

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
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MEMORANDUM

DATE: November 22, 2002

TO: File

FROM: Steve Padovani, Remedial Project Manager (RPM)
Remedial Response Section #5
Superfund Division

SUBJECT: No Action at the Coal Dock Property Located at the Hubbell/Tamarack
Portion of the Torch Lake Superfund Site, Houghton County, Michigan.

This memo provides an explanation for taking no action at the coal dock property (see attached figure) located at the Hubbell/Tamarack portion of the Torch Lake Superfund Site (the Site), Houghton County, Michigan.

BACKGROUND

The Torch Lake Superfund cleanup remedy primarily addresses the negative ecological impacts to area water bodies as a result of over 100 years of copper mining, milling and smelting activities. The most significant ecological impact is the severe degradation of the benthic community in area water bodies as a result of past and current metal and particulate matter surface water loadings from mining wastes (including Astampsands®) located on land along and near area water bodies. Benthic communities include lake bottom dwelling organisms that are a very important part of a complex food web in lakes. The USEPA cleanup decision for terrestrial portions of the Site is documented in the USEPA's September 30, 1992 Record of Decision (ROD).

The 1992 ROD's cleanup process includes constructing a soil (six inches of sandy loam) and vegetative cover over exposed mining wastes on properties that border area water bodies. This cover is designed to prevent further contamination and ecological degradation of area water bodies by reducing the ongoing transport (i.e., wind erosion, surface water runoff, and shoreline erosion) and loading of mining waste metals and particulate matter into area water bodies. The area water bodies will then be allowed to naturally recover.

The USEPA contracted with the United States Department of Agriculture (USDA) - Natural Resources Conservation Service (NRCS) in August 1994 to perform RD work. The USEPA also contracted with the USDA-NRCS in September 1998 to perform RA management and oversight.

COAL DOCK PROPERTY

The coal dock property consists of approximately 3 to 4 acres of barren and abandoned commercial land. The property consists mainly of surface debris such as scrap metal, wood (mostly tree bark with some wood chips), some fire brick, minor amounts of stampsand and coal pieces which are approximately one to two inches in diameter (NRCS, USEPA, & MDEQ site inspections, 2002). The coal pieces make up approximately 60% - 70% of the debris. The most prominent feature on the property is a massive, solid concrete retaining wall approximately 900 feet long and four feet thick running along the edge of Torch Lake. The concrete wall is speculated to be the remnant of a platform or building foundation that was intended for the unloading of coal from ships which were docked at a historical wooden dock built directly adjacent to the wall. All that remains of the dock is primarily several wooden pilings protruding just above the surface of the water.

Historically, the coal dock property was used for the receiving of coal from ships in the early part of the 20th century. The coal was needed to generate power for area milling and smelting operations such as the Calumet and Hecla Smelter. In 1993, the property was purchased by Houghton (Buchanan) Forest Products, Inc. (deed attached) for use as a timber loading dock. In summer 1993, a large commercial vessel (approximately 500 ft long) entered Torch Lake and tied up alongside the former coal dock to take on a large load of timber for transport to Canada. This was the only attempt at timber shipping from the property by its current owner that USEPA is aware of and the owner does not anticipate any future attempts at shipping timber in a similar way because it proved to be cost prohibitive (conversation with Ken Buchanan, 2002).

During the design and construction phases of the Hubbell/Tamarack portion of the Superfund project (1998 through 2000), NRCS and USEPA evaluated the need for cover material at the coal dock property. At that time, the NRCS determined, and USEPA concurred, that the concrete dock wall was highly stable and would be more than adequate to prevent wave erosion from affecting the land behind it. In addition, the NRCS did not observe any wind erosion and/or surface water erosion into Torch Lake from the coal dock property at that time.

However, in 2002, USEPA and NRCS revisited the need for cover material at the coal dock property. This included site inspections conducted on July 24, 2002 by NRCS personnel and on October 8, 2002 by NRCS, USEPA and Michigan Department of Environmental Quality (MDEQ) personnel. In addition, during the October 2002 site inspection, the MDEQ collected and analyzed two soil samples from the coal dock

property (attached).

During the July 24, 2002 site inspection, the NRCS noted the general composition of the surface debris (presented above) and noted that the debris (including the coal) is of a relatively large size and would likely not be subject to wind erosion. In addition, the NRCS conducted soil borings through the debris and observed native soil within 6 to 10 inches of the surface. However, the NRCS also noted surface runoff channels that could potentially carry contamination into Torch Lake.

During the October 2002 site inspection, NRCS, USEPA and MDEQ evaluated the potential surface runoff channels more carefully. The agencies concluded that surface water runoff from the property did not enter Torch Lake. In addition, the agencies confirmed the presence of only a thin layer of surface debris (mainly coal pieces) which contains only minor amounts of stampsand. Based on this observation, the agencies concluded that the volume of waste material is not significant enough to be a significant contaminant source to Torch Lake. Also, no significant contamination was detected in the two soil samples collected by the MDEQ.

The MDEQ analytical results, along with field observations, support the conclusion that the coal dock property is not likely a significant potential source of contamination to Torch Lake.

RECOMMENDATION

Based on the information above, USEPA has concluded at this time that the potential for the coal dock property to contribute to the severe degradation of the benthic community in Torch Lake is not high enough to justify taking a Superfund action consistent with the 1992 ROD. In addition, given the limited volume of waste material on the coal dock property and the fact that no significant contamination was detected in the two soil samples collected by the MDEQ, USEPA, at this time, will not be pursuing institutional controls on the property.