

**COMPREHENSIVE ENVIRONMENTAL RESPONSE,
COMPENSATION AND LIABILITY ACT
EMERGENCY RESPONSE REPORT**

**TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSEE
EPA CONTRACT No. EP-W-05-054
TDD No. TTEMI-05-001-0017**

Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 4 Emergency Response and Removal Branch
61 Forsyth Street, SW, 11th Floor
Atlanta, Georgia 30303**

Prepared by



**Tetra Tech
EPA Region 4
Superfund Technical Assessment and Response Team
1955 Evergreen Boulevard, Building 200, Suite 300
Duluth, Georgia 30096**



October 18, 2007

Mr. Leslie Sims
On-Scene Coordinator
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, SW, 11th Floor
Atlanta, Georgia 30303

**Subject: Comprehensive Environmental Response, Compensation, and Liability Act
Emergency Response Report
Tennessee Wheel and Rubber
817 18th Avenue, North
Nashville, Davidson County, Tennessee
EPA Contract No. EP-W-05-054
TDD No. TTEMI-05-001-0017**

Dear Mr. Sims:

The Tetra Tech Superfund Technical Assessment and Response Team (START) is submitting the emergency response report for Tennessee Wheel and Rubber in Nashville, Davidson County, Tennessee. This report summarizes field activities conducted at the site since the initial emergency response report to On-Scene Coordinator Mr. Steve Spurlin on October 25, 2006. Therefore, this report summarizes activities conducted from November 1, 2006 through June 28, 2007.

If you have any questions about the enclosed report, please call me (Brian Croft) at (678) 775-3113 or Chris Draper at (615) 969-1334.

Sincerely,

A handwritten signature in black ink, appearing to read 'Brian Croft'.

Brian Croft
START III Project Manager

A handwritten signature in black ink, appearing to read 'Andrew F. Johnson'.

Andrew F. Johnson
START III Program Manager

Enclosure

cc: Katrina Jones, EPA Project Officer
Darryl Walker, EPA Alternate Project Officer (letter only)
Angel Reed, Tetra Tech START III Document Control Coordinator

**CERCLA EMERGENCY RESPONSE REPORT
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSEE
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Revision 0

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Contract No.	:	EP-W-05-054
TDD No.	:	TTEMI-05-001-0017
Date Prepared	:	October 18, 2007
EPA Work Task Monitor	:	Mr. Leslie Sims
Telephone No.	:	(404) 562-8892
Prepared by	:	Tetra Tech
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Chris Draper
Tetra Tech START III
Site Manager

Reviewed by

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Tetra Tech START III
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Approved by

Andrew F. Johnson
Tetra Tech START III
Program Manager

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Attachment

1	INITIAL TETRA TECH START EMERGENCY REMOVAL ACTION REPORT DATED OCTOBER 25, 2006
2	BRIEFING LETTER FROM TETRA TECH START TO OSC STEVE SPURLIN DETAILING ACTIVITIES NECESSARY TO EXTRACT AND STAGE DRUMS DISCOVERED ON THE NORTH SIDE OF THE SITE
3	ANALYTICAL DATA PACKAGE FOR POOLED WATERS IMPOUNDED AT THE SITE THAT WERE DISCHARGED INTO THE PUBLICLY-OWNED TREATMENT WORKS
4	ANALYTICAL DATA PACKAGE FOR WATERS STORED WITHIN THREE PORTABLE TANKS THAT WERE ULTIMATELY DISCHARGED INTO THE PUBLICLY-OWNED TREATMENT WORKS
5	BRIEFING LETTER FROM TETRA TECH START TO OSC LESLIE SIMS SUMMARIZING WASTE CONSOLIDATION, TRANSPORTATION AND DISPOSAL ACTIVITIES, INCLUDING THE MANIFESTS
6	ANALYTICAL DATA PACKAGE FOR MATERIALS COLLECTED FROM TWO, APPROXIMATELY 10,000-GALLON UNDERGROUND STORAGE TANKS
7	BRIEFING LETTER FROM TETRA TECH START TO OSC LESLIE SIMS DETAILING THE UST PUMPING ACTIVITIES, INCLUDING THE RECYCLING MANIFEST

