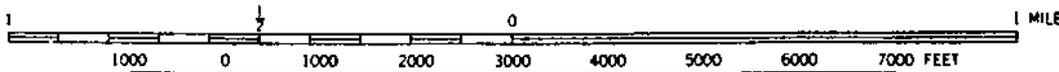




BASE MAP IS A PORTION OF THE U.S.G.S. BURLINGTON & COLCHESTER, VT
 QUADRANGLE 17.9'SERIES, 1948 PHOTOREVISED 1972)



LOCUS PLAN
CHAMPLAIN MILLS
WINOOSKI, VT

JULY 1986

NUS
 CORPORATION
 A Halliburton Company

FIGURE 1

MEMO TO DON SMITH
AUGUST 4, 1986-PAGE TWO

At the same time, the state conducted air sampling throughout the entire building using a Jerome Model 411 mercury detector. Elevated mercury in air readings were detected only in the area of the spill and from around the ceiling where it appeared the mercury originated (3). The state has continued to perform monthly air sampling throughout the VSAC offices since the original leak.

The state recommended to Mr. Pecor that he hire a consultant to investigate the origin of the mercury and provide remedial options for removal. Civil Engineering Associates, Inc. (CEA) of Shelburne, Vermont was retained by Mr. Pecor to conduct this investigation. During the course of their investigation, it was discovered that, during the late 50's and early 60's, a company known as American Supertemperature Wires, Inc. spilled liquid mercury on the fourth floor during a wire coating process (4).

The remainder of CEA's investigation involved air sampling in and around the ceiling of the third floor using the Jerome Model 411 mercury detector. One and one half inch core samples were drilled into the ceiling in order to obtain samples from the floor boards. Results from the investigation indicated that mercury contamination is contained in certain sections of the third floor ceiling and that the floor boards should be removed.

Upon completion of their report, Civil Engineering Associates, Inc. submitted a copy to the Vermont Department of Health. The Department of Health decided then to inform the Vermont Agency of Environmental Conservation (VT AEC), who in turn notified EPA requesting a Preliminary Assessment.

ENVIRONMENTAL SETTING

The Champlain Mill is situated within the Winooski River Basin in the town of Winooski, Vermont. The site is bounded to the north by a large parking lot and Route 15, to the east by a small shopping center, to the west by Routes 2 and 7, and to the south by the Winooski River which flows from east to west (Figure 2).

Drinking water is supplied to the town (population 6,319) by the Champlain Water District whose source is Lake Champlain, located approximately two miles to the west (5).

Surficial deposits in this area consist of fine grained stratified glacial drift and swamp deposits. These deposits are composed primarily of silts and clays, and some sands, which will generally yield sufficient water for domestic wells only (6). Bedrock in this area is generally encountered at depths exceeding 200 feet and is composed of "distinctively red quartzite (sandstone) interbedded with lesser buff and white quartzite and relatively thick sections of dolomite" (7).



ROUTE 15 MAIN ST.

ROUTE 2

PARKING LOT

SHOPPING CENTER

CHAMPLAIN MILL

WINOOSKI RIVER

NOT TO SCALE

SITE SKETCH
CHAMPLAIN MILL
WINOOSKI, VT

JULY 1986



FIGURE 2

MEMO TO DON SMITH
AUGUST 4, 1986-PAGE THREE

CONCLUSIONS AND RECOMMENDATIONS

Based on the information obtained and reviewed during this Preliminary Assessment, NUS/FIT agrees with the recommendation made by Civil Engineering Associates. Although no additional mercury has leaked from the ceiling since the original leak occurred, the potential for liquid mercury remaining in the ceiling is possible. NUS/FIT recommends that the planking of the third floor ceiling be removed by individuals experienced in handling hazardous materials and that the removed materials be disposed of at a licensed hazardous waste facility.

It should be noted that although NUS/FIT recommends that the above measures be incorporated into any future action at the site, no recommendations are to be inferred regarding the allocation of resources for these tasks. Furthermore, NUS/FIT does not advocate which parties (State, EPA, Principal Responsible Party, etc.) should be responsible for further action at the site.

MLM/mtb

Reviewed and Approved By:


R. DiNitto, RPM

Date:

8-4-86

REFERENCES

1. Perimeter Survey conducted on July 18, 1986, NUS/FIT.
2. Newspaper article contained in state files.
3. Letter: March 8, 1985, State of Vermont, Department of Health, Division of Occupational and Radiological Health; to R. Pecor, The Champlain Mill.
4. "Mercury Detection at the Champlain Mill", Civil Engineering Associates, Inc. June 1985.
5. Telecon: July 25, 1986 between assistant town clerk, Town of Winooski, Vermont and M. Mengel, NUS/FIT.
6. Hodges, Arthur J., USGS and Butterfield, David, Vermont Department of Water Resources in cooperation with the Department of the Interior, USGS; "Ground Water Favorability Map of the Winooski River Basin, Vermont," 1967.
7. Doll, Charles G., State Geologist, et al, "Centennial Geological Map of Vermont," 1961.