east. The site is currently adjacent to a former glass factory that is now operated as a warehouse depot and by King’s Tire Service, Inc., which sells a variety of tires and conducts automobile repair and maintenance work.

B. Site Background

Although named for the adjacent former glass factory and industrial property parcels, the site primarily involves the Rails to Trails (RTT) trail and slag pile areas. The RTT recreational trailcomprises of a strip of land approximately 6.9 miles in length with varying widths, consisting of approximately 95.3 acres. The RTT recreational trail is currently operated through a lease agreement between the property owner, the West Virginia Railroad Maintenance Authority (RMA), and the lessee, the Harrison County Parks and Recreation Commission (HCPRC). The RMA was deeded the property on April 15, 1983. The property was formerly owned and operated as an active railroad by the Baltimore and Ohio Railroad Company (B&O). B&O acquired this rail line from the Monongahela River Railroad Company on November 12, 1912.

In August of 2009, Triad Engineering, Inc. (TRIAD) conducted a Site Inspection Reassessment of the Fourco Glass Plant site. This report was submitted to the West Virginia Department of Environmental Protection (WVDEP). The report indicated the presence of elevated levels of arsenic, lead, and zinc in surface soil sample results. Results from surface soil sample locations in the vicinity of the RTT recreational trail indicated elevated lead and arsenic.
In March of 2010, WVDEP requested EPA assistance with evaluating potential risks from soil exposure along the RTT recreational trail adjacent to the former Fourco Glass Plant.

On April 13, 2010, EPA and START personnel accompanied WVDEP personnel on a site visit. Numerous media and other stakeholders/stakeholder representatives were present at the meeting. EPA, START, and WVDEP walked the RTT recreational trail, slag pile area and the facility grounds. WVDEP provided EPA with a package of background information which included the Site Inspection Reassessment report pertaining to the work listed above. The EPA OSC for the site indicated to WVDEP that EPA would review the information and determine if EPA assistance is warranted.

On August 18, 2010, EPA and START personnel performed a removal evaluation sampling event at the Site. START collected a total of 38 soil samples for in-situ prepared field portable X-Ray Fluorescence (XRF) analysis, and laboratory samples for TAL metals analysis. Eight (8) Slag samples were collected for TAL metals analysis. Soil samples were collected from the RTT recreational trail entrance area, from areas along the trail using a 100 foot spacing scheme, and from a drainage area observed along the trail. Slag samples were collected from 8 locations in the slag pile area. XRF data and validated laboratory sample analytical data indicated elevated levels of arsenic and lead in both the soil and slag samples. Analytical data results from eight samples (six slag samples and two soil samples) indicated lead results in the percent range. Based on validated analytical data, the highest slag sample result for lead was 29.400 parts per million (ppm), and the highest soil sample result for lead was 13,900 ppm.

2. Current Activities

2.1 Operations Section

Current Actions:

On October 11th, 2010, START and ERRS contractors mobilized to the site to initiate the removal action activities. START mobilized the Wheeling Office Mobile Command Post (MCP) from Wheeling, WV. The MCP was mobilized to serve as administrative office space for EPA, and workspace for START contractors. The MCP was set up in the staging area which is a

concrete pad located on the former Fourco Glass manufacturing facility property. The current property owner gave EPA permission for use of this area. START demobilized from the site at 1720 hours.

On October 12th, 2010, the OSC (1), START (1), and ERRS (7) commenced removal operations at the site. ERRS began operations by sweeping and cleaning off the staging area and unloading/preparing their equipment. ERRS started clearing and grubbing operations along the rails to trails (RTT) trail. ERRS demarcated the areas of the trail that will capped with aggregate and asphalt paving, and also delineated areas where fencing is to be installed. Clearing and grubbing consisted of using a track mounted skid steer with a mower deck attachment, weedeaters, and a chainsaw. Wood that was cut along the trail was staged at the trail head for future residential use. START met with residents to procure property access to perform dataRam particulate air monitoring. START conducted written and photographic documentation during the operational period.

