NPL Site Narrative for Pesticide Warehouse III

PESTICIDE WAREHOUSE III
Manati, Puerto Rico

Conditions at Proposal (September 5, 2002): The Pesticide Warehouse III (PWIII) site is an active facility located at Road No. 670, kilometer (km) 3.7, in a rural/residential area of Manati, Puerto Rico. The site is approximately 2 acres in size and consists of a main warehouse, a smaller warehouse, and a small shed which contains an on-site well. The PWIII site is bounded to the south by Road No. 670, to the west and north by fields, and to the east by a church and a retirement home. The Puerto Rico Land Authority (PRLA) owned and operated the site from 1954 to 1996. Site operations during this period included the preparation of pesticides/insecticides, herbicides, and fertilizers. The site is currently privately owned and operated.

In 1996-1997, EPA conducted a Site Inspection (SI) investigation which consisted of an on-site reconnaissance and a subsequent sampling site inspection. During the reconnaissance, the following were noted to be stored in bags within the main warehouse: magnesium sulfate, Ochoa fertilizer, sulfate of potash, zinc sulfate, ferrous sulfate, urea, MoCap 10G, Karmex DF, Baylethon, Hyvar X, Nemacor 3, and Solobar. Spilled materials were noted throughout the warehouse. In addition, stained soils were noted throughout the site. Surface drainage was observed to be toward the west, where it entered a drainage ditch. This ditch extended along the western and northern boundaries of the site, where it terminated in a leach pit located north of the on-site buildings. This pit was observed to be unlined and appeared to be a natural sinkhole.

Based on the potential for pesticide contamination on site and the potential impact to off-site receptors, EPA conducted an SI sampling event which included the collection of 15 surface soil samples (depth: 0 to 6 inches) at locations both on and off the PWIII site. Diazinon, Malathion, Diuron, and Toxaphene were detected in on-site surface soil samples at concentrations significantly above background. These contaminants were also detected at concentrations significantly above background in samples collected from the drainage ditch and associated leach pit. These contaminants were either observed on site or were listed in site Material Safety Data Sheets (MSDS). Other pesticides detected in on-site soils at concentrations significantly above background included alpha-BHC, Heptachlor, Aldrin, Endosulfan I, Dieldrin, Endrin, alpha-Chlordane, and gamma-Chlordane. Several pesticides detected on the PWIII site exceeded EPA Soil Screening Levels (SSLs). Zinc was also detected at concentrations significantly above background in both on-site soils and the retirement home located adjacent to the PWIII site. The contamination is related to improper handling of pesticides/insecticides, herbicides, and fertilizers.

Two sources have been identified for the Hazard Ranking System (HRS) evaluation of the site: contaminated soil and the drainage ditch and associated leach pit. There are other areas of environmental concern, such as a pit observed at the bottom of a former truck scale located south of the main warehouse entrance, and a cistern located below the ruined northeast portion of the main warehouse building, and suspected asbestos-containing materials located on some of the piping runs within the small warehouse.

Ground water threatened by the PWIII site serves an approximate population of 118,970 people. These people obtain potable water from wells screened in the North Coast Limestone Aquifer System (i.e., the

aquifer of concern), which has karst aquifers beneath the site. The nearest potable well is the Coto Sur No. 5, which is located approximately 700 feet west of the PWIII site. This well serves an approximate population of 1,260 people. In addition, analytical data from the SI indicates that there is documented soil contamination at the nearby retirement home, which has a building within 15 feet from the eastern border of the PWIII property. The population of the retirement home is estimated to be 50 people. There are currently 20 workers at the PWIII site.

Status (April 2003): EPA is considering various alternatives for this site.

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.