CLOSURE PLAN

FOR

DRUM DISPOSAL AREA
VISTA CHEMICAL COMPANY FACILITY
ABERDEEN, MISSISSIPPI

Prepared For:

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2.0 SOURCE CHARACTERIZATION

2.1 Drums

2.1.1 Drum Disposal Location

An estimated 75 to 100 drums are believed to be disposed of in the landfill designated as Area No. 4 in the NUS report. Although the exact dimensions of the drum disposal area are not known, a geophysical survey (EM-31 conductivity meter and a magnetic gradiometer) of the general area performed by Law Environmental, Inc. indicated three potential disposal zones designated as Zones "E", "F", and "G" in Figure 2. The major area of concentration is probably in Zone E since the other zones are relatively small and may be affected by the proximity of the rails and metal scrap, possibly indicating a false anomaly. It is suspected that the drum disposal occurred over an area of 100 ft by 200 ft by 10 ft deep although Zone E in Figure 2 indicates a circular area with a diameter of 30 to 40 ft.

2.1.2 Drum Contents

The drum contents are believed to consist of approximately 5,000 gallons of bis (2-ethylhexyl) phthalate filter cake as indicated in the NUS report. However, the records on the drum contents are not conclusive, and it is possible that other materials including carbon black, unreacted batch of plasticizers and vinyl chloride monomers were disposed of in the drums. Two soil samples taken east of the disposal area indicated a presence of bis (2-ethylhexyl) phthalate, perhaps confirming the filter cake as the main content in the drums. Conversations with plant personnel also revealed the possibility that the drums could contain phthalic anhydride. Drum contents will be analyzed for a determination of disposal options as described in the sampling plan.

2.1.3 Period and Method of Disposal

It is believed that the drums were disposed of in the landfill about 20 years ago. The method of disposal was basically to round up the drums and to put them in the pit. The pit was then covered by pushing the dirt over the drums.

The excavated soil will be placed onto a sheet of plastic spread on the ground. Following the soil/waste sample retrieval, the excavated soil will be placed back into the sample hole. The sampling activity will be performed by a qualified field geologist who is trained under OSHA requirements, specifically 1910.120.

The results of the sampling and analytical testing will provide the data necessary to fill out the Waste Profile Sheets provided in Appendix A and to evaluate the disposal options under the Land Bans.

2.3.2 Soil Sampling

Three soil samples will be obtained from the same three waste sampling locations to assess the nature and extent of contamination in the soil medium. However, it is possible that the drums may have been stacked on top of each other during disposal. In that case, it is recommended that soil sampling locations be moved to an area where the drums are expected to be sparse (i.e., around the periphery of the major concentration area in Zone E). The soil samples will be obtained from an approximate depth of 10 to 12 feet, again, using a backhoe. A field log book will be used to classify the soils and make any pertinent observations on the conditions of the soils and waste materials at the site. The samples will be obtained using a disposable stainless steel scoop or spoon and will be placed in 8-and 16-ounce sample jars for delivery to the selected analytical laboratory. They will be shipped in coolers (4° C) with a chain-of-custody form.

The soil samples will be tested for the same battery of analytical parameters as for the waste samples except that the ignitability, corrosivity and reactivity tests will not be needed.

4.0 CLOSURE STATUS AND DISPOSAL OPTIONS

4.1 Closure Status

We anticipate that the Drum Disposal area will be closed under the RCRA closure standards, namely, 40 CFR Part 264/265. Following the removal of the waste and the contaminated soil and if no other medium (i.e., groundwater, sediments, etc.) is contaminated from this source, the drum disposal area will be considered to require "no further action." A closure certification report will be issued to provide the documentation for this "clean" closure. If, however, clean closure can not be achieved, the area can be closed as a landfill with post closure care and financial requirements.

A closure plan checklist is provided in Appendix B.

4.2 Disposal Options

Several disposal options are available for the excavated waste/drums and the contaminated soils. Disposal options will be evaluated following the analytical results and source characterization. Profiles for the waste and the soil in contact with the waste will need to be developed in order to determine the status of the material under the land ban rules. We recommend that the drums be handled in bulk, i.e., empty the drum contents in larger bulk containers and crush the empty drums for disposal with the contaminated soil. It is possible, although unlikely, that the excavated waste may not require treatment and can be disposed of directly into a Subtitle "C" landfill. Under the land ban rules, the excavated waste may end up being incinerated.

The contaminated soil will most likely be placed in a Subtitle "C" landfill without any treatment. The overall cost of the remediation will vary significantly with the quantity of material landfilled and with the quantity of waste treated/incinerated.

5.2 Closure Estimate

A closure cost estimate for the drum disposal area was made based on a number of assumptions. The assumptions pertain to the quantity of the material to be excavated, treated and landfilled. Chemical Waste Management, Inc. (CWM) was contacted to provide a cost estimate for remediating the drum disposal area. A copy of this estimate is provided in Appendix C. Unit costs for various disposal options (incineration, stabilization, landfilling) are also included in the CWM estimate. Based on a unit cost provided by CWM of approximately $325/Ton for transportation and disposal, a total volume of 750 cubic yards of waste and soil, and assuming 1.35 tons per cubic yard, the total cost for disposal and transportation is $329,000. The additional cost for excavation, and other labor associated with the project is approximately $21,000. Based on the assumptions, the overall cost for the remediation of the buried drum and contaminated soil is about $350,000. A breakdown of the CWM unit costs and the assumptions are given in Appendix C.