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# PROCEEDING BOOK

(Abstracts and Full-Text Papers)



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#### > ORAL PRESENTATION

#### Petrochemical Waste Migration and Its Adverse Effects in Petro-Processors of Louisiana, Inc. (PPI) Site

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#### Abstract

The Petro-Processors of Louisiana, Inc. (PPI) site, located North of the city of Baton Rouge, includes the Brooklawn Operable Unit (OU), located off Brooklawn Drive, and the Scenic OU, located off U.S. Brooklawn and Scenic sites were used as depositories for various petrochemical processing industries from mainly the 1960s until the 1980s. The main problem was the potential for leachate migration and for exposure of toxic materials, which had been released into local waterways. The Middle District of Louisiana issued an order approving the consent decree for remedial action at the PPI site in 1984. U.S. Environmental Protection Agency approved an Interim Remedial Action for the Scenic OU in November 2001, and for the Brooklawn OU in July 2003. These investigations have detected chlorinated aromatic and nonaromatic hydrocarbons in samples from the soil, groundwater, and air at the both disposal sites and in surface water samples at the Brooklawn site. Therefore, the site is considered a public health hazard area because of risks to human health from past, present, and future exposure to hazardous substances. Therefore, we investigated selected chlorinated organic liquids with recommended remedial actions and health effects. Results from this study showed that even though the petrochemical waste disposal shut down since 1980, it will still take an average of 60 years to reach the nearest domestic well via slow migration, which will increase the cancer risks for the people who live near PPI site.

**Keywords:** waste migration, chlorinated hydrocarbons, Petro Processors, Inc. (PPI) site