



Approximately 35,000 drums are buried within the Stacked Drum Area (SDA) of the Drum Disposal Area.



Drum removal began on December 9, 2003.



Drums are removed from the excavation using a piece of heavy equipment fitted with a grapple.





A technician at the edge of the excavation notes the condition of the drum including the level to total volatile organic compounds measured in the drum.



Technicians at the excavation are dressed in Level C, which includes a full-face respirator – all air monitoring results to date have indicated that a respirator is not necessary, however, it is used as a precaution.



Drums that are in bad condition are placed in larger drums called overpacks.



Drums are stacked up to four deep.



Clean soil

Clean soil is visible at the bottom of the excavation.



The excavation can be foamed to reduce emissions and odors.



Soil from around drums is stockpiled and will be treated on Site in the bioremediation facility.



Excavated drums are placed in a roll-off and taken to the Drum Handling Building (DHB). Each roll-off contains approximately 20 drums.





Drums are unloaded from the roll-off and taken into the Drum Handling Building where their contents are inspected, sampled and bulked for off-Site shipment.



A sample is taken of the material in each drum.



Samples may be analyzed in the Drum Handling Building Lab (shown here), the on-Site lab or at an off-Site lab.



The material in each drum is given a letter designation based on the category of waste into which it fits. Materials found have primarily been dark solids, filtercakes or resins.



Material that can go to the same disposal facility is bulked together. Drum material is loaded into a lined roll-off.





Empty drums are crushed and bulked together for shipment off Site.



A placard on each roll-off provides a disposal designation. This information is also included in a manifest that accompanies the material to the disposal facility.

TRS-DRT-SOL

Dye Residue

(Production Tars With Solvent Group K1)

Box # 7969

Date Filled: 2-9-04

Inspected By: _____

Group K1

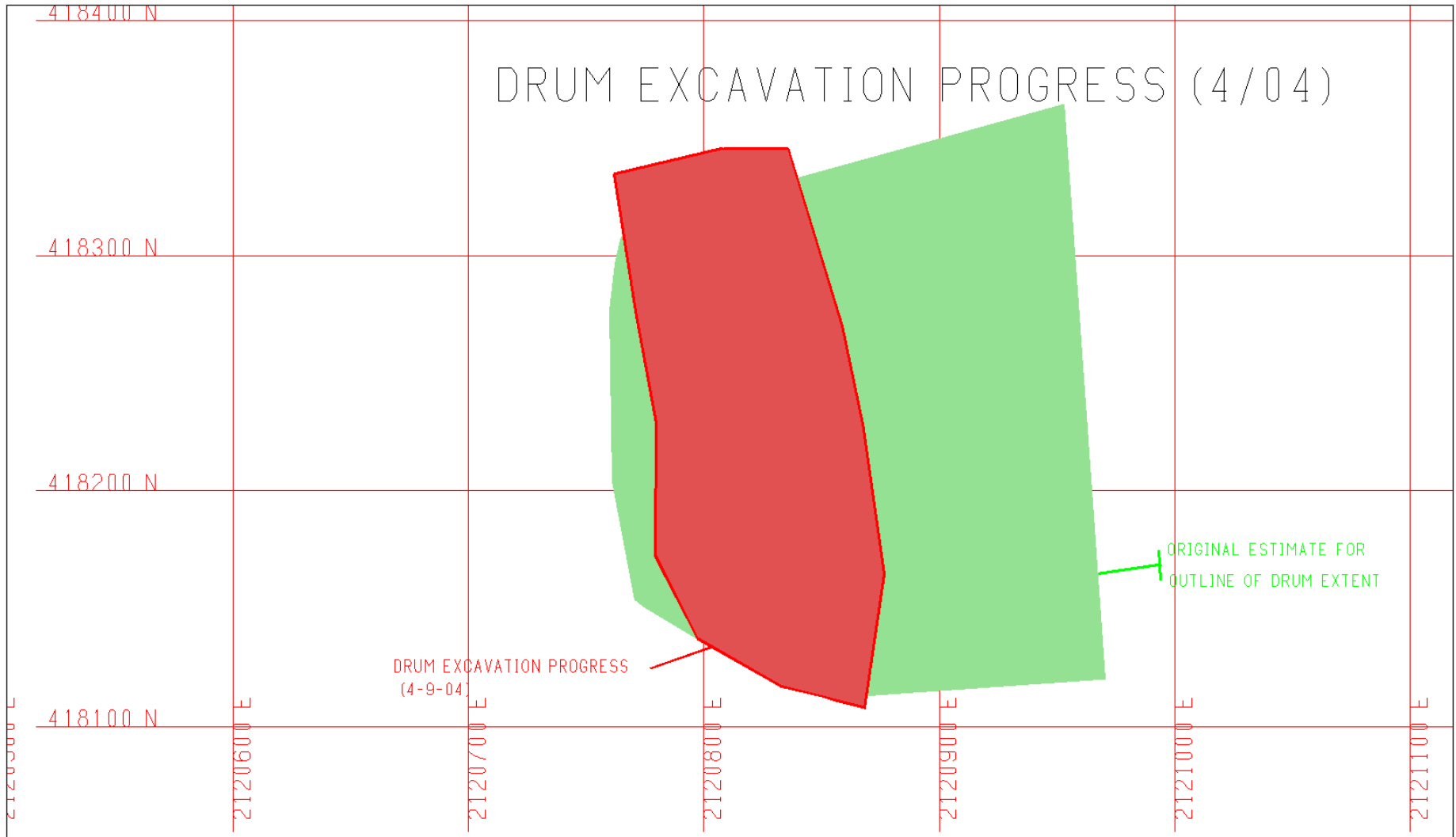
Air from the Drum Handling Building is treated in two carbon units before being released to the atmosphere.

