NPL Site Narrative for Lower Ecorse Creek Dump

LOWER ECORSE CREEK DUMP Wyandotte, Michigan

The Lower Ecorse Creek Dump site is located in Wyandotte, Wayne County, Michigan. The site consists of the residence at 470 North Drive and three neighboring parcels of land. The site occupies a level area with the back of the lots abutting the Ecorse River. During the period between 1945 and 1955, and prior to the house at 470 North Drive being built, the low lying swampy area of the creek was filled with material from local industries. Some of the fill material contained what has been confirmed as ferric ferrocyanide, commonly referred to as "Prussian Blue". The blue soil was also found across the street at 471 North Drive, approximately two feet below the surface and the owner of the residence at 469 North Drive also reported that he found the blue soil in his yard. In addition, there are two vacant lots east of 470 North Drive where Prussian Blue is exposed. Neighborhood children have used portions of these lots as a go-cart track and wearing of the topsoil by the go-carts has exposed the Prussian Blue.

The EPA was contacted by the Wayne County Health Department on October 25, 1989. EPA tasked its Technical Assistance Team (TAT) on October 27, 1989, to conduct a site investigation and sampling. Sampling results were provided to ATSDR for review and assessment. ATSDR's review on November 22, 1989, concluded that "The levels of cyanide found in the soil do present an urgent public health threat. Steps to eliminate any direct contact with the contaminated soil need to be taken immediately."

Following ATSDR's determination that the presence of cyanide-contaminated wastes in an unrestricted residential area presented an immediate and significant public health threat, EPA's Emergency Response Branch initiated removal activities. On December 4, 1989, work commenced to cover the contaminated areas with six inches of clean topsoil and fill in areas of the driveway and sidewalk which had been previously excavated by the property owner. This action eliminated physical contact with Prussian Blue and related cyanide compounds which had spread throughout the area. The initial action was completed in the summer of 1990 with the establishment of a vegetative cover.

The Final ATSDR Health Advisory which was released on August 13, 1993, recommended the following actions: 1) immediately dissociate the affected residents from cyanide contamination, which is at levels of health concern in residential subsurface soils; 2) implement permanent measures to remediate the contamination as appropriate; and 3) consider including the Lower Ecorse Creek Dump site on the EPA National Priorities List or, using other statutory or regulatory authorities as appropriate, take other steps to characterize the site and take necessary action. Such activities are better addressed under remedial authorities than removal considering the costs and time involved in an extensive groundwater study and potential groundwater remediation.

Additional recommendations by ATSDR include conducting a door-to-door well survey and well sampling to determine the extent and level of any groundwater contamination. ATSDR also suggests restricting digging into contaminated subsurface soil to prevent human contact with contaminated soils and released cyanide gas.

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at ATSDR - ToxFAQs (http://www.atsdr.cdc.gov/toxfaqs/index.asp) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.