

Student Sheet 4.2-Clean Up Plans



Containment: Surround and cover the contaminated area with clay.

Advantages	Disadvantages
<ul style="list-style-type: none"> • Quick • Relatively inexpensive • Reduces stirring up more pesticides and possibly causing more contamination • Used for this purpose in other areas • Poses little danger to the public 	<ul style="list-style-type: none"> • Must monitor water continuously for pesticide • Issues of worker safety as the caliche cover is installed • Problems defining the area to be covered • Danger of groundwater contamination reaching surface water

Excavation of Pesticide Pockets: Drill a series of test holes to determine the size of the affected area. Excavate pockets of pesticide buried in the old landfill and transport in covered sealed trucks to an EPA authorized hazardous waste site (Robstown, TX).

Advantages	Disadvantages
<ul style="list-style-type: none"> • Proven successful in other areas • Removes material that is highly hazardous 	<ul style="list-style-type: none"> • Pesticide mixed with topsoil during construction of Mabel Davis ballfield would not get removed • Expensive • Possibility of leakage and spills during excavation and transportation • Exposure of the contaminant to air may lead to other problems • Digging may redistribute some of the contamination into the surface water if it rains before excavation is complete

Excavation of Pesticide Pockets and Topsoil Removal: Same as above but also remove and transport topsoil that was mixed with the pesticide when leveling the ground for the ballfield.

Advantages	Disadvantages
<ul style="list-style-type: none"> • Would remove ALL known pesticide materials 	<ul style="list-style-type: none"> • Same as "Excavation of Pesticide Pockets" • Very expensive • Labor intensive because of the huge amount of excavation required

Permanently Close the Location to Human Activity and Contain Surface Runoff

Advantages	Disadvantages
<ul style="list-style-type: none"> • Eliminates the opportunity for human contact so reduces the human health threat 	<ul style="list-style-type: none"> • Requires berms and a water quality pond to catch polluted runoff • Berms and water quality ponds are costly and require constant maintenance • Use of valuable City land would be lost • Does not clean up the contaminated site • Will not protect the plants and wildlife from the effects of the pesticide