On October 13th, 2010, the OSC (1), START (1)and ERRS (6) continued removal operations at the site. ERRS continued clearing and grubbing, and tree cutting operations during this day. ERRS utilized the excavator to move loads of cut wood to the trail head area for staging. ERRS installed an underflow pipe and riprap in the drainage/swale area which is located about one-third the way up the site portion of the trail. WVDEP Inspector Pasupathy Ramanen arrived at the site to inspect site operations and progress. The inspector indicated no major issues or concerns during his visit. START collected site feature GPS location data using a Trimble GPS receiver. START conducted air monitoring operations, written and photographic documentation activities during the operational period.

On October 14th, 2010, START (1) and ERRS (6)continued removal operations at the site. ERRS continued and completed clearingand grubbing, and tree cutting operations during this day. Cut wood was again delivered and staged along the trail head for residential use. START did not conduct air monitoring during this day due to precipitation and saturated conditions along the trail. START conducted written and photographic documentation activities during the daily operational period.

On October 15th, 2010, OSC (1), START (1), ERRS (6) continued removal operations at the site. ERRS procured a load of riprap which was delivered to the site to be applied in the drainage/swale area, and the slag area buttress construction. The riprap was staged in the trail head area prior to being utilized. ERRS procured 10-foot fence posts to be installed along the slag pile area. ERRS also worked on installing a small and a large buttress along the slag pile boundary area. This boundary is located on the western side of the trail. Both the small and large buttress areas were constructed using existing railroad ties for stability. The buttress areas were backfilled with riprap. ERRS also added some riprap to the underflow pipe area. START conducted air monitoring operations, and conducted written and photographic documentation activities during the daily operational period.

On October 16th, 2010, OSC (1), START (1), and ERRS (6) continued removal operations at the site. ERRS began and completed installation of the 10-foot fence posts (10-foot spacing) along the slag area boundary. The fence posts were installed using an auger attachment for the skid steer. ERRS stabilized each individual fence post through the application of 80 pounds of concrete. A total of 17 fence posts were installed along the slag pile boundary. START conducted air monitoring operations, and conducted written and photographic documentation activities during the daily operational period.

2.2 Planning Section

Next Steps:

ERRS to continue fence installation, which will also include the installation of some baseboards along the fence for finished trail stability. ERRS to apply aggregate to trail using a roller, followed by the addition of asphalt along the trail, from the gate to 1250 feet up the trail (north). OSC to update WVDEP and other stakeholders as appropriate.

Issues:

None to report.

2.3 Logistics Section

None to report.

2.4 Finance Section

2.5 Safety Officer

2.6 Liaison Officer

2.7 Information Officer

3. Participating Entities

3.1 Unified Command

3.2 Cooperating and Assisting Agencies

West Virginia Department of Environmental Protection

4. Personnel On Site

5. Definition of Terms

6. Additional sources of information

6.1 Internet location of additional information/reports

6.2 Reporting Schedule

Weekly

7. Situational Reference Materials

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Fourco Glass - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: **POLREP #3**
Final
Fourco Glass
A3NR
Clarksburg, WV
Latitude: 39.2956602 Longitude: -80.3556673

To:
From: Marjorie Easton, On-Scene Coordinator
Date: 10/28/2010
Reporting Period: 10/18/2010 - 10/25/2010

1. Introduction

1.1 Background

Site Number:	A3NR	**Contract Number:**	
D.O. Number:		**Action Memo Date:**	
Response Authority:	CERCLA	**Response Type:**	Emergency
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	10/11/2010	**Start Date:**	10/12/2010
Demob Date:	10/25/2010	**Completion Date:**	10/22/2010
CERCLIS ID:	WVD988768693	**RCRIS ID:**	
ERNS No.:		**State Notification:**	WVDEP
FPN#:		**Reimbursable Account #:**	

A. Site Description

The Site is located west of North 25th Street in the “North View” area of Clarksburg, Harrison County, West Virginia. The site primarily consists of the RTT recreational trail and the adjacent slag pile along the northern reach of the site. This delineation consists of approximately 5 acres of land. The site is bound by industrial property parcels to the south and west, the continuation of the RTT recreational trail to the north, and residential/public roadway property to the east. The site is currently adjacent to a former glass factory that is now operated as a warehouse

depot and by King's Tire Service, Inc., which sells a variety of tires and conducts automobile repair and maintenance work.

