

# NPL Site Narrative for Fort Hartford Coal Co. Stone Quarry

## FORT HARTFORD COAL CO. STONE QUARRY Olaton, Kentucky

**Conditions at proposal (June 24, 1988):** The Fort Hartford Coal Co., Inc., Stone Quarry in Olaton, Ohio County, originally provided limestone for parkway construction in western Kentucky. Since 1981, the 100-acre area has been used to store secondary dross (a by-product of aluminum recycling) from Barmet Aluminum Corp.'s smelter in Livia, Kentucky. According to Fort Hartford Coal, by late 1986 Barmet had deposited more than 712,000 tons of dross into the quarry. Dross contains heavy metals (including barium, cadmium, chromium, lead, copper, and manganese) and reacts violently with water to form several gases, including ammonia. EPA detected ammonia in the air around the storage areas during a December 1986 inspection.

In 1984, the Kentucky Department for Environmental Protection found high levels of ammonia in an unnamed stream that originates in the waste. Run-off from the quarry flows into the Rough River, which is used for recreational activities. The waste was deposited below the water table, thus threatening ground water. An estimated 700 people obtain drinking water from wells and springs within 3 miles of the site.

**Status (January 1990):** Barmet contested the proposed listing of the Fort Hartford Site and filed a civil action against EPA and the State on November 8, 1988 in the U.S. District Court. In November 1988, Barmet also filed for a Temporary Restraining Order to keep EPA from (1) placing this site and the Brantley Landfill Site on the final NPL until their comments had been addressed and (2) keep EPA from sending letters to other parties potentially responsible for wastes associated with the sites informing them of their potential liability. After the request for this order was denied, EPA sent the letters.

In December 1988, EPA, in response to a citizen's complaint, identified two areas where the quarry roof had collapsed on his property. Subsequently, additional roof collapse areas were identified that provide actual or potential pathways by which water can drain into the dross storage areas.

In January 1989, EPA sampled area private wells. No evidence was found of contamination from dross stored at the site. However, two samples had elevated levels of manganese and/or iron. Storage operations continue. By October 1989, 1.2 million tons of dross were in the quarry.

On September 20, 1989, EPA and Barmet signed a CERCLA Administrative Order on consent requiring Barmet to conduct a remedial investigation/feasibility study (RI/FS) to determine the type and extent of contamination at the site and identify alternatives for remedial action. Barmet submitted an Expedited Response Action Plan on October 20, 1989 under the order. Barmet will (1) identify all areas where waste is in contact with water and where water is entering the quarry and (2) isolate wastes from water.

**Status (August 30, 1990):** The civil action against EPA was dismissed when the judge ruled he did not have subject matter jurisdiction.

After EPA reviewed Barmet's workplans, Barmet started the Expedited Response Action in mid-May 1990.

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.