STATEMENT OF BASIS/FINAL DECISION AND RESPONSE TO COMMENTS SUMMARY

REGION V
ID # 3744

CECOS INTERNATIONAL ABER ROAD FACILITY

Williamsburg, OH

Facility/Unit Type:	**Sanitary landfill facility**
Contaminants:	**Acetone, benzene, dichloroethane (DCA), dichloroethylene (DCE), trichloroethylene (TCE)**
Media:	***Ground water***
Remedy:	**Installation of hydraulic gradient control system and slurry wall, ground-water monitoring, onsite collection and treatment of contaminated ground water using air stripping with carbon filtration of air discharges, landfill cap improvements, removal of sanitary landfill pond, installation of subsurface gas monitoring probes, installation of additional leachatecollection wells**

FACILITY DESCRIPTION

In September 1987, CECOS International and EPA entered into an Administrative Consent Order pursuant to §3008 (h) of RCRA. The agreement required CECOS to conduct interim measures (IMs) to mitigate potential threats to human health and the environment; conduct necessary investigations to identify the types, quantities and locations of contaminants at the facility; and develop appropriate measures to address the contamination problems.

The CECOS International Aber Road facility began operations in 1972. CECOS is an sanitary landfill specializing in the disposal of industrial waste. Land use in the area is primarily agricultural, with isolated residences. Between 1987 and 1992, CECOS conducted IMs, an RFI and a CMS of numerous facilities on the site including Cells 1 and 2, the Sanitary Landfill, Firepond 1, Secure Chemical Management Facilities (SCMFs) and the Intermediate Landfill. In 1984, CECOS submitted a RCRA Part B Permit Application which was ultimately denied by EPA in 1988 and consequently CECOS ceased all onsite disposal of wastes in April of 1990. Contaminants found during onsite investigations include acetone, benzene, carbon tetrachloride, chloroethane, dichlorodifluoromethane, DCA, DCE, dichloropropane, tetrachloroethylene, TCA, TCE, trichlorofluoromethane, and vinyl chloride.

Local usage of ground water is limited to a few isolated residential wells and springs. Contaminated ground water in the Upper Sand and 880 Zone Sand layers is located in the vicinity of the Intermediate Landfill, Sanitary Landfill, Cell 1/2, and SCMFs 3 and 4/5. The approximate depth to ground water encountered in the Upper Sand layer is 6 feet while ground water is encountered at 12 feet in the 880 Zone Sand layer.

No remedial measures have been previously conducted at this site.

EXPOSURE PATHWAYS

CECOS International conducted a risk assessment and an ecological assessment of any threats to human health and the environment at four locations at the Aber Road Facility: the Sanitary Landfill, the Sanitary Landfill Pond, Cell 1/2, and Pleasant Run Creek. Contaminated ground water is a principal threat at this facility because of the long term potential for direct ingestion through drinking water wells and surface water supply intakes.

SELECTED REMEDY

The selected remedy for the remediation of contaminated ground water includes the following actions:

- Installation of hydraulic control system consisting of trenches and wells
- Installation of vertical ground-water control barrier consisting of soil-bentonite slurry wall
- Onsite collection and treatment of contaminated ground water

CONTAMINATION DETECTED AND CLEANUP GOALS

Media	Estimated Volume	Contaminant	Maximum Concentration (mg/l)	Action Level	Cleanup Goal (mg/l)	Point of Compliance
ground water		acetone	318		-	
		benzene	0.024		0.005	
		carbon tetrachloride	0.014		0.005	
		chloroethane	0.014		-	
		dichlorofluoromethane	0.048		-	
		1,1 dichloroethane	2.38		-	
		1,2 dichloroethane	2.11		0.005	
		1,2 dichloroethylene	0.089		0.07	
		1,2 dichloropropane	0.015		0.005	
		tetrachloroethylene	6.22		-	
		1,1,1-trichloroethane	0.109		0.2	
		trichloroethylene	0.411		0.005	
		trichlorofluoromethane	0.030		-	
		vinyl chloride	0.124		0.002	

through air stripping, with carbon filtration of air discharges

- Onsite collection and pretreatment of leachate from all landfill cells prior to offsite disposal
- Installation of additional leachate extraction wells
- Landfill cap improvements
- Removal of sanitary landfill pond
- Installation of subsurface gas monitoring probes
- Implementation of ground-water program to monitor all unconsolidated and bedrock aquifers at the facility.

In addition, the following activities will be performed: active gas collection and treatment at the Sanitary Landfill; installation of methane monitoring probes at the Sanitary Landfill; installation of a leachate collection system at the Sanitary Landfill; draining and backfilling at the Sanitary Landfill Pond; ground-water monitoring; deed restrictions; installation of leachate extraction wells at the Intermediate Landfill and Cell 1/2; leachate collection from hazardous waste cells; installation of gradient control trenches in the Upper Sand and pumping of contaminated ground water; installation of gradient control wells in the 880 Zone Sand and pumping of contaminated ground water; conversion of monitoring well M-19 to a gradient control well; and pumping of SCMFs 3 and 4/5 ground water underdrains and collection of contaminated ground water.

The goal of the selected remedy is to clean up ground water and eliminate risks to human health by meeting the applicable health-based ground-water protection standards.

The estimated capital cost for this remedy is $3.7 to 4.3 million and the net present worth cost (including O&M costs) is estimated to be $10.6 to 12.2 million.

INNOVATIVE TECHNOLOGIES CONSIDERED

None.

PUBLIC PARTICIPATION

EPA held a 60-day public comment period from June 1, 1992 through July 31, 1992. A public meeting was held on June 15, 1992 to address oral and written comments. The main concern expressed by the local community was the long-term protectiveness, integrity and effectiveness of the proposed slurry wall ground-water containment system. Commentors queried whether the excavation of wastes from the unlined, leaking landfill cells and replacement into an existing lined landfill cell was a more permanent solution for protection of local water supplies than the proposed remedial alternative. Commentors included Clermont County, CECOS

International, Miami Township, Tate Township, and Village of Williamsburg. EPA required additional studies of the excavation alternative; these studies confirmed that the selected remedy is appropriate for this facility.

NEXT STEPS

The EPA will issue an Administrative Order to require CECOS to implement the selected remedy. During the remedy implementation period, the EPA will provide further information as appropriate and upon request.

KEYWORDS
ground water; ingestion; VOCs, acetone, benzene, DCA, DCE, TCE; air stripping, containment (hydraulic), filling, leachate collection, monitoring (gw, gas), onsite treatment, offsite disposal, slurry wall

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