B. Site Background

Although named for the adjacent former glass factory and industrial property parcels, the site primarily involves the Rails to Trails (RTT) trail and slag pile areas. The RTT recreational trailcomprises of a strip of land approximately 6.9 miles in length with varying widths, consisting of approximately 95.3 acres. The RTT recreational trail is currently operated through a lease agreement between the property owner, the West Virginia Railroad Maintenance Authority (RMA), and the lessee, the Harrison County Parks and Recreation Commission (HCPRC). The RMA was deeded the property on April 15, 1983. The property was formerly owned and operated as an active railroad by the Baltimore and Ohio Railroad Company (B&O). B&O acquired this rail line from the Monongahela River Railroad Company on November 12, 1912.

In August of 2009, Triad Engineering, Inc. (TRIAD) conducted a Site Inspection Reassessment of the Fourco Glass Plant site. This report was submitted to the West Virginia Department of Environmental Protection (WVDEP). The report indicated the presence of elevated levels of arsenic, lead, and zinc in surface soil sample results. Results from surface soil sample locations in the vicinity of the RTT recreational trail indicated elevated lead and arsenic.
In March of 2010, WVDEP requested EPA assistance with evaluating potential risks from soil exposure along the RTT recreational trail adjacent to the former Fourco Glass Plant.

On April 13, 2010, EPA and START personnel accompanied WVDEP personnel on a site visit. Numerous media and other stakeholders/stakeholder representatives were present at the meeting.
EPA, START, and WVDEP walked the RTT recreational trail, slag pile area and the facility grounds. WVDEP provided EPA with a package of background information which included the Site Inspection Reassessment report pertaining to the work listed above. The EPA OSC for the site indicated to WVDEP that EPA would review the information and determine if EPA assistance is warranted.

On August 18, 2010, EPA and START personnel performed a removal evaluation sampling event at the Site. START collected a total of 38 soil samples for in-situ prepared field portable X-Ray Fluorescence (XRF) analysis, and laboratory samples for TAL metals analysis. Eight (8) Slag samples were collected for TAL metals analysis. Soil samples were collected from the RTT recreational trail entrance area, from areas along the trail using a 100 foot spacing scheme, and from a drainage area observed along the trail. Slag samples were collected from 8 locations in the slag pile area. XRF data and validated laboratory sample analytical data indicated elevated levels of arsenic and lead in both the soil and slag samples. Analytical data results from eight samples (six slag samples and two soil samples) indicated lead results in the percent range. Based on validated analytical data, the highest slag sample result for lead was 29.400 parts per million (ppm), and the highest soil sample result for lead was 13,900 ppm.

2. Current Activities

2.1 Operations Section

Current Actions:

On October 18, 2010, the EPA (1), START (2), and ERRS (6), resumed the emergency response removal action from a temporary site shut down on Sunday, October 17, 2010. ERRS received crush-and-run aggregate and had it dumped directly onto the rails to trail (trail). A roller was then used to compact the crush-and-run material in preparation for a planned asphalt cover. Approximately 420 feet of the trail was covered with crush-and-run aggregate and subsequently compacted. ERRS continued work on a chain-link fence which was to be constructed near the slag pile. Wooden boards were secured at the base of the fence to prevent crush-and-run material from falling through a gap between the edge of the trail and the fence. Horizontal support bars were installed on the fence. As requested by WVDEP, EPA directed START to collect two samples to be analyzed for TCLP Metals at a later date. The samples were collected from the slag pile and from the trail prior to it being covered. The sample locations were recorded with a Trimble GPS unit. START conducted air monitoring operations, and conducted written and photographic documentation throughout the day.

On October 19, 2010, the OSC (1), START (2), and ERRS (6) continued removal operations at the Site. ERRS continued to install a chain-link fence near the slag pile, continued to compact the trail, and received a rental auger attachment to be used to dig fence post holes. A fence was planned to be constructed near the trail head and adjacent to the building and the concrete roof/platform where a large drop-off exists. The fence will be to prevent anyone from inadvertently falling off the drop off. START conducted air monitoring operations, and conducted written and photographic documentation throughout the day.

