Rod Site

Department of Environmental Conservation

Division of Hazardous Waste Remediation

Vatrano Road Site

Former General Electric Apparatus Repair Shop I.D. Number 401036

Record of Decision

11/4/02

5 YEAR GW. MONTORING WILL END IN 2004, WILL BE EVALUATED THEN TO SEE IF REMOVAL ACTION IS EFFECTIVE AS FINAL REMEDY OR IF GW REMEDIATION IS REQUIRED.
DEED RESTRICTIONS WILL BE PLACED INTO EFFECT WHEN 5 YEAR SAMPLING COMPLETE.

March 1993

New York State Department of Environmental Conservation
MARIO M. CUOMO, *Governor* THOMAS C. JORLING, *Commissioner*

DECLARATION FOR THE RECORD OF DECISION

SITE NAME AND LOCATION

General Electric Vatrano Road Former Apparatus Repair Shop
City of Albany
Albany County, New York
Site Code: 401036

STATEMENT OF PURPOSE

This document describes the selected remedial action for the GE - Vatrano Road Site, developed in accordance with the New York State Environmental Conservation Law (ECL), and consistent with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). Exhibit A identifies the documents that comprise the Administrative Record for the site. The documents in the Administrative Record are the basis for the selection of the remedial action.

ASSESSMENT OF THE SITE

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action selected in this Record of Decision, present a potential threat to public health, welfare and the environment.

STATEMENT OF BASIS

This decision is based upon the administrative record for the GE- Vatrano Road Site. A copy of the documents in the record is available for public review and/or copying at the following locations:

New York State Department of Environmental Conservation
2176 Guilderland Avenue
Schenectady, New York
(518)382-0680
Hours: 8:30 AM - 4:45 PM Monday - Friday

Colonie Public Library
629 Albany-Shaker Road
Loudonville, New York 12211
(518)458-9274

The following documents are the primary components of the administrative record:

A. "Phase I Remedial Investigation Report, General Electric Company Former Vatrano Road Service Center, Albany, New York", prepared by ERM-Northeast, Inc., for General Electric Company, Albany, NY, March, 1991.

B. "Phase II Remedial Investigation Report, General Electric Company Former Vatrano Road Service Center, Albany, New York", prepared by

ERM-Northeast, Inc., for General Electric Company, Albany, NY, December, 1991.

C. "Feasibility Study Report General Electric Company Former Vatrano Road Service Center, Albany, New York", prepared by ERM-Northeast, Inc., for General Electric Company, Albany, NY, revised September 1992

D. "Feasibility Study Supplemental Report General Electric Company Former Vatrano Road Service Center, Albany, New York", prepared by ERM-Northeast, Inc., for General Electric Company, Albany, NY, December, 1992.

Description of Selected Remedy

The selected remedy for the GE-Vatrano Road Site, a modification of alternative 2 of the FS Report (September, 1992), utilizes in-situ stabilization/solidification for soil containing greater than 10 ppm PCB, to a maximum of 2000 ppm. The mean concentration of PCBs in the soil to be solidified will be <50 ppm. Soil containing PCB levels greater than 2000 ppm will be excavated and sent off-site to an approved hazardous waste disposal facility. An asphalt cap will cover the site after treatment and groundwater will be monitored for at least five years.

The site will be fenced and have access restrictions to prevent future uses of the property that would interfere with the remedial measures or with the protectiveness which they afford.

If the selected alternative is found not feasible for reasons not evident at this time, a contingent remedial action will be implemented. The contingent action is excavation of soil containing 10 ppm PCB or greater and off-site landfilling of the soil at a hazardous waste facility. The site would then be backfilled with clean fill. Any areas of soil above the cleanup level that cannot be excavated will be covered with a cap.

DECLARATION

The selected remedy is designed to be protective of human health and the environment, is designed to comply with State regulations and standards to the extent practicable and is cost effective. This remedy satisfies the Department's preference for action that reduces the toxicity and mobility of hazardous substances, pollutants or contaminants as the principal goal.

March 12, 1993
Date

Ann Hill Debarbieri
Deputy Commissioner
Office of Environmental Remediation

Although the Patroon Creek is nearby, it was determined that there have been no adverse impacts to ecological resources due to the presence of contamination at the site.

IV. Enforcement Status

The New York State Department of Environmental Conservation negotiated with General Electric Company for a Consent Order to perform a Remedial Investigation and Feasibility Study at this site. The Order was executed on August 31, 1990. Completion of the remedy selection process, which culminates in a Departmental Record of Decision (ROD), will complete General Electric's obligation under this Consent Order. A new agreement will be necessary to implement the remedy indicated in the ROD.

V. Goals for the Remedial Action

Remedial action is proposed for the purpose of reducing the environmental or human health risk by preventing the ingestion or inhalation of contaminated soil, and reducing the potential for leaching of contaminants from the soil. Objectives for groundwater include reducing the potential for groundwater impact by remediating the source and further reducing the potential for ingestion of contaminated groundwater, and to attain levels of substances in accordance with the New York State SCG's.