FIGURES

<u>Figure</u>	<u>Page</u>
1	SITE LOCATION MAP
2	SITE LAYOUT AND WASTEWATER SAMPLING LOCATION MAP



1.0 INTRODUCTION

This emergency response report has been prepared under the provisions of Technical Direction Document (TDD) No. TTEMI-05-001-0017, which the U.S. Environmental Protection Agency Region 4 (EPA) assigned to the Tetra Tech Region 4 Superfund Technical Assessment and Response Team (START) under Contract Number EP-W-05-054. The overall scope of this TDD, monitored at various times by EPA On-Scene Coordinators (OSC) Steve Spurlin, Terrance Byrd, David Dorian, David Andrews, and Leslie Sims, was to mitigate ongoing releases and stabilize the Tennessee Wheel and Rubber facility (or site). This is the second emergency response report prepared under the TDD cited above. The complete initial report, delivered to OSC Mr. Spurlin on October 25, 2006, is hereby incorporated by reference and is included as Attachment 1 of this report.

Specific elements of this TDD included conducting air monitoring, conducting hot zone entries to assess the site, evaluating container integrity, overseeing and documenting Emergency and Rapid Response Services (ERRS) contractor activities, collecting multimedia samples, performing selected field hazardous characterization of samples, submitting selected samples to a procured analytical laboratory, documenting site conditions and activities with logbook notes and photographs. Appendix A contains all logbook notes since the initial report, Appendix B contains the photographic log, and Appendix C contains a table of witnesses.

Including the attachments, this report covers over 14 months of intermittent site activities. Seven attachments are included that document the scope of the mitigation and stabilization activities conducted during this period. Following is a brief description of each:

- ❖ **Attachment 1** - Initial Tetra Tech START emergency removal action report from this response dated October 25, 2006.
- ❖ **Attachment 2** - Briefing letter from Tetra Tech START to OSC Mr. Spurlin detailing activities necessary to extract and stage drums discovered on the north side of the site.
- ❖ **Attachment 3** - Analytical data package for pooled waters impounded at the site that were discharged into the Publicly-Owned Treatment Works (POTW).
- ❖ **Attachment 4** - Analytical data package for waters collected from drums and pools at the site and stored within three portable tanks that were ultimately discharged into the POTW.
- ❖ **Attachment 5** - Briefing letter from Tetra Tech START to OSC Mr. Sims summarizing waste consolidation, transportation and disposal activities, including the manifests.
- ❖ **Attachment 6** - Analytical data package for materials collected from two, approximately 10,000-gallon underground storage tanks (USTs) discovered at the site.

- ❖ **Attachment 7** - Briefing letter from Tetra Tech START to OSC Mr. Sims detailing the UST pumping activities, including the recycling manifest.

This Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) emergency response report discusses the site background (see Section 2.0) and the emergency response action activities (see Section 3.0). A summary and conclusions for the emergency response action are presented in Section 4.0.

