



***Registered Environmental Consultant (REC)  
&  
Registered Site Manager (RSM) Case Study***

**Ulah Battery Site**

In March 2011, Pyramid Environmental & Engineering, P.C. (Pyramid) was asked to meet a representative of a major home furnishings manufacturer at the Ulah Battery site. The Registered Site Manager (RSM) met the client at the site to discuss the best path to get the Inactive Hazardous Site Branch (IHSB) Project closed out with the program. The US Environmental Protection Agency (US EPA) Region IV had requested the manufacturer to excavate and remove over 500 tons of lead contaminated soil located on the property. In addition, the NC IHSB required that the assessment and cleanup meet the requirements of the IHSB program. Pyramid was asked to evaluate and find the best method for disposal of the soil.

The Ulah battery site was a former battery cracking operation that was active in the 1960s through about 1985. Significant source cleanup had already been completed in the early 1990s by US EPA, and the remaining contamination had been roughly identified and targeted for cleanup. Pyramid went to the NC IHSB project files in Raleigh, NC and copied the portions of the file that referred to the property. These files were evaluated and a letter with recommended actions was sent to the IHSB program for evaluation.

Once the IHSB has reviewed the plan, sampling and analysis will be completed to provide data to guide the: (1) removal operations at the site, (2) profiling of the waste, and (3) provide sufficient analyses for regulatory closure. The proposed work will include community health and safety planning, work plan preparation, soil assessment, waste profiling, excavation and disposal, and methods of work, and final cleanup reporting. The work is planned for late summer 2011 and will include all elements required by both programs.



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**Building/Canopy Manufacturer**

In 2010, the Inactive Hazardous Sites Branch (IHSB) sent a letter to said company requesting a comprehensive evaluation of this industrial site. The manufacturing facility was built in 1966 to manufacture modular buildings and steel canopies. The operations at this facility raised concerns for the IHSB Program which included metals contamination, hazardous drum storage and waste disposal, permitting, along with on-site burning, underground storage tanks removals and cleanups, remediation of lead contaminated soil, remediation of toluene contaminated soils, plus chlorinated solvent contamination. In all there were 16 Areas-of-Concern (AOCs) that required work under the IHSB program. Pyramid researched all available environmental assessment as well as cleanup reports for the site and prepared an Environmental History Review for the facility. The focus of the report was to provide all of the data and analysis in one place so that redundant assessment would not be required by the client. The Environmental History Review was reviewed by the DENR in early 2011. In the Comment letter, the IHSB said;

“The IHSB received the Environmental History Review Report and letter prepared by your consultant, Pyramid Environmental & Engineering, P.C. The report included a thorough environmental history of the site and several assessment and cleanup reports that were not included in the DWQ files. From review of this information, it appears that adequate assessment and analysis has occurred for most of the areas of concern.”

The Pyramid report and analysis was accepted and removed the requirement for Phase I Assessment of 15 AOC's. This analysis and research saved the client tens of thousands of dollars! The remaining concern for the IHSB program is the chlorinated solvent Tetrachloroethene (PCE). Throughout the assessment and remediation work, this contaminant has persisted and is a hazard to the human health and the environment. Pyramid immediately recommended sampling the nearby water supply wells and found that the closest water supply well was contaminated above the drinking water standards. Pyramid helped the company navigate the legal and personal negotiations with the property owners to assure that company resources were applied to solving the problem thus not paying attorney fees. Pyramid will continue to assist as a RSM/REC within the IHSB program. At this time, the IHSB has requested additional groundwater assessment and remediation at the facility.



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**Former Metals Plating Facility**

Pyramid was requested to perform a background review and analysis of the Division of Water Quality (DWQ) file on a metals plating facility and to evaluate the Areas of Concern (AOCs). After reviewing the file, Pyramid recommended soil and groundwater assessment prior to purchasing the facility. The facility had been historically used as a metals plating facility, and chromium was detected in the soil near the plating area. Aluminum, total chromium, copper, Nickel, Zinc, and pH were detected in areas downstream from the facility, including a pond. Pyramid designed the Sampling & Analysis Plan (SAP) using the existing Monitoring Well (MW), Geoprobe soil boring, and temporary water sampling points. The SAP was planned to meet the requirements of the Inactive Hazardous Sites Branch (IHSB) program.

After assessment work was prepared, an application for the Brownfields Program, which was accepted and the site was closed out. This allowed the company to redevelop the site while documenting the former planting waste concerns.