

United States Environmental Protection Agency
Region IV
POLLUTION REPORT

Date: Friday, April 16, 2004

From: David Andrews

Subject: Pollution Report No. 2
Dixie Barrel & Drum
2120 Jones Street, Knoxville, TN
Latitude: 35.9558000
Longitude: -83.9081000

POLREP No.:	2	Site #:	A4CK
Reporting Period:	2	D.O. #:	0207-F4-00-19
Start Date:	4/12/2003	Response Authority:	CERCLA
Mob Date:	4/12/2003	Response Type:	Time-Critical
Demob Date:	2/17/2005	NPL Status:	Non NPL
Completion Date:	5/28/2005	Incident Category:	Removal Action
CERCLIS ID #:	TND034692632	Contract #	68-S4-02-07
RCRIS ID #:			

Site Description

The Dixie Barrel and Drum Site ("Dixie Barrel" or the "Site") is located at 2120 Jones Street in Knoxville, Knox County, Tennessee. The Site is located in a light-industrial area south of downtown Knoxville, TN and approximately one-half mile to the south of the Tennessee River. Additionally, the Site is located on the northern fringe of a residential neighborhood and about several blocks south of an elementary school. At the time of the December 2003 assessment there was evidence of trespassing and vandalism.

From approximately 1976 to 2002, the Site operated as a plastic and steel drum recycling and reconditioning facility. The facility was permitted to accept used drums that contained less than 1 inch of product ["RCRA Empty"]. The reconditioning process [steel drum] involved several stages: The first stage involved manually removing the residues from the drums. The residues were bulked into other "waste drums" that were later shipped off site for disposal; The second stage was a series of corrosive rinses (concentrated acid & caustic); The third stage was an anti-corrosion treatment and preparation for paint; At some point in the processes, each drum went through a DOT specified integrity test in order to be legally sold as a "reconditioned" drum; The final step is repainting the drum and parking the drum into the inventory of the warehouse. Additional storage was located on adjacent property to the south and in a small house structure known as the "Dixie House".

During their operational years, Dixie Barrel maintained a contract with a waste disposal company that managed the waste generated from their reconditioning operations. Dixie Barrel also operated a system that recycled their process waste-water for reuse in their reconditioning processes and also treated their effluent prior to discharge to the City of Knoxville's POTW. Dixie Barrel was subject to City inspections of their effluent and also received periodic inspections by EPA's Resource Conservation and Recovery Act (RCRA) program. Dixie Barrel was cited for various RCRA violations. The Tennessee Department of Environment and Conservation (TDEC) issued a RCRA enforcement order to the facility in April 2002. The facility failed to comply with the requirements of the order, ceased operations, and filed for bankruptcy.

TDEC's Division of Superfund referred the site to the EPA Emergency Response and Removal Branch in August 2003 and requested a site assessment be performed. EPA conducted a removal assessment in October 2003. Samples collected during the assessment revealed numerous hazardous substances including lead, chromium, ethyl benzene, and trichloroethylene. Drums stored on site were found in poor condition and stored next to other incompatible chemicals thus elevating the risk of fire and explosion. Treatment vats containing concentrated acid and caustic were found open and posed a serious release and injury risk. The removal assessment data and other information laid the foundation to support a removal action by EPA.

On December 15, 2003 EPA and its Emergency Rapid Response Service (ERRS) contractor

responded to the site under an Emergency Action Memorandum to mitigate a release from a number of drums on the site and to secure areas of the site where the fence-line was breached by vandalism. On April 12, 2004 EPA, ERRS, and the Superfund Technical Assessment & Response Team (START) re-mobilized to Site under the existing Emergency Action Memorandum (amended March 10, 2004) to conduct a time-critical removal action to remove waste, threats of release, and effectively secure the Site from vandalism.

