

Commonwealth of Pennsylvania  
Department of Environmental Protection

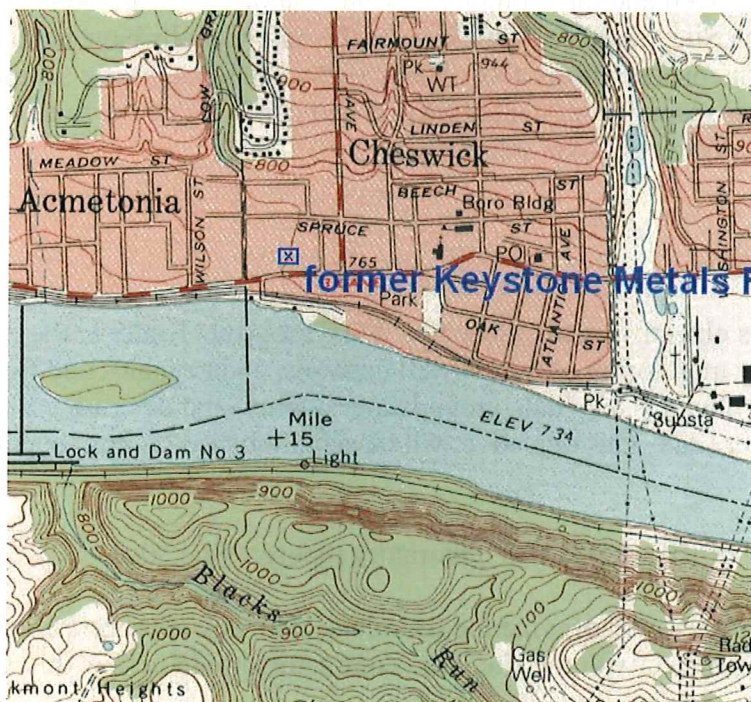
Scope of Work  
October 23, 2014

Groundwater Monitoring at Keystone Metals Reduction Site  
Cheswick Borough  
Allegheny County

Prepared By  
Dawna Saunders, PG  
HSCA Section  
Southwest Regional Office

**I. General Statement**

The Keystone Metals Reduction Site (“KMR”) is located in the 1000 block of Pittsburgh Street in the Borough of Cheswick, Allegheny County, Pennsylvania. The Site encompasses approximately 3.5 acres and is located in an urban area with commercial, light industrial and residential properties nearby. The Harmar Township Municipal Well Field is located approximately 2 blocks west of the Site. North American Fencing Corporation currently operates at the Site.



A Remedial Investigation Report and a Remedial Alternative Analysis Report have been prepared for the Site. Continued quarterly groundwater monitoring is needed at the Keystone Metals Reduction Site while the Department determines the proper response at the Site and implements the remediation.

## **II. Background**

Keystone Metals Reduction Co. was a Delaware corporation that purchased the Site in 1921 and operated a uranium processing facility on the property. Records indicate that Keystone utilized an extraction process on previously 'milled' uranium ore to produce radium. The facility reportedly produced about 2 grams of radium and ceased operations in the early 1920s. Radium production at this time required about two hundred fifty to five hundred tons of ore for every gram of radium produced.

In August 2010, staff from the Department's Radiation Protection Program conducted a radiological scoping survey ("survey") of the Site. During the survey, no byproducts from radium processing were observed on the property. It is not known how the tailings that resulted from the radium processing were disposed. No records from the facility have been found. A common radium production practice at the time was to dump the tailings on or near the facility. During the survey, Department representatives detected two locations on the ground with elevated radiation levels.

As a result of the Department survey, a Site Investigation was conducted. Soil samples collected during the investigation indicate that Radium-226 is the target radionuclide in soils at the Site that has driven the site characterization and possible remedial activities. Groundwater is also impacted at the Site. A network of nine onsite monitoring wells, one off-site monitoring well and three municipal water supply wells are being used to monitor groundwater at the Site. Samples from some of the on-site wells have contained gross alpha and uranium concentrations above the USEPA MCL. Quarterly sampling is planned to monitor groundwater contamination and confirm that the municipal groundwater wells continue to be safe for use.

