

FACT SHEET
GENERAL ELECTRIC CAPACITOR PRODUCT DIV.
FORT EDWARD
INACTIVE HAZARDOUS WASTE DISPOSAL SITE

GENERAL INFORMATION: This site is listed as a class 2 Inactive Hazardous Waste site on the New York State Registry due to the presence of polychlorinated biphenyls (PCB's) and trichloroethane (TCE) at portions of the plant area as well as an area off-site. These contaminants reportedly entered the ground as a result of past plant operations and spillage.

SUMMARY ABATEMENT ORDER AND HEARING NOTICE

A summary Abatement Order and Hearing Notice was issued by DEC in March 1983. Significant contamination was identified in many private domestic water wells south of the plant. The order was vacated in July 1983 after General Electric entered into a contract with the Village of Fort Edward to provide a permanent source of potable water to the affected residents. GE has continued to monitor the domestic water quality at the affected residences.

RI/FS FINDINGS

The feasibility study evaluates remedial alternatives and recommends a remedial action plan for the area south of the plant site where the shallow groundwater is contaminated with trichlorethylene (TCE) concentrations in the general range of 1 to 2 mg/l, with a maximum concentration of 52 mg/l. PCBs are detectable only in the northernmost area in low (less than 0.002 mg/l) concentrations. TCE concentrations throughout the area have tended to decrease from the period 1982 through 1987. The plume discharges at a series of springs southwest of the study area. Mass discharge of total volatile organic compounds from the springs has declined from 1985 to 1987 at a fairly steady flow rate of 100 gpm.

The range of relevant criteria for human ingestion of TCE is from nondetectable to 0.1 mg/l. Water quality criteria for protection of aquatic life are cited by EPA as 45 mg/l for TCE. For the purposes of the feasibility study, the relevant criterion for the evaluation of groundwater remedial alternatives is the New York Groundwater Standard for GA waters, 0.01 mg/l.

Since groundwater is no longer used to supply drinking water in the area, the risk is solely from unauthorized and uninformed use of the groundwater. Therefore, for that reason, and because limitations inherent in calculating the time to reach 0.01 mg/l make cost estimates speculative, an alternative concentration limit (ACL) of 0.05 mg/l was utilized for comparison purposes in the study.

HUMAN EXPOSURE

Human exposure pathways include accidental ingestion of TCE from the springs and domestic wells, although Village of Fort Edward water supply is connected to all homes in the area. Inhalation of contaminants represents an insignificant exposure since measured concentrations of TCE near the springs are near or below the detection threshold. Based on model results, volatilization of TCE into basements will lead to residential concentrations less than 0.01% of NIOSH exposure limits. Potential environmental exposures to TCE could result from contact with the contaminants in the springs, wetlands, and brook, and volatilization of TCE as the springs flow to the brook. However, the potential risk is small since the concentration of TCE is low and decreasing in these exposure areas.

Based on the exposure pathways and the relevant criteria, existing conditions in the plume do not pose a hazard or threat to human health or the environment. Implemented on-site remediation has included removing from service or repairing sources of groundwater contamination; operation of a groundwater recovery well (RW-1) at the property boundary; and provision of alternative water supply throughout the plume area. These actions have allowed the plume concentrations to decline substantially, and have reduced contaminant exposure and environmental impacts. Because groundwater contamination remains in the plume area, away from the GE site, remedial measures to accelerate removal of these contaminants from the groundwater are appropriate in high concentration areas.

REMEDIAL ACTION CHOSEN

As a result of the RI/FS, the following measures will be undertaken to clean-up the off-site contaminated groundwater.

- * Continuation of the on-site groundwater pumping and treatment.
- * Pumping of the contaminated groundwater from the north area and treatment at the existing GE treatment facility. A recovery well will be installed to collect and treat groundwater.
- * Restrictive fencing around springs (where concentrations exceed 0.05 mg/l) and posting of warning signs in the area.
- * Monitoring wells will be constructed to sample and monitor the progress of groundwater clean-up.

ONGOING MAINTENANCE & OPERATION OF OFF-SITE REMEDIATION EFFORTS

Groundwater pumping and treatment will continue for as necessary until groundwater samples show that the contaminants have been cleaned up. The following monitoring program has been developed:

- * A monitoring program for five years to assess the effectiveness of pumping the north area and the on-site area, and to monitor the declining concentrations in the other areas and the springs.

- * Reevaluation of plume characteristics after five years of monitoring. If the midwest area of the plume has continued to decrease in concentrations at approximately the existing rates, no additional remedial actions will be implemented. If the data indicate that the enacted remedial program is ineffective, then additional remedial actions will be evaluated.

CONSTRUCTION PLANS

Construction of the remedial design will begin once the availability session and comment period are over. The construction will consist of:

- * installation of a new groundwater recovery well located where the highest off-site groundwater concentrations of volatile organics have persisted (see Figure 1)
- * installation of a pipeline to transmit the effluent from the well, west to the existing private road and then north, beneath Park Avenue to the building housing controls for the existing system. The effluent will flow from there west to the existing on-site treatment system.
- * Three pairs of off-site monitoring wells will be installed in the "midwest area" (see Figure 1).
- * Fencing will be installed around each of the springs showing persistent water concentrations in excess of 500 ppb total volatiles. Owner permission will be required. Each fence will be approximately 15 feet on a side and will be 6 feet high, contain a walk gate. Each side of the fence will be posted with a sign stating "CONTAMINATED WATER - DO NOT DRINK".

