Last Updated: July 2007

General Electric Company - Auburn Plant

EPA ID Number: NYD002231272

Other (Former) Names of Site

Powerex (1986-1990), GE Company (1951-1986)

Site Description

The site encompasses 55.4 acres and is located in the Town of Aurelius, within the City of Auburn. GE purchased the property in 1951 and constructed a manufacturing plant that produced a variety of electrical components including radar equipment, printed circuit boards and high voltage semiconductors. In January 1986, Powerex, Inc., acquired the site and continued to manufacture high voltage semiconductors until May 1990, when the plant was closed. In November 1990, GE purchased the site back from Powerex to facilitate remedial activities. The plant has been inactive since May 1990.

Past waste-solvent handling practices at the site include the disposal of waste solvents in one or two unlined evaporation ponds (approximately 1959-1967). Additionally, waste solvents were stored in underground tanks that may have leaked. Sampling performed as part of the site investigation has revealed high concentrations of volatile organic compounds in soil and groundwater.

Site Regulatory Responsibility and Legal Instrument

New York State Order on Consent, Article 27, Title 13

Permit Status

GE Auburn submitted a Resource Conservation and Recovery Act (RCRA) Part A permit application which allowed it to receive interim status. The interim status allowed it to continue operating with the understanding that eventually it would apply for a full permit. This interim status was later transferred to Powerex for an underground storage tank and a container storage area.

In August 1988 Powerex decided to close the long-term storage area that would have eventually required a full permit, and to store its waste for less than 90 days. The tank was closed in December 1988 in accordance with the closure plan. The plant closed in 1990 and remains inactive.

The facility remains under interim status and subject to Resource Conservation and Recovery Act (RCRA) corrective action requirements. On-site corrective action is proceeding under the New York State inactive hazardous waste site program.

Potential Threats and Contaminants

During the site investigation, elevated levels of volatile organic compounds (VOCs), such as vinyl chloride, trichloroethylene (TCE), 1,2-dichloroethene (DCE), acetone, methanol and acetone were identified at concentrations above environmental standards in the soil and groundwater. Some of these same contaminants were also found in the groundwater approximately one mile from the facility.

EPA responded under the Superfund program and residences served by wells drawing from that groundwater have either had treatment units installed or have been connected to a public water supply. The area in the immediate vicinity of the facility is served by a public water supply.

More information regarding the extent of on-site contamination in the deep bedrock will be defined in the final phase remedial investigation (RI) which is being conducted by the New York State inactive hazardous waste site program. An on-site investigation of deep groundwater is on-going. A dual phase extraction system (initiated in the year 2001) now controls the shallow groundwater contamination, but it is not effective in controlling the deepest concentrations. Recently, VOCs have been found at concentrations of 300 to 450 parts per million (ppm) at depths of 180 feet below ground surface

Additionally, the EPA Superfund program is managing a Phase II field investigation of deep and shallow groundwater for the Cayuga Groundwater Superfund Site in the off-site vicinity of the facility. Until additional information is available pursuant to these ongoing studies, it has not been determined whether the contamination from the facility has impacted the groundwater problem being addressed by the Superfund response action.

As the site is inactive, the only persons on-site who potentially would be receptors for indoor air vapors are the operators of the corrective measures systems. There are four buildings on-site, each of which has potential for indoor air quality problems due to its vicinity to contaminated soil with high soil gas vapor readings. These buildings consist of the former large plant building which currently houses the shallow groundwater treatment system, two small former storage buildings, and one small new building that was built to house the surface water treatment system discussed below. It has been determined that there are no indoor air impacts to off-site residential buildings.

Cleanup Approach and Progress

Several interim remedial measures have been implemented at the site. Fencing has been installed around the site to restrict access, the property is locked to prevent trespassing, several underground storage tanks have been removed, contaminated sediments have been removed from drainage ditches, and storm sewers have been sealed to prevent contamination of storm drainage.

Additionally, contaminated water from the on-site stormwater drainage ditch is treated to meet New York State point-source discharge requirements, in a treatment building via a surface water interim remedial measure (IRM) prior to leaving the facility.

In 2001, construction was completed and startup began for an on-site shallow groundwater pump-and-treat system. It is anticipated that the shallow groundwater pump-and-treat system will be a significant part of the final remedy. A dual phase extraction system, which collects both groundwater and soil gas, has been installed in areas containing higher concentrations of contaminants.

A pipe has been placed at the groundwater surface, and a high-powered vacuum is collecting soil gas and groundwater, which are being directed to a fluidized bed bioreactor and then to an air stripper. It is anticipated that the groundwater remediation system will reduce contaminant levels in the area above the bedrock (the "overburden") and shallow bedrock while the investigation of the deep bedrock is conducted. This system should also reduce further contamination of the deep bedrock groundwater by controlling contamination migration from the upper layers.

Further investigation of deep bedrock groundwater is necessary, and is being conducted.

Environmental Indicator Status or Projection

\$ Current Human Exposure Under Control - Applies to units subject to Resource Conservation and Recovery Act (RCRA) permitting and/or corrective action.

The only current potential on-site human exposures from indoor air contaminants are to remediation workers due to potential indoor air quality problems at the buildings which house the treatment systems. These workers are required to be equipped with protective equipment which meets OSHA standards. Thus, it has been determined that current human exposure is under control.

\$ Migration of Contaminated Groundwater Under Control

This Environmental Indicator Status cannot be achieved until a decision is made regarding the extent of deep groundwater contamination, and the need for a remedial system to capture contamination in the deep bedrock groundwater.

Site Repository

Copies of supporting technical documents and correspondence cited in this site fact sheet are available for public review at:

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