On October 20, 2010, the OSC (1), START (1), and ERRS (6) continued removal operations at the Site. ERRS completed covering the trail (1,300 feet) with crush-and-run aggregate material, and continued to compact it in preparation for asphalt operations. Additionally ERRS began to level the trail, fill in low spots, and ensure the trail was approximately 10 feet wide. The construction of the chain-link fence near the slag pile was completed. Using an auger attachment on the skid steer, the holes for the fence posts were dug near the building at the trail head. A total of 14 holes were dug, fence posts were set in the holes, and the holes were backfilled with concrete. START conducted written and photographic documentation throughout the day. No air monitoring was conducted as the trail was covered with crush-and-run aggregate thereby eliminating the potential for offsite migration of contaminants.

On October 21, 2010, the OSC (2), START (1), and ERRS (6) continued removal operations at the Site. ERRS completed the compaction and leveling process of the crush-and-run aggregate on the trail. Asphalt paving is scheduled for October 22, 2010. ERRS continued to construct the chain-link fence located near the trail head. START conducted written and photographic documentation throughout the day.

On October 22, 2010, the OSC (1), START (2), and ERRS (7) completed all removal operations at the Site. Asphalt paving operations on the trail began and was completed today. A total of 1,250 feet on the trail was covered with approximately 2 inches of asphalt. ERRS completed the construction of the chain-link fence near the trail head. EPA, START, and ERRS completed a site walk through and agreed that the removal actions were completed. The support zone began to be dismantled in preparations for a site demobilization. ERRS demobilized all

equipment and personnel. The MCP was scheduled to be demobilized on October 25, 2010.

On October 25, 2010, START mobilized to the Site, performed shutdown procedures on the MCP, and demobilized the MCP back to Wheeling. No further removal actions scheduled.

2.2 Planning Section

Next Steps:
The OSC does not anticipate any additional onsite work to be completed as part of this removal action.

Issues:
None to report.

2.3 Logistics Section

None to report.

2.4 Finance Section

2.5 Safety Officer

2.6 Liaison Officer

2.7 Information Officer

3. Participating Entities

3.1 Unified Command

3.2 Cooperating and Assisting Agencies

West Virginia Department of Environmental Protection

4. Personnel On Site

5. Definition of Terms

6. Additional sources of information

6.1 Internet location of additional information/reports

6.2 Reporting Schedule

Weekly

7. Situational Reference Materials

APPENDIX 2
LABORATORY ANALYTICAL RESULTS - 10/19/10 DATA SUMMARY

Fourco Glass Plant Removal Assessment - Validated Data
October 2010 Sampling Event
TDD# TL01-10-07-005

CLP Sample ID	MC0083		MC0084		Characteristic Hazardous Waste Determination Below**
Sampling Location	RT1		ST1		
Latitude	39.299066		39.299181		
Longitude	-80.353447		-80.353525		
Sample Date	10/18/2010		10/18/2010		
Sample Time	8:30		8:40		
Matrix	Soil/Sediment		Waste		
Analyte	Result*	Qual	Result*	Qual	Regulatory Limit*
Arsenic	0.0355		0.0059	B	5.0
Barium	0.75		1.07		100.0
Cadmium	0.074		0.16		1.0
Chromium	ND		ND		5.0
Lead	3.75		143#		5.0
Selenium	ND		ND		1.0
Silver	0.0017	B	0.014	J	5.0

Notes:
* = concentration in milligrams per liter (mg/L) per TCLP
# = sample was heavily diluted due to high concentration in the sample
B = Not detected substantially above the level reported in laboratory or field blanks
J = Analyte present. Reported value may not be accurate or precise

Color Codes	
	Present, but at concentrations below the Regulatory Limit
	Present at concentrations above the Regulatory Limit

**TCLP sampling determines if solid and/or liquid wastes meed the criteria for a characteristic hazardous waste based on RCRA guidance found in 40 CFR Part 261.