Current Activities

Actions taken from April. 16 – April. 16 are as follows:

On April 12, 2004 Emergency Rapid Response Service (ERRS) contractor Ferguson Harbor, Incorporated remobilized equipment and personnel to the Dixie Drum & Barrel Site (Site) located at 2120 Jones Street in Knoxville, Tennessee. Personnel included 1-Project Manager, 1-Field Clerk, 1-Equipment Operator, and 3-Chemical Technicians (Laborers). Equipment mobilized to site included 1XResponse equipment trailer, 1X Loader/Back-hoe, 1XSkid-loader (Bobcat), and 2X 30-cu yd. Roll-offs. A Caterpillar 325B Track-hoe is scheduled to for site delivery during the next reporting period. An office trailer was mobilized to site and office space was established for EPA, ERRS, and START. Utility connections and service for phone & electricity are scheduled to be completed by April 19th.

After the site safety briefing, ERRS began Phase One (see Planned Removal Actions) removal operations:

Began inventorying and transferring the empty steel drums from the main building to a drum stack in the staging area to the rear area of the building along the northern fence-line. The plastic or “Poly” drums and containers were cut in-half and placed into the roll-offs. Fiber drums were crushed with the bucket of the back-hoe and placed in the roll-offs. To date – 1,210 empty drums & containers have been inventoried and staged for disposal. A disposal profile was submitted for non-hazardous drum & demolition debris disposal at the Waste Management’s Chestnut Ridge (Subtitle-D) Landfill in Heiskel, Tennessee. Drum removal was also initiated at the annex storage located next door and south of the main building where drums are stored within and outside of a partially collapsed house.

Removal of heavy vegetation (“grub-work”) along and on the perimeter fence line and around the annex-storage house was initiated on the southern boundary to assure site safety and security.

Planned Removal Actions

Activities planned for the next reporting period include:

The time-critical removal at the Site is planned to be conducted in “phases” and in the following manner:

Phase I – Establish the Work Area

The former drum reconditioning operations at Dixie Barrel & Drum Company was apparently abandoned and the two floors of the main building contained > est. 1500 drums located in and around a production line which included caustic & acid baths (vats). Phase I work is the focus of operations on inventory and removal of all empty drums and containers from the main building and annex property and disposal of the drums & demolition debris of the annex storage structure located next door. Additionally, Phase I work will also include the removal of the heavy vegetation along the perimeter fence-line to enhance site safety & security.

Phase II – Identify Waste Streams & Disposal

Phase 1 will create room to safely conduct removal activities within and outside the building. At this Phase, the removal team will be able to access the remaining drums of waste residues contained in:

- an estimated > 250 X 55-gallon drums
- 3 production line vats (500 to 1000-gallons) of caustic and acid waste
- Waste liquid and sludge within the waste water treatment system with an estimated total volume of 3000-gallons.
- 500-gallon waste oil tank

EPA will mobilize a START chemist to aide in the identification of waste streams and evaluating disposal options. Due to the number of drums and anticipated waste volume, EPA will evaluate the options of on-site treatment (or pretreatment) and/or bulk consolidation of site waste prior to off-site transportation and

disposal.

Phase III – Evaluate Ground Contamination

During the removal assessment and emergency response, EPA & TDEC documented possible extensive soil contamination in and around the concrete dock in the rear operations area of the main building. Visible contamination will be removed followed by confirmation samples.

Next Steps

Phase II will begin during the next Polrep period (April 19 – 23 2004); START Chemist will mobilize to site and begin waste group categorization; ERRS will mobilize heavy equipment (Cat 325B track-hoe) for demolition work and a wood-chipper to assist with final grub work.

Key Issues

No Key Issues at this time;

ERRS Ceiling Increase will be reflected in future Polrep.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$50,000.00	\$22,483.00	\$27,517.00	55.03%
RST/START	\$10,000.00	\$0.00	\$10,000.00	100.00%
Intramural Costs				
USEPA - Direct (Region, HQ)	\$2,000.00	\$500.00	\$1,500.00	75.00%
USEPA - InDirect	\$4,000.00	\$900.00	\$3,100.00	77.50%
Total Site Costs				
	\$66,000.00	\$23,883.00	\$42,117.00	63.81%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

response.epa.gov/DixieBarrel&Drum

POLREP #2 Last Updated 12/19/2006