CONSTRUCTION SCHEDULE

The construction schedule commences on authorization by NYSDEC to proceed. Barring unforeseen delays the entire project is expected to be complete within 5 1/4 months of authorization.

STATUS OF ON-SITE STUDY

Remedial Investigation/Feasibility Study of on-site contamination is in final stages. Draft document should be complete by mid-August. As this time, the Department will hold a public meeting to discuss the results and solicit public comment.

POINT OF CONTACT FOR FURTHER INFORMATION: James Ludlam, Project Manager, NYS DEC, Division of Hazardous Waste Remediation, 50 Wolf Road, Room 222, Albany, N.Y. 12233, (518) 457-5637 or Betsy Lowe, Citizen Participation Specialist, NYS DEC, Ray Brook, N.Y. 12977, (518) 891-1370.

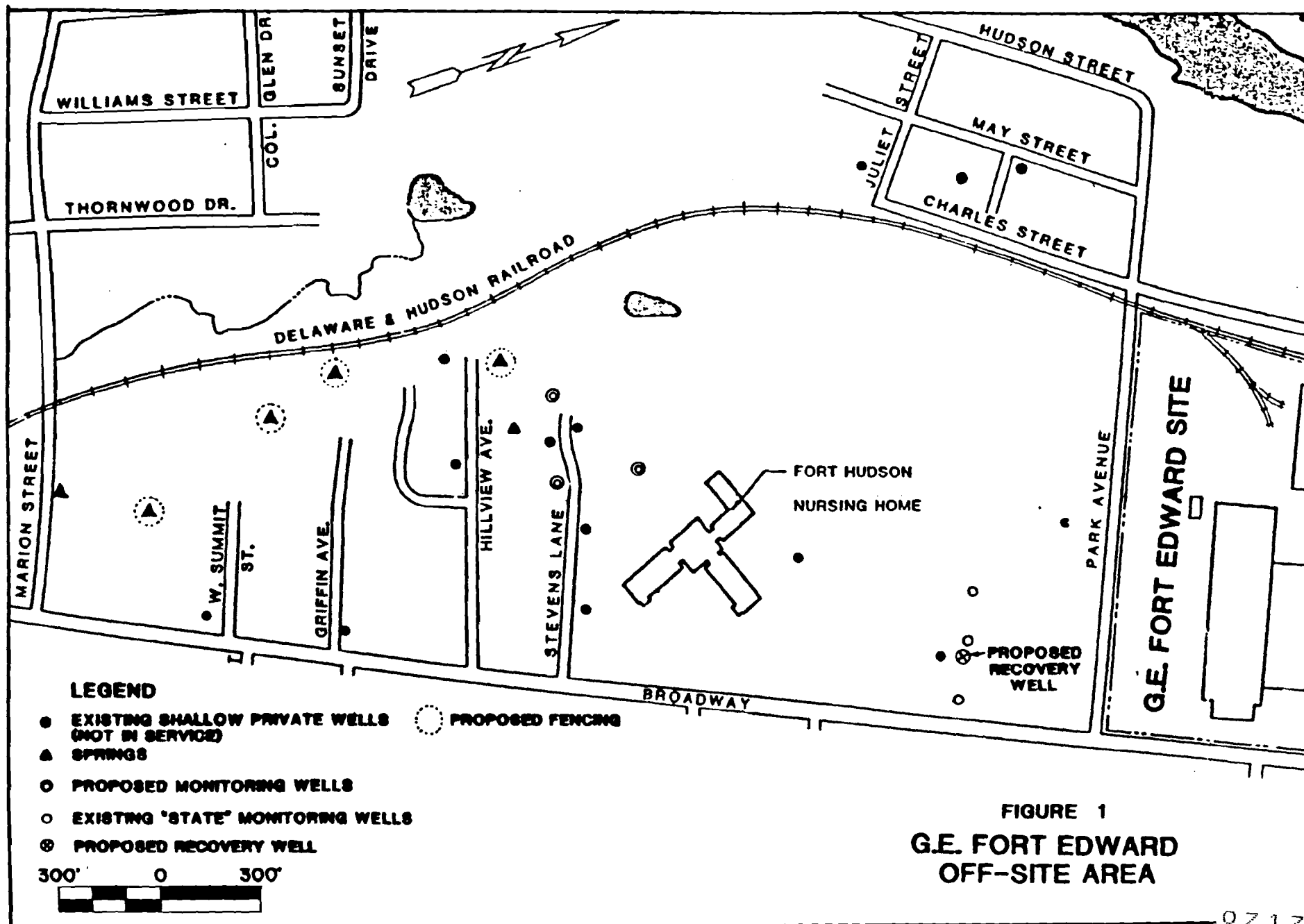


FIGURE 1
G.E. FORT EDWARD
OFF-SITE AREA