NPL Site Narrative for Ward Transformer

WARD TRANSFORMER Raleigh, North Carolina

Conditions at Proposal (September 5, 2002): The Ward Transformer site is located near the Raleigh Durham International Airport in a predominantly industrial area of Raleigh, Wake County, North Carolina. The site encompasses an active electrical transformer building/reconditioning facility constructed in 1964 on 11 acres of previously undeveloped land. A perennial stream bordered by wetlands leads from the property to a recreational lake and fishery. The closest residence, the only one within 1/4 mile of the site, is approximately 300 feet northeast of the Ward Transformer property. The site is being proposed to the NPL because elevated levels of polychlorinated biphenyls (PCBs), dioxins, furans, arsenic, chromium, copper, lead, manganese, and zinc, all attributable to facility operations, have been found throughout the site, and elevated concentrations of PCBs have been detected in surface water downstream of the site, posing a threat to recreational fisheries and wetlands.

Prior to 1972, storm water runoff flow from the facility was uncontrolled. Two impoundments were constructed around 1972 to collect runoff, and in 1979, a retaining wall (curb height) was constructed around the facility to direct runoff into the impoundment. An onsite treatment plant, installed in 1979, removes PCBs from the impoundment water prior to its discharge. Recent inspections by the North Carolina Division of Water Quality show that the treatment facility is in compliance.

The facility currently incinerates used transformer parts in a permitted onsite burnoff oven/incinerator and reclaims copper from the resulting ash. Recent inspections by the North Carolina Division of Air Quality indicate that the incinerator is in compliance with its permit. Prior to the installation of the incinerator, transformer parts were burned in the open air to reclaim copper. A concrete area near the incinerator is covered with dark, oily soil. In 1978 and 1979, EPA collected samples on the facility property and from an unnamed tributary and Little Brier Creek downstream from the facility. PCB contamination was found in soil, in the storm water impoundment, and water and sediment collected from the unnamed tributary and Little Brier Creek. No additional action was taken by the EPA on the site until 1993. Prompted by reports of bankruptcy, EPA conducted a removal investigation and no contaminants were detected above removal action levels.

The North Carolina Superfund Section's Preliminary Assessment (PA) conducted in 1994, and subsequent Site Inspection (SI) performed in 1995, recommended further action under CERCLA as part of an Expanded Site Inspection. In 1997, samples were collected for the Expanded Site Inspection by the North Carolina Superfund Section. Soil at the wooded rear of the Ward property, outside fencing or curbing, contained PCB 1260, manganese, zinc, 1,2,3,7,8 pentachlorodibenzofuran, and octachlorodibenzofuran. Sediment collected along the shoreline of the impoundment showed PCB 1260. Soil near the incinerator contained Aroclor 1260, dioxins, arsenic, chromium, copper, lead, manganese, and zinc. Aroclor 1260 was also found in sediment samples collected from the unnamed tributary and Little Brier Creek less than a mile downstream of the 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.