

**EPA Region 9  
Del Amo Proposed Superfund Site**

**TABLE 2: DETAILED ANALYSIS OF ALTERNATIVES**

Criteria	#1 - No Action	#2 - Institutional Controls	#3 - RCRA Equivalent Cap	#4 - RCRA Equivalent Cap, Soil Vapor Extraction	#5 - Excavate and Off-site Incineration, Soil Vapor Extraction, and Cap
<b>Description</b>	No clean-up, monitoring, access restrictions, or deed restrictions would occur. (No actions would occur).	- Install surface water controls, restrict future land use, and monitor the groundwater.- Upgrade the fence.- Maintain existing soil cover.	Install a RCRA equivalent cap- Install surface water controls, restrict future land use, and monitor the groundwater.	- Install a RCRA equivalent cap.- Conduct soil vapor extraction- Install surface water controls, - restrict future land-use, and - monitor the groundwater.	- Excavate waste, take to off-site incinerator- Conduct soil vapor extraction - Install low-permeability cap. - Install surface water controls, restrict future land use, and monitor groundwater.
<b>Overall Protection of Human Health and the Environment</b>	NOT PROTECTIVE - Soil cover could erode and expose contaminants, - waste pits would continue to contaminate the groundwater.	NOT PROTECTIVE - Fence is inadequate in preventing trespassing and possible disturbance of the waste. - Waste pits would continue to contaminate the groundwater.	NOT FULLY PROTECTIVE - Cap would eliminate direct exposure, and reduce rainwater infiltration. - Contaminants would still enter the groundwater by moving on their own and when the groundwater rises.	PROTECTIVE - Cap would eliminate direct exposure, and reduce rainwater infiltration. - Combined cap & SVE system would significantly reduce further groundwater contamination.	PROTECTIVE - Cap placed over excavated area would significantly reduce rainwater infiltration. Waste excavated would be the main source of groundwater contamination and source potential exposure system would prevent rainwater from entering groundwater.
<b>ARARs Compliance (Applicable, Relevant, and Appropriate Regulations)</b>	DOES NOT COMPLY - Does not meet regulations for safe hazardous waste facility closure.	DOES NOT COMPLY - Does not meet regulations for safe hazardous waste facility closure.	COMPLIES - Meets all regulations.	COMPLIES - Meets all regulations.	COMPLIES - Meets all regulations.
					HIGH RISK

<p><b>Short-Term Effectiveness: (Measures risks to community and workers during construction and operation of clean-up systems).</b></p>	<p>NOT ANALYZED FURTHER - Since this alternative did not pass the two above criteria, it will not be analyzed further.</p>	<p>NOT ANALYZED FURTHER - Since this alternative did not pass the two above criteria, it will not be analyzed further.</p>	<p>LIMITED RISK, CONTROLLABLE - Design and construction would last 6-12 months. - Limited short-term risks during construction; able to be controlled.</p>	<p>LIMITED RISK, CONTROLLABLE - Design and construction would last 8-12 months. - Limited short-term risks during construction; able to be controlled.</p>	<p>UNCER PROTEC Excavati backfill v last 2 ye: Short-ter effective uncertain excavati be enclor tempora with a fu emission system. I enclosur emission system fi contam-i will be r into the i Conditio enclosur require v to wear p clothing SCBA ta creates h heat exh reduced and incre slip, trip, hazards.</p>
<p><b>Implementability</b></p>	<p>N/A</p>	<p>N/A</p>	<p>READILY IMPLEMENTABLE - Technically and administratively reasonable. - Materials and services needed are readily available.</p>	<p>READILY IMPLEMENTABLE - Technically and administratively feasible. - Materials and services needed are readily available.</p>	<p>LESS CI - Actual needed f excavati uncertain Emissior and effie the emis: control s uncertain -Possible variation waste character uncertain -Full-sca excavati wastes li has neve done.</p>
					<p>EFFECT Highest</p>

<p><b>Long-Term Effectiveness and Permanence</b></p>	<p>N/A</p>	<p>N/A</p>	<p>EFFECTIVE - Careful cap maintenance will ensure it remains effective. - Continued groundwater monitoring will confirm the effectiveness of the cap. - Land-use restrictions will prohibit use that could potentially damage effectiveness of cap. - A review will be conducted every 5 years to ensure the remedy is still effective.</p>	<p>EFFECTIVE - Careful maintenance of cap and SVE system will ensure effectiveness. - Continued groundwater monitoring will confirm the effectiveness of the cap and SVE system. - Land-use restrictions will prohibit use that could potentially damage effectiveness of cap or SVE system. - A review will be conducted every 5 years to ensure the remedy is still effective.</p>	<p>Careful maintenance of cap and SVE system will ensure effectiveness. - Continued groundwater monitoring will confirm the effectiveness of the cap and SVE system. - Land-use restrictions will prohibit use that could potentially damage effectiveness of cap or SVE system. - A review will be conducted every 5 years to ensure the remedy is still effective. Excavation and removal provides level of effectiveness</p>
<p><b>Reduction of Toxicity, Mobility, and Volume through Treatment</b></p>	<p>N/A</p>	<p>N/A</p>	<p>NO TREATMENT</p>	<p>SOME TREATMENT - Leaves contaminated waste and soil in place. - Reduces toxicity, mobility, and volume of contaminated soil through SVE treatment.</p>	<p>MOST TREATMENT - Removal and incineration of waste material and soil. - Further reduces toxicity, mobility, and volume of contaminated soil through SVE treatment.</p>
<p><b>Cost</b> <b>Up-front:</b> <b>+Operation/Maintenance</b></p> <hr/> <p>Total Present Worth</p>	<p>N/A</p>	<p>N/A</p>	<p>\$ 2,833,000 +1,410,000 <hr/>\$ 4,243,000</p>	<p>\$ 6,290,000 +2,690,000 <hr/>\$ 8,980,000</p>	<p>\$95,820 +1,490 <hr/>\$97,310</p>

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*Send questions and comments to:*

*Dante Rodriguez, RPM: [rodriguez.dante@epamail.epa.gov](mailto:rodriguez.dante@epamail.epa.gov) or*

*Jeffrey Dhont, RPM: [dhont.jeffrey@epamail.epa.gov](mailto:dhont.jeffrey@epamail.epa.gov)*

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<http://www.epa.gov/region09/waste/sfund/npl/delamo/document/tab2pp.htm>