PRELIMINARY HEALTH ASSESSMENT REEVES SOUTHEASTERN GALVANIZING TAMPA, FLORIDA JANUARY 4, 1989

Prepared by:
Office of Health Assessment
Agency for Toxic Substances and Disease Registry (ATSDR)

Background

The Reeves Southeastern Corporation Site (RSS) is listed by the U.S. Environmental Protection Agency on the National Priorities List (NPL). The active site is located in Tampa (Hillsborough County), Florida. RSS encompasses 2 areas located in close proximity to each other. They include the Reeves Southeastern Galvanizing Site (RSEG) (approximately 17 acres) and the Reeves Southeastern Wire Site (RSEW) (approximately 11 acres). In addition, the sites are adjacent to 2 other NPL sites. Historically, spent caustic, rinse, and acid process wastes generated at RSEG and RSEW were neutralized and discharged to storage ponds for percolation and evaporation. It is believed that plating wastes were discharged in the same manner. At RSEW there are 3 ponds (1 backfilled and 2 not backfilled but not used) exist. Two ponds exist at the RSEG area but are not presently used. Access to the site is restricted. Removal operations have not occurred.

The following documents were reviewed by ATSDR: (1) Review of Draft Site Operation Plan for Remedial Investigation (RI), January 1986, (2) Community Relations Plan (Draft), February 1988, (3) Review of Draft Site Operation Plan for RI, and (4) Excerpts from Draft Workplan, no date given. These documents form the basis of this Preliminary Health Assessment.

Environmental Contamination and Physical Hazards

Preliminary on-site groundwater sampling results have identified chromium unspecific, (2 ppm) and aluminum (0.7 to 440 ppm). No further sampling information was reported. Physical hazards were not reported.

Potential Environmental and Human Exposure Pathways

Potential environmental pathways include migration of contaminated groundwater, surface water, on-site soils, and entrainment of contaminants in ambient air. In addition, bioaccumulation of contaminants in water fowl may be another environmental pathway.

Potential human exposures to contaminants include ingestion of and direct contact with groundwater, surface water, soil, and possible ingestion of bioaccumulated contaminants in the food chain. In addition, inhalation of contaminants entrained in air during remedial operations is another potential source for human exposure.

Demographics

There are about 56,000 people living within a 3-mile radius of the site. The distance from RSS to the nearest residence is one-quarter of a mile. Special population concerns were not reported.

Evaluation and Discussion

Private and municipal potable wells are located within the vicinity of the site. Area wells are reportedly uncontaminated. However, sampling information was not reported with respect to area private wells. Public system data has confirmed the absence of site-related contaminants in municipal wells. An area wide groundwater study is being planned.

Sampling results confirm contamination of on-site soil. However, soil sampling information was not reported. On-site soil sampling information is necessary to determine the amount of exposure of on-site workers to site-related contaminants. In addition, off-site soil contamination has not been confirmed and is necessary to rule out possible exposure to site-related contaminants by area residents.

There are no surface water bodies impacted by RSS. Moreover, air sampling and food chain sampling information were not reported. ATSDR has prepared a Toxicological Profile on chromium.

Conclusions and Recommendations

Based on available information, this site is considered to be of potential public health concern because of the risk to human health caused by the possibility of human exposure to hazardous substances. Direct contact, inhalation and possible ingestion of soils and contaminants entrained in air are potential exposure pathways.

Additional information on contaminants released, populations potentially exposed, and environmental pathways through which the contaminants can reach these populations is necessary. At a minimum, future investigations of this site should include a characterization of the site and site contaminants to include on-site soil sampling, an updated well survey, and a characterization of the hydrogeology of the area.

Further environmental characterization and sampling of the site and impacted off-site areas during the Remedial Investigation and Feasibility Study (RI/FS) should be designed to address the environmental and human exposure pathways discussed above. When additional information and data, such as the completed RI/FS are available, such material will form the basis for further assessment by ATSDR as warranted by site-specific public health issues.