Hazardous Material Disposal Options			
Material	Primary Outlet	Secondary Outlet	Treatment
Low BTU dyes, tars, and pit drains	Onyx TWI (Sauget, IL)	Onyx (Port Arthur, TX)	Incineration
Intermediate BTU tars	Clean Harbors (Kimball, NE)	Clean Harbors (Deer Park, TX)	Incineration
High BTU solid tars	Onyx @ RR (Ohio) Pending	Clean Harbors (Kimball, NE)	Fuels
High BTU wet tars	Onyx @ RR (Ohio) Pending	Clean Harbors (Kimball, NE)	Fuels
Resin Filtercakes with Solvent	Giant (Harleyville, SC)	Clean Harbors (Kimball, NE)	Fuels
LAB QC Samples/Cuno filters	Onyx TWI (Sauget, IL)	Onyx (Port Arthur, TX)	Incineration
Liquid Resins with Solvent	Marisol (Middlesex, NJ)	Systech (Fredonia, KS)	Fuels
Fluorescent lights	Model City (NY)	Pending	Stabilization
Onyx is contracting with Sumter Transport to process the high BTU tars with a grinder and liquification at the Onyx Fuels facility. Onyx will also attempt to process the more solid high BTU tars in Ohio after processing the inventory of wet tars first. Rineco has looked at the high BTU wet tars and requested a contract and trial load.			
Non-Hazardous Material Disposal Options			
Non-Hazardous resins, dyes, filtercakes, carbon	Model City (NY)	Pending	Landfill

Waste disposal locations are dependant on the characteristics of the material.



Air from the Drum Handling Building is treated in two carbon units before being released to the atmosphere.



As of April 4, 2004, approximately 11,000 drums were removed.

Drums Data Entry Form

Drum Number Date Excavated

Drum Condition

VOC >5? Overpack?

PID Readings Liquid Layer?

Date Haz-Cat Sampled PID Exceed?

Air Reactivity Date Haz-Cat Analyzed

Flame Ign Phase Determination

Water Reactivity Beilstein

Hexane Sol Water Sol:

Peroxide Oxidizer

Sulfide pH

Group Designation Cyanide

Description

Comments

Save & Add New Close Form

<<
**Fill These with
Typical Values**
>>

Information about each drum is input into a drum database which tracks the drum from excavation to disposal.

Activity Description

Monday

January 26, 2004

On 01/26/04, routine activities at the site began at 7:00 AM.

Air monitoring activities were conducted in accordance with the approved Air Monitoring Plan.

Site facilities construction activities conducted today included construction of the ex-situ bioremediation buildings.

A total of 105 drums were excavated from the DDA. The drums were handled in accordance with the approved Drum Handling Plan.

A total of 2 trucks containing 40 tons of material removed from drums were sent off Site to an approved Disposal Facility in accordance with the approved Traffic Control Plan.

Elevated TVOC levels were recorded within the hours from 9:00 PM to 10:00 PM at perimeter station 2. The levels were below the TVOC Trigger Level and did not require any action to be taken. Confirmatory monitoring was performed to insure that all Perimeter Zone air monitoring levels at this station were acceptable.

Elevated TVOC levels above the 100 ppb TVOC Trigger Level were recorded within the hours from 10:00 PM to 11:00 PM at perimeter station 2. Contaminant-specific monitoring confirmed that no Perimeter Zone Action Level was exceeded at this station.

Further Details

- [Routine Activities](#)
- [About the Air Monitoring Plan](#)
- [Ex-Situ Biotreatment Buildings](#)
- [DDA](#)
- [Drum Handling Plan](#)
- [Transportation and Disposal Plan](#)
- [TVOC](#)
- [Perimeter Stations / Perimeter Zone](#)
- [TVOC Trigger Level](#)
- [Confirmatory Monitoring](#)
- [Contaminant-Specific Monitor](#)
- [Perimeter Zone Action Level](#)

Activity Description

Thursday April 8, 2004

On 04/08/04, routine activities at the site began at 7:00 AM.

Air monitoring activities were conducted in accordance with the approved Air Monitoring Plan.

Site facilities construction activities conducted today included construction of the ex-situ bioremediation buildings.

A total of 240 drums were excavated from the DDA. The drums were handled in accordance with the approved Drum Handling Plan.

A total of 1 truck containing crushed empty drums was sent off-site to an approved Disposal Facility in accordance with the Transportation and Disposal Plan.

A total of 2 trucks containing 34 tons of material removed from drums were sent off Site to an approved Disposal Facility in accordance with the Transportation and Disposal Plan.

The excavation activities were stopped from 8:30 AM to 8:40 AM, 10:30 AM to 10:40 AM, 3:15 PM to 3:25 PM, and at 4:55 PM due to near field zone air monitoring exceedances. Elevated TVOC levels were recorded in the near field zone associated with the DDA. Emission control procedures were implemented. Confirmatory monitoring was performed to insure that all air monitoring levels at this station were acceptable. Work resumed after Confirmatory monitoring was performed. No air monitoring action levels were exceeded during this time.

Further Details

- [Routine Activities](#)
- [About the Air Monitoring Plan](#)
- [Ex-Situ Biotreatment Buildings](#)
- [DDA](#)
- [Drum Handling Plan](#)
- [Transportation and Disposal Plan](#)
- [Near-Field Zone](#)
- [Air Monitoring Exceedance](#)
- [Action Level](#)