APPENDIX 3
PHOTOGRAPHIC DOCUMENTATION

10/12/2010
Rails to Trails trail upon initial ERRS entry and work (North)
IMG_5435.jpg

10/12/2010
Area at head of RTT trail where ERRS will stage materials (S)
IMG_5436.jpg

10/12/2010
Another view of RTT trail entrance (NE)
IMG_5440.jpg

10/12/2010
ERRS RM vehicle on-site at RTT trail (N)
IMG_5442.jpg

10/12/2010
Area of trail cleared and grubbed by ERRS (South)
IMG_5443.jpg

10/12/2010
South end of RTT trail cleared and grubbed by ERRS looking (N)
IMG_5446.jpg

10/12/2010
ERRS skidsteer and mower deck performing brush clearing (N)
IMG_5448.jpg

10/12/2010
ERRS skidsteer performing brush clearing - looking (SE)
IMG_5450.jpg

10/13/2010
DataRam 2 deployment location - looking NNE
IMG_5461.jpg

10/13/2010
DataRam 1 deployment location - looking north
IMG_5464.jpg

10/13/2010
Wood from clearing ops staged at head of site by ERRS - (West)
IMG_5465.jpg

10/13/2010
ERRS using excavator to move cut wood to staging area - (N)
IMG_5469.jpg

10/13/2010
ERRS crew using excavator to pull down tree - looking north
IMG_5473.jpg

10/13/2010
Area along RTT trail where underflow drain pipe was installed
IMG_5478.jpg

10/13/2010
Head of installed drain pipe - water will cross from (E) to (W)
IMG_5482.jpg

10/13/2010
ERRS 1250 foot marker along RTT trail - looking south
IMG_5487.jpg

10/14/2010
Area where ERRS removed RR ties from head of trail (SSW)
IMG_5493.jpg

10/14/2010
RR Ties staged near slag area - ties were removed from head of trail
IMG_5495.jpg

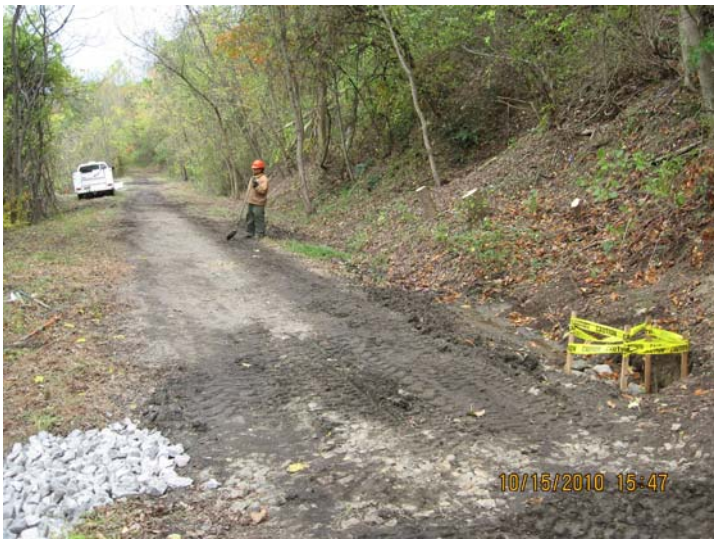
10/14/2010
Six inch CPP staged along RTT trail - looking north
IMG_5507.jpg

10/14/2010
ERRS crew clearing and grupping along RTT trail - looking north
IMG_5515.jpg

10/15/2010
Riprap stone staged near entrance to RTT trail - looking (S)
IMG_5519.jpg

10/15/2010
Slag pile area with RR tie buttress installed - looking (N)
IMG_5521.jpg

10/15/2010
Installed RR tie buttress system along slag pile area boundary
IMG_5524.jpg



10/15/2010
Drainage swale area alont RTT trail looking north
IMG_5532.jpg

10/15/2010
Slag pile boundary with riprap installed in buttress system (N)
IMG_5536.jpg

10/15/2010
Drainage swale area pipe with additional stone added for stability
IMG_5543.jpg

10/16/2010
ERRS crew installing fence in slag pile area looking north
IMG_5544.jpg

10/16/2010
ERRS installing fence posts in slag area looking north
IMG_5546.jpg

10/18/2010
ERRS installing wooden boards at base of fence. The trail will be covered with asphalt
IMG_5564.JPG

10/18/2010
START collecting a soil sample (RT1) from the trail prior to it being covered.
IMG_5565.JPG

10/18/2010
Perspective view of START collecting a soil sample RT1 from the trail prior to capping
IMG_5566.JPG

