STATEMENT OF BASIS/FINAL DECISION AND RESPONSE TO COMMENTS SUMMARY

REGION III
ID #
PAD 00 238 6761

Honeywell Incorporated
Fort Washington, PA
(Signed August 24, 1994)

Facility/Unit Type:	**Electronic control and mechanical valve assembly manufacture**
Contaminants:	**Trichloroethane (TCE), benzene, 1,1-dichloroethane (1,1-DCE), tetrachloroethane (PCE), and vinyl chloride**
Media:	**Groundwater**
Remedy:	**Extract contaminated groundwater and treat on-site**

FACILITY DESCRIPTION

On February 6, 1991, EPA and Honeywell entered into an Administrative Consent Order pursuant to Section 3008(h) of RCRA regarding remediation of contaminated groundwater at the Honeywell Fort Washington, PA facility. In accordance with this order, Honeywell conducted a RCRA Facility Investigation (RFI) that revealed a lateral and vertical distribution of contaminants (dissolved VOCs) in both on- and off-site groundwater. As a result of these findings, Honeywell embarked upon a corrective measure study (CMS) and implemented an interim measures groundwater recovery pump and treat system on October 25, 1993. It consists of two groundwater recovery wells and associated pumps which treat the water using two granular activated carbon (GAC) units to a level acceptable to the Delaware Valley Industrial Sewage Authority (DVISC)-operated sanitary sewer.

Prior to the current agreement with EPA, Honeywell conducted several other investigations of contamination at the facility. In 1986, Honeywell removed ten underground storage tanks (USTs), conducted post-excavation soil sampling at the former UST locations and conducted soil and groundwater sampling in the vicinity of the former (now inactive) wastewater treatment plant (WWTP). The results of the post-excavation soil sampling indicated elevated total petroleum hydrocarbon (TPH) concentrations in the area of UST 4 and elevated concentrations of total VOCs and TPH in the area of UST 8. This contaminated soil (approximately 70 tons) was excavated and disposed of by Honeywell, in accordance with applicable regulations. After the excavation of the contaminated soil, an investigation of groundwater quality was initiated. Soil sampling in the vicinity of the WWTP did not reveal any contamination at a concentration requiring further action.

From 1987 to 1990, Honeywell continued to investigate the impact of contamination at the facility. The investigations concluded that VOCs, primarily TCE, were migrating through the groundwater in a southwesterly direction (the direction of groundwater flow) from the vicinity of the UST 4 and UST 8 areas and the former solvent degreaser pit. Honeywell concluded that the source of VOCs was most likely the UST 8 area and the former solvent degreaser pit because both formerly contained TCE. During these investigations no significant soil contamination was found.

The Honeywell facility is located in Upper Dublin Township, Fort Washington, Montgomery County, Pennsylvania. This is mainly a suburban bedroom community (population 24,000) with the exception of the Fort Washington Office Center which has more than fifty commercial/light industrial tenants. Site relief is approximately 45 feet and the site was significantly regraded during the construction of the facility. The southern portion of the property contains

CONTAMINATION DETECTED AND CLEANUP GOALS

Media	Estimated Volume	Contaminant	Maximum Concentration (ppb)	MCL Action Level (ppb)	MCL Cleanup Goal (ppb)	Point of Compliance
Groundwater	Not given	TCE	1000,000	5	5	Throughout the plume
		Benzene	7	5	5	
		1,1-DCE	90	7	7	
		PCE	41	5	5	
		Vinyl chloride	30	2	2	

as much as 12 feet of fill in the former bed of Pine Run Creek. The facility is approximately 67 acres in size. Prior to 1958, portions of the facility property were owned by several individuals and used primarily for agricultural purposes. From 1958 to 1965, the property was owned by Delaware Valley Industrial Properties Inc., and was purchased by Honeywell in 1965. In 1965, Honeywell developed the facility for the manufacture of electronic controls and mechanical valve assemblies. Honeywell sold the facility in 1986 to "1100 Virginia Drive Associates" and continues to lease a portion of the facility, but no longer conducts any manufacturing activities at the facility.

EXPOSURE PATHWAYS

As a result of the interim measure groundwater recovery pump and treat system, EPA has determined that there has been no contamination of off-site domestic wells. Also, the contaminated groundwater is being contained and is not discharging to Pine Run Creek, which has been identified as a potential ecological receptor. EPA has also determined that there are no on-site human receptors because groundwater at the facility is not used for any purposes.

EPA has selected a groundwater recovery pump and treatment system that would include:

- Installing two new recovery wells;
- Constructing a new treatment system;
- Running a treatment pilot study to determine which method of treatment would be most effective (air stripping or UV/oxidation);
- Continued operation of the interim measures pump and treat system until the new groundwater pump and treat system is installed and operational;
- During the treatment pilot study, determine if the interim measure recovery wells should be used with the new system or if they should be eliminated;
- Create and impose institutional controls to require periodic monitoring and reporting of groundwater data to track compliance with established media cleanup standards;

SELECTED REMEDY

- Discharge treated groundwater to Pine Run Creek in accordance with the Clean Water Act National Pollutant Discharge Elimination System regulations or to the sanitary sewer in accordance with acceptable limits required by DVISC.

The cost of this remedy will depend upon the selection of treatment method. For air stripping, the capital cost would be approximately $855,000, the annual operation and maintenance (O&M) cost for year 1 would be approximately $161,300, and the annual O&M cost for years 2 - 30 would be approximately $151,300 annually. For UV/oxidation, the capital cost would be approximately $672,500, the annual O&M cost for year 1 would be approximately $163,800, and the annual O&M cost for years 2 - 30 would be approximately $153,800.

INNOVATIVE TECHNOLOGIES CONSIDERED

None.

PUBLIC PARTICIPATION

EPA held a 30-day public comment period that began on August 31, 1994 and ended September 30, 1994. EPA also held a public meeting on August 15, 1994 at the Upper Dublin Township Municipal Building, Fort Washington, PA. EPA placed announcements in a local newspaper notifying the public of the public meeting and location of the Administrative Record. Comments that were received did not result in any significant changes to the permit.

NEXT STEPS

Conduct a treatment pilot study to determine which method of treatment would be most effective (air stripping or UV/oxidation), determine if the interim measure recovery wells should be used with the new system, and continue operation of the interim measures pump and treat system until the new groundwater pump and treat system is installed and operational.

KEYWORDS:
Groundwater; VOCs, TCE, Benzene, 1,1-DCE, PCE, Vinyl Chloride; Air stripping, Containment, Institutional Controls, Monitoring, UV/oxidation

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