## **Objectives/Tasks**

The Department's objective in this Scope of Work for groundwater at the KMR Site is to continue quarterly monitoring of the 13-well network, update tables and figures as additional data is obtained, evaluate groundwater quality, and determine if any changes have occurred over time. This objective will be accomplished by implementing the following tasks:

1. Review of RIR, RAA, and Laboratory reports / Site Visit

The Department will provide the contractor with any appropriate information and reports associated with the site. The contractor should review this information



prior to the site visit to become familiarized with the site. After the contractor has reviewed this information, a site visit will be scheduled for the same day as the project scoping meeting.

## 2. Project Scoping Meeting

Prior to the preparation of the work plan, the contractor will participate in a project scoping meeting with the Department to discuss the objectives to be achieved and the tasks to be undertaken. This meeting will take place at the Department's office in Pittsburgh. The Department will conduct a site visit with the contractor on the same day as the Project Scoping Meeting.

## 3. Scoping Meeting Minutes

Within five (5) working days after the scoping meeting, the GTAC Contractor will submit meeting minutes to the Department. Any changes or additions to this Scope of Work, as well as a summary of the scoping meeting will be included in the minutes. The Department will review and provide any comments on the minutes within five (5) working days after receipt.

## 4. Prepare Work Plan

The contractor will develop a Work Plan for Quarterly Groundwater Monitoring and Reporting. The Work Plan should include a plan for the management of investigation-derived wastes.

The Work Plan will include:

- Project Staffing and Management
- Equipment Type and Use
- Analysis to be performed
- Project Schedule by Task
- Project Costs by Task

The contractor should also prepare a Sampling and Analysis Plan and a Health and Safety Plan. These documents may be attached as appendices to the Work Plan.

The Work Plan and schedule for completing the tasks outlined in the work plan should be submitted to the Department for review and approval. Any revisions or clarifications to the Work plan will be requested in writing.

## 5. Implement Work Plan

Upon written approval of the Work Plan and associated documents by the department, the contractor will conduct all action necessary to implement the Work Plan. The contractor shall procure all services/subcontractors required to

complete the tasks identified in the Work Plan. Laboratory services will be provided by the Department's contract laboratory program.

#### 6. Reporting

After completion of each quarterly sampling, the contractor will prepare and submit for review a brief report describing the sampling event, results, and any notable changes from past sampling events. The report should also update tables and figures as needed. Results of previous sampling will be incorporated in each Report.

Upon Department review of the Draft Report, the contractor will incorporate any comments the Department has regarding the report and submit a revised final report.

#### 7. Community Relations

The contractor may be required to provide support including attendance at any public meetings or generation of a web page for the site.

### **IV. Deliverables**

#### Reports and Plans

1. Draft Work Plan
2. Final Work Plan
3. Draft Quarterly Monitoring Report
4. Final Remedial Investigation Report

#### Other Deliverables

1. Meeting Minutes for Project Scoping Meeting, by e-mail
2. Daily Activity Reports during field work
3. All analytical results
4. Waste manifests / Bills of Lading
5. Certificates of Disposal
6. Executed Subcontractors
7. Certificates of Insurance
8. Bid Price Quotes

Number of Copies

	<u>Project Officer</u>	<u>DEP CO</u>	<u>Rad Protection</u>
Draft Work Plan	2	1	1
Final Work Plan	3	1	1
Daily Activity Reports	1	1	
Draft Quarterly Report	2	1	1
Final Quarterly Report	4+2 disks	1	1

The DEP project officer for this site is:

Dawna Saunders, PG  
Department of Environmental Protection  
Environmental Cleanup Program  
400 Waterfront Drive  
Pittsburgh, PA 15222  
(412) 442-4347  
e-mail: [dasaunders@state.pa.us](mailto:dasaunders@state.pa.us)

**V. Conflict of Interest Determination**

No Responsible Parties have been identified at this time.