10/18/2010
START Hpreparing to collect a waste sample from the slag pile (ST1).
IMG_5567.JPG

10/18/2010
START collecting a waste sample (ST1) from the slag pile for TCLP analysis.
IMG_5568.JPG

10/18/2010
View of gravel base compacted on trail.
SAM_0001.JPG

10/18/2010
Photo of compactor/roller which is being used to compact gravel base of trail.
SAM_0002.JPG

10/18/2010
ERRS installing wooden boards at base of fence.
SAM_0003.JPG

10/18/2010
ERRS rolling/compacting gravel base on trail in preparation of asphalt being applied
SAM_0004.JPG

10/18/2010
Extent of compacted gravel on trail.
SAM_0005.JPG

10/18/2010
Progress of the installation of wooden boards at base of the fence.
SAM_0006.JPG

10/18/2010
View of area behind the fence.
SAM_0007.JPG

10/19/2010
ERRS erecting chain link fence.
SAM_0009.JPG

10/19/2010
Location of particulate monitoring unit. (Hanging from tree branch in foreground.)
SAM_0010.JPG

10/19/2010
ERRS installing tension wire on top section of chain link fence.
SAM_0011.JPG

10/19/2010
Progress view of chain link fence.
SAM_0012.JPG

10/20/2010
Location of particulate monitoring station 04 (Dataram D687) on the concrete roof
SAM_0013.JPG

10/20/2010
ERRS compacting the recently added crush-n-run on the trail in preparation for asphalt
SAM_0014.JPG

10/20/2010
Extent of the trail which will be capped. Note the 2 orange stakes on the hillside.
SAM_0015.JPG

10/20/2010
View of the completed fence near the slag pile.
SAM_0016.JPG

10/20/2010
ERRS preparing for the installation of a fence adjacent to the building
SAM_0017.JPG

10/20/2010
Recently installed fence posts.
SAM_0018.JPG

10/20/2010
ERRS using skidsteer with an auger attachment to dig the fencepost footers
SAM_0019.JPG

10/20/2010
ERRS using skidsteer with an auger attachment to dig the fencepost footers
SAM_0020.JPG

10/20/2010
Dump truck unloading and spreading crush-n-run on the trail.
SAM_0021.JPG

10/20/2010
Dump truck unloading and spreading crush-n-run on the trail.
SAM_0022.JPG

10/20/2010
Dump truck unloading and spreading crush-n-run on the trail.
SAM_0023.JPG

10/20/2010
ERRS installing fence posts.
SAM_0024.JPG

10/21/2010
ERRS placing crush-n-run on trail to fill to level it in preparation for paving.
SAM_0025.JPG

10/21/2010
In preparation for paving, ERRS placing crush-n-run on trail to build a level base.
SAM_0026.JPG

10/21/2010
In preparation for paving, ERRS placing crush-n-run on trail t...
SAM_0027.JPG

10/21/2010
View of drainage pipe which runs underneath trail.
SAM_0028.JPG

10/22/2010
Stone placed at base of fence to eliminate the gap which had previously been u...
SAM_0032.JPG

10/22/2010
Asphalt contractor preparing to begin paving the trail.
SAM_0033.JPG

10/22/2010
Dump truck unloading asphalt into the paving machine.
SAM_0034.JPG

10/22/2010
Paving of the trail. Started at North end and worked south ...
SAM_0036.JPG

10/22/2010
Paving of the trail.
SAM_0037.JPG

10/22/2010
Paving of the trail.
SAM_0038.JPG

10/22/2010
Compaction on trail after asphalt was laid.
SAM_0039.JPG

10/22/2010
Compaction on trail after asphalt was laid.
SAM_0040.JPG

10/22/2010
Paving of trail.
SAM_0041.JPG

10/22/2010
View inside asphalt storage compartment.
SAM_0042.JPG

10/22/2010
ERRS erecting chain link fence near building at trail head.
SAM_0043.JPG

10/22/2010
Paved trail.
SAM_0044.JPG

10/22/2010
Completed fence near building at trail head.
SAM_0045.JPG

10/22/2010
Paved trail.
SAM_0046.JPG

10/22/2010
Paved trail (SAM_0047.JPG)

10/22/2010
Paved trail (SAM_0048.JPG)