US ERA ARCHIVE DOCUMENT

EPA ARCHIVE DOCUMENT

STATEMENT OF BASIS/FINAL DECISION AND RESPONSE TO COMMENTS SUMMARY

AMP GLEN ROCK FACILITY

Glen Rock, Pennsylvania (signed February 19, 1991)

Facility/Unit Type: Materials and plastics manufacturer

Contaminants: TCE; 1, 1, 1-TCA; 1, 1, 2-TCA

Media: Soil, ground water

Remedy: Ground water pump and treat by using air stripping towers and bedrock flushing

FACILITY DESCRIPTION

On January 4, 1989, EPA and AMP Glen Rock (AMP) entered into a Consent Order pursuant to Section 3008(h) of RCRA to perform onsite and offsite investigation of the nature and extent of release of hazardous wastes. EPA and AMP entered into a second Consent Order on January 22, 1991. Under the terms of this Consent Order, AMP was required to implement the remedy selected in the Record of Decision dated January 21, 1991. In addition, the facility has agreed to prepare and adopt a waste minimization plan.

The 20-acre facility began operation in 1959. It currently manufactures plastic electrical connector holdings for use in the computer, telephone, and automotive industries and conducts research and development of adhesives and lubricants.

The facility is underlain by a single bedrock aquifer consisting of fine-grained albite and chlorite-enriched schist. Ground water flows to the south and southeast.

Surrounding land use is primarily rural. A trailer park is located adjacent to the site.

Sampling of the facility's wells in 1984 revealed contamination of ground water and surficial soils with VOCs. In September of 1984, AMP initiated pumping of ground water and treatment using air stripping towers.

In 1983 and 1984, AMP supplied bottled water to employees because of complaints about well water taste. In 1984, a nearby trailer park also received bottled water in response to detection of contamination in a backup water supply well.

EXPOSURE PATHWAYS

The primary exposure pathway that threatens human health and safety is ingestion of contaminated ground water. The employees at the facility are at the greatest risk. Hydrogeologic surveys indicate that principal wells at the nearby trailer park are hydraulically upgradient of the facility.

CONTAMINATION DETECTED AND CLEANUP GOALS

| Media | Estimated Volume | Contaminant | Maximum Concentration | Action Level | Cleanup Goal (ppb) | Point of Compliance |
|--------------|------------------|-----------------------------|--------------------------|-----------------|-----------------------|--|
| ground water | Not provided | TCE* 1,1,1-TCA* 1,1,2-TCA** | 4000 ppb*** | Not provided | 5 200 .6 | The following ground water wells: R-5 MW-4L AMP Well-3 MW-10 Larkin Field Well |

- Cleanup goal represents an MCL
- ** Cleanup goal based on risk level of 10⁻⁶; since detection limit is 1 ppb, compliance concentration will be equal to "less than" the reportable detection limit.
- *** Maximum concentration for total VOCs.

SELECTED REMEDY

The selected corrective measure consists of continuing the ongoing pumping and treatment of ground water using eight recovery wells and a dual air stripping tower. The selected remedy also includes installation of a subsoil/bedrock flushing trench consisting of a perforated piping system that saturates the subsoil/bedrock by gravity drainage, thereby transporting contaminants into the ground water for recovery and treatment.

The corrective measure was selected by EPA because it will effectively and reliably reduce the toxicity, mobility, and volume of contamination. The selected corrective measure is a cost-effective permanent solution that will use an innovative and alternative technology to attain long and short term remediation. This remedy minimizes environmental degradation and protects human health and the environment.

The total estimated capital and annual O&M costs associated with the corrective measures are \$78,000 and \$108,700 per year, respectively.

INNOVATIVE TECHNOLOGIES CONSIDERED

- Vacuum extraction
- Bioreclamation

PUBLIC PARTICIPATION

On July 30, 1990, a 30-day public comment period was announced in local newspaper. EPA did not receive any comments from the public.

NEXT STEPS

AMP will submit an assessment report every 2 years (effective January 1991) until cleanup goals are attained. EPA is concerned that an additional source of VOC contamination may still exist onsite. EPA will require AMP to conduct an additional RCRA Facility Investigation (RFI) to investigate the possible existence of another source of VOCs if the concentrations of VOCs in ground water at well R-5 do not decrease to less than 2000 ppb after 2 years of pumping and treatment.

KEY WORDS

ground water; soil; ingestion; VOCs; TCE; TCA; on-site treatment, off-site treatment, air stripping.

CONTACT

Robert W. Stroud U.S. EPA, Region III 841 Chestnut Building Philadelphia, PA 19107 (215) 597-8214