2.0 BACKGROUND

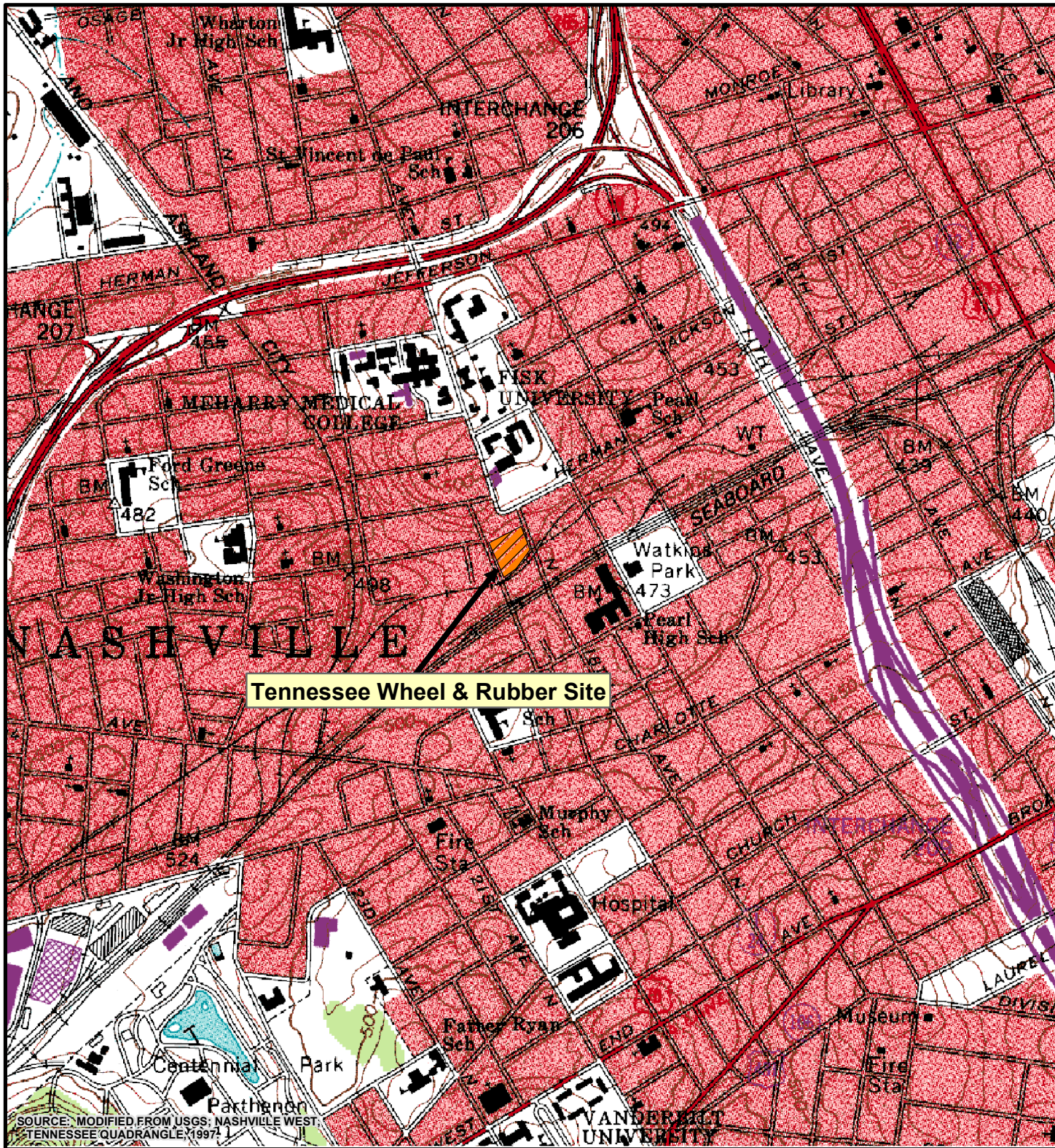
The Tennessee Wheel and Rubber site is located at 817 18th Avenue North in Nashville, Davidson County, Tennessee (see Figure 1). The site-specific geographic coordinates are 36.162862 north latitude and -86.803983 west longitude. Mr. Stephen C. Ramsey owns the site, which previously manufactured wheels and casters for various applications but is presently abandoned and bankrupt. The site is located in a commercial/residential area within the city limits of Nashville. The site is bordered by commercial properties to the east and south, and residential properties to the north and west.

At the request of the Tennessee Department of Environment and Conservation (TDEC), EPA OSC Mr. Spurlin conducted an initial site inspection on May 22, 2006, and observed ongoing releases of suspected potential hazardous substances and oil from drums stored at the site.

Oily, discolored storm water was seen discharging off site into a nearby combined sewer drain. OