

NPL Site Narrative for American Brass

AMERICAN BRASS Headland, Alabama

Conditions at Proposal (January 1999): American Brass, Inc. is located on State Highway 134 near Headland, Henry County, Alabama. American Brass, Inc. was a secondary brass facility (SIC 3341) that operated on a 140-acre site surrounded by agricultural land from 1977 until 1992. The process at American Brass, Inc. was as follows: Brass- and copper-bearing scrap material were charged into the rotary furnaces and melted. Alloying and fluxing agents were added to obtain a spec alloy. The metal was cast into ingot form and the remaining slag was taken for further processing. The ingots were allowed to cool. The slag was processed through the crusher and then into the ball mill. Brass particles were recovered from the crushed slag and reprocessed in the furnace. The slag was then sent to storage bins. Fume from the furnaces and particulate emissions from the crusher and ballmill were controlled by two baghouses. The baghouse dust was collected and sold as a finished product. Approximately 150,000 tons of heavy metal-contaminated furnace waste, ball mill residues, and furnace slag were stockpiled in the facility at various areas on the ground and in a large uncontrolled stockpile approximately one-third mile southeast of the facility.

On February 22, 1996, the Alabama Department of Environmental Management (ADEM) conducted a Site Investigation at American Brass, Inc. and collected aqueous samples and sediment samples from Dunham Creek, Cedar Creek, and the breach in the berm around the ball mill stockpile, which drains into a tributary to Cedar Creek. Aqueous samples collected in Dunham Creek show a release of barium; the sediment samples indicate a release of barium, chromium, copper, nickel, lead, and zinc. Aqueous samples collected from Cedar Creek indicate a release of barium; the sediment samples indicate a release of barium, chromium, and zinc. Aqueous samples collected below the breach in the berm show a release of barium, copper, lead, and zinc; the sediment samples show a release of barium, chromium, copper, nickel, lead, and zinc.

In April 1996, as part of EPA Region 4's removal assessment at this site, EPA's START contractor conducted an additional site investigation and collected surface soil, ground water, and waste samples to determine preliminary site conditions. Analytical results indicated elevated levels of lead in samples collected in the pond sediment and in the ball mill residue stockpile. ADEM had a representative on site to collect split samples and additional samples.

In August 1996, EPA's START contractor conducted another site investigation. During the investigation 27 soil samples were collected in order to determine the extent of contamination in the soil surrounding the facility. Analyses of the samples indicated elevated levels up to 1,300 parts per million (ppm).

Due to site conditions, and the potential threat to human health and the environment, EPA submitted an Action Memorandum requesting removal action. EPA selected an ERCS Contractor to perform the removal activities on site.

Removal activities were to mitigate the soil contamination in excess of 1,500 ppm, decontaminate the site structures and machinery, and consolidate the waste with the on-site stockpile of ball mill residue for

subsequent encapsulation with a high-density polyethylene (HDPE) liner. These activities were concluded on May 7, 1997.

A second emergency removal action commenced in October 1998, and was completed in March, 1999, to remove and properly dispose of the material in the ball mill residue pile.

Status (May 1999): During the summer of 1999, EPA will be conducting the RI/FS, which includes community relations activities.

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) (<http://www.atsdr.cdc.gov/toxfaqs/index.asp>) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.