NPL Site Narrative for Crown Cleaners of Watertown, Inc.

CROWN CLEANERS OF WATERTOWN, INC.
Carthage, New York

Conditions at Proposal (September 13, 2001): The Crown Cleaners of Watertown, Inc. (a.k.a., Nu-Art Cleaners) site includes a former laundry/dry cleaning facility located along Route 3 in the Village of Herrings, Jefferson County, New York and a groundwater plume resulting from onsite contamination. The facility property is approximately 9.82 acres in size and consists of a main building and several ancillary buildings situated parallel to Route 3 and along the Black River. The property is bordered to the north by Fort Drum, to the west by residential dwellings, to the east by a county-managed park and to the south by the Black River. From 1890 until the mid-1960s, the property was used by the St. Regis Paper Company for the purpose of producing paper bags and related products. In the late 1970s, the property was purchased by Crown Cleaners. Company cleaning processes involved both dry and machine wash cleaning. The dry cleaning operation involved the use of tetrachloroethylene (PCE), as well as machine oils and greases. Waste water from the washing machines was discharged into basement storage pits, which then discharged through the foundation walls to the ground and the Black River.

In 1991, the New York State Department of Health (NYSDOH) discovered that the Village of Herrings public water supply well was contaminated with PCE. Concentrations ranged from 25 to 50 parts per billion (ppb). The New York State Department of Environmental Conservation (NYSDEC) was contacted and preliminary investigations were conducted in the area of the village well and the Crown Cleaners property , which is located 300 feet south of the village well. The investigation included an inspection of the Crown Cleaners building and surrounding areas. Analytical results of soil samples collected on the Crown Cleaners property indicated the presence of PCE at concentrations up to 63,000 ppb. The most contaminated samples were collected in the spent filter storage area, located on the southwest side of the main building. In addition, sampling of a private well located 2,200 feet west of Crown Cleaners indicated the presence of PCE at concentrations of 22 to 40 ppb.

In 1991, NYSDEC investigated contamination of the village well. Results of this investigation indicated that the soil and ground water beneath the Crown Cleaners building were contaminated with PCE and other organic compounds. This investigation also indicated that the Crown Cleaners facility was the source of the PCE contamination detected in both the village well and an unused private well located on an adjacent property. As a result of this study, a treatment system for the village well was installed. The efficiency of the well was improved during the installation of the treatment system. As a result, the system could be operated in an "on-off" cycle. Previous to the study, the well operated continuously, creating a cone of depression which reached the Crown Cleaners site.

In 1998, NYSDEC initiated a state Remedial Investigation/Feasibility Study (RI/FS) of the Crown Cleaners site. Field activities included several rounds of ground water samples collected from wells in the area of the site. Analytical results from these sampling activities indicated that PCE was still present in samples collected from on-site monitoring wells, the village well, and private potable wells in the area. Concentrations of PCE detected during the RI/FS were less than detected in 1991-1992 as a result of the new pumping schedule of the village well. Other RI/FS activities included a building survey, a ground

penetrating radar survey of the structures beneath the Crown Cleaners building, and a limited removal of wastes located within the building and/or residing in containers, sumps, or other locations.

On June 8, 2000, the NYSDEC requested the U.S. Environmental Protection Agency (EPA) to assess the site for a possible removal action, and to provide assistance in assessing contamination from the site to local private drinking water wells and the village supply well. During EPA's removal site evaluation, asbestos insulation materials were observed in various stages of deterioration throughout the entire facility. In addition, five above or partially buried steel storage tanks were located near the building's electrical room. These vessels ranged from 275 to 10,000 gallons and appeared to contain a petroleum-derived product. The estimated quantity of materials within these tanks was 5,000 gallons. Evidence of leakage was noted at each of these tanks. Based on an evaluation of previous analytical data, historical information, and the removal site evaluation, EPA determined that the site poses a threat to public health, welfare, and environment and that the site met the requirements of the National Contingency Plan for the undertaking of a removal action. Activities planned for the removal action include securing the site, removal and disposal of volatile organic contaminated sludge/debris, sump pit water, and soils/spent dry cleaning filters, removal of friable asbestos-containing materials, and removal and disposal of approximately 5,000 gallons of waste oil.

PCE contamination in ground water is documented by the chemical analyses of ground water samples collected from the Village of Herrings potable public supply well. PCE contamination is documented for this well, which is located 300 feet south of the site and serves an approximate population of 140 people. This well is screened in the Pamelia Formation. PCE contamination is also documented by chemical analyses of ground water samples collected from on-site monitoring wells.

Status (September 2002): EPA is considering various alternatives for this site.

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) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.