VI. Selection of Remedial Alternatives

Summary of Alternatives

The Feasibility Study describes in detail the various alternatives selected for final consideration. Below is a brief summary of each.

All alternatives would include groundwater monitoring of the site, and access and site restrictions.

1. **No-Action** would include deed and access restrictions at a minimal cost. Although easily implemented, this action would not attain the SCG's, nor will it reduce the toxicity at the site. This course of action would not be protective of human health and is not recommended. Cost: $166,000

2. **In-situ Stabilization/Solidification (S/S)** This alternative would encapsulate the contaminated soil. A cementatious material would be injected into the soil and allowed to solidify. The resulting monolith would prevent the PCB's from leaching into the groundwater, and prevent the release of soil as fugitive dust. The solidified material would be covered with an asphalt cover to deter degradation of the monolith. It is expected that this proposal will be highly effective in reducing the risks associated with the contaminated soil. Land use would be restricted as the site is in an industrial area and waste would be left on-site. However, the site would be able to be utilized for activities that would not affect the integrity or protectiveness of the remedy. Cost: $1,003,000

3. **Excavation and Landfilling** - The contaminated soil would be excavated to the depth of the cleanup level and the soil transported to a Permitted Hazardous Waste Facility in Model City, New York for disposal by land burial. Cost: $3,366,000

4. **Excavation and Off-site Incineration** will require the excavation and incineration of approximately 3500 cu. yds of contaminated soil. The area will then be backfilled with clean fill. The groundwater beneath the site would not be actively treated as the level of contaminants is low and removal of soil would alleviate the continued migration of contaminants from the soil into the groundwater. Cost:$17,855,000

Evaluation Criteria

The Feasibility Study process requires all potential remedies be screened for their applicability to the situation. This screening process and its results are detailed in the Final draft Feasibility Study dated June 24, 1992 (revised 9/22/92). After initial screening, those potentially appropriate/feasible remedies are evaluated with respect to their ability to satisfy the remedial goals and otherwise satisfy the following criteria.

1.) **Overall Protection of Human Health and the Environment**

The various remedial alternatives were evaluated as to whether they are able to provide adequate protection of human health and the environment, once the remedial alternative has been implemented. This is based upon a composite of factors assessed under other criteria, especially short and long-term effectiveness and compliance with NYS SCG's.

Alternative #1, No Action, does not meet the requirements. The other alternatives are all protective.

2.) **Compliance with Applicable or Relevant and Appropriate NYS Standards, Criteria and Guidance Values (SCG's)**

SCG's are divided into the categories of chemical-specific (e.g., groundwater standards), action-specific (e.g., design of a landfill) and location-specific (e.g., protection of wetlands).

The alternatives were evaluated as to their ability to achieve the desired clean-up levels and meet all applicable standards. The target cleanup goals for groundwater are the NYS groundwater standards.

Alternative # 1 does not comply. The other alternatives comply except for groundwater standards, as the groundwater will not be remediated under these alternatives.

3.) **Reduction in Toxicity, Mobility or Volume of Contaminants via Treatment**

The alternatives were evaluated as to their ability to reduce the toxicity, mobility or volume of contaminants on site. Department policy is to give preference to alternatives that permanently and significantly reduce the toxicity, mobility and volume of the waste via treatment. This includes assessing the fate of the residues generated from treating the wastes at the site. Alternatives #2 and #3, although they will reduce the mobility of the contaminants do not "treat" the waste and thus do not rank as high as the incineration remedy which is permanent.

4.) **Feasibility**

A feasible remedy is one that is suitable to site conditions, capable of being successfully carried out with the available technology and considers at a minimum, implementability and cost-effectiveness. The technical and administrative feasibility of implementing the alternative is evaluated. Technically, this includes the difficulties associated with the construction and operation of the alternative, the reliability of the technology, and the ability to monitor the effectiveness of the remedy. Administratively, the availability of the necessary personnel and equipment is evaluated along with the potential difficulties in obtaining special permits, rights-of-way for construction, etc.

No-Action is very feasible but does not meet the other requirements. In-situ S/S has been utilized at other sites and can be readily implemented. A treatability study is on-going that will determine the necessary requirements for implementation (i.e. binder type, mixing and setting time). However, there will be administrative approvals that must be obtained. Incineration is not cost-effective as it has a very high cost without providing any more protectiveness than if the site soil was excavated and landfilled as in Alternative #3.

5.) **Short-term Impacts and Effectiveness**

The potential short-term adverse impacts of the remedial action upon the community, site workers, and the environment are evaluated. The length of time needed to achieve the remedial objectives is estimated and compared with other alternatives as a measure of short-term effectiveness. Alternatives #2,3,and 4 all pose slight increase in exposure to workers on-site during movement of the soil. In-situ S/S has the least risk to exposure as

the soil will not be picked up from the surface. Controls for suppressing fugitive dust emissions can be implemented to reduce the risk of any excavation alternatives.

6.) **Long-term Effectiveness and Permanence**

If wastes or residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude and nature of the risks presented by the remaining wastes; 2) the adequacy of the controls intended to limit the risk to protective levels; and 3) the reliability of these controls.

Incineration ranked high as it is a "permanent" remedy. Alternative #2 complied well as there will be groundwater monitoring included, and the monolith will leach very little if any, PCBs into the groundwater. Also, deed restrictions will be imposed to prevent use of the property that may present a risk from exposure or endanger the integrity of the remedy.

7.) **Community Acceptance**

The Department issued a Proposed Remedial Action Plan (PRAP) to inform the public about the proposed remedy for the site and to solicit their comments on the proposal. A Responsiveness Summary and transcript of the Public Meeting is attached that responds to the public comments.

VII. Summary of the Government's Decision

The alternative selected by the Department is a modification of Alternatives #2 and #3, in-situ Stabilization/Solidification in combination with excavation and landfilling, at a cost of $1,381,000. The soil with PCB contamination above the 2000 ppm level along with some soil that contains lower levels of contaminants will be excavated to make room for the solidified material as there will be an increase in volume of approximately 30% during solidification. This will minimize any soil mounding after remediation. The excavated material will be taken off-site to a hazardous waste landfill. The remaining areas of soil with contamination of 10 ppm and above would be stabilized by injection of a cementatious material into the soil, mixing and letting it solidify. The mean (geometric) concentration of the soil to be solidified would be <50 ppm. The concept of this remedial technology is to create a monolith that would trap the PCB's, thus preventing them from leaching from the material. Some areas from or in the vicinity of the site containing <2000 ppm PCB may require excavation of the soil instead of stabilization. This excavated material may be placed on-site or removed off-site for disposal. This option also provides for capping the site with an asphalt layer. The cap would help to ensure the integrity of the monolith by preventing infiltration of rainwater, thus reducing further the

remote possibility of leaching of contaminants from the monolith into the groundwater and by preventing the degradation of the monolith surface due to weathering and mechanical damage. This alternative ranked highest in the evaluation of alternatives performed during the Feasibility Study.

Groundwater contamination is isolated to one small area. No pathway indicating that contaminants have reached or are moving toward Patroon Creek has been identified. Precautions, such as access and deed restrictions will be taken that will prevent the groundwater within the waste mass from being utilized by the public for any use. The groundwater will be monitored to track the movement of contaminants, if any, and any increase in the levels of contaminants. A specific source for the volatile organic contamination has not been found and the levels are expected to dissipate with time. The PCB source (the soil) will be remediated, thus preventing further groundwater contamination by PCBs. Therefore, additional remedial techniques for groundwater are not warranted at this site.

Groundwater monitoring wells will be sampled semi-annually for two years and then yearly until the 5 year point, at which time a review of the remedial action will take place. Because waste will be left in place, the monitoring will help determine how effective the treatment has been, and determine if contaminants are moving toward Patroon Creek. If a groundwater pathway off-site is identified, or, if this method, after implementation, proves not to be adequate in reaching the stated objectives, the site will be revisited and other methods of remediation will be evaluated.

In-situ S/S, although not commonly used for PCB contaminated sites, has been shown to be a promising technique in areas where oil/grease are not major constituents of the waste, which is the case at this site. Though the use of in-situ Stabilization/Solidification at this type of site is a first in New York State, it is expected to be an effective method for obtaining an adequate and acceptable reduction in the associated risks to the environment and the public health and in reaching the remedial objectives.

If the alternative is found not to be feasible for reasons not evident at this time, a contingent remedial action will be implemented. The contingent action is alternative # 3, Excavation and landfilling. Site soil containing 10 ppm or higher PCB concentrations will be excavated and transported to a permitted hazardous waste landfill, most likely in Model City, New York. Certain precautions will need to be taken to alleviate any fugitive dust emissions from the site during excavation. Some soil next to the buildings and near the railroad tracks with greater than 10 ppm subsurface PCB contamination will remain in place as excavation in these areas will endanger the structural stability of the foundations. A cap will cover these areas which will prevent on-site exposure to PCBs.

The 10 ppm PCB subsurface cleanup level has been derived through methods which determine the potential for PCBs in the soil to leach into the groundwater at levels which would contravene groundwater standards and thus contaminate this resource. This 10 ppm level is also protective of human health and the environment. There will not be any PCBs exposed to the surrounding population at ground surface.

The remaining options were not selected because they require: a much higher

cost for comparable levels of protectiveness to the proposed remedy; do not apply treatment methods or reduce the volume; or do not reduce the associated risks to appropriate levels.

A pilot study to determine in-field design parameters will be part of the design program. It is expected that the project design would be completed by the end of 1993 and that construction would start in 1994.