

# ACS February 2009 Regular Meeting

February 12<sup>th</sup>, 2009

7:00 pm

University of Southern Indiana

ED 1101 in the Education/Science Center

**Speaker:** Marshall A. Lake, P.G.  
PSC Industrial Outsourcing, LP

**Title:** Environmental Consulting and Remediation –  
A Case Study Discussion

**Dinner:** 5:30 pm @ Gerst Haus  
200 W. Franklin St.  
Evansville, IN

*RSVP for dinner by February 10<sup>th</sup> to Derek Lake*  
**[Derek.Lake@sabic-ip.com](mailto:Derek.Lake@sabic-ip.com)**

## Abstract

PSC Industrial Outsourcing, LP (PSC) is a nationwide company, with over 4,000 employees, that offers industrial services, environmental services, and transportation and container services. The PSC office in Columbia, IL offers remediation and consulting services for our clients. Several projects where the Columbia, IL office has conducted work include hazardous waste transfer, storage, and disposal (TSD) facilities, underground storage tank (UST) sites, rail yards, brownfields, and various industrial facilities. Historical, operational, geological, chemical, computer modeling, and regulatory information are all used in providing consulting and remediation services.

Several sites will be discussed to illustrate the process of using data collected from these various sources. The first case study will review a site where source material infiltrated the soil and migrated into the groundwater from a TSD. Soil and groundwater samples were collected to monitor the degradation of the parent products into the daughter products of various hydrocarbons. The second case study involves a rail yard facility that repairs damaged rail cars. Contents from those cleaned cars were rinsed lagoons, with clay liners, which eventually leaked contaminating the soil and groundwater. Several remedial technologies have been used to control the associated contamination over the past several years, the most recent being in-situ remediation of the groundwater. The third site involves a former bakery, where delivery trucks were fueled using an on-site UST. The site had a diesel UST that developed leaks and contaminated the soil and groundwater beneath the site. This site has had several remedial technologies conducted, with removal of the UST to in-situ chemical oxidation by modified Fenton's reaction. Groundwater samples collected at the site show degradation products of the parent hydrocarbons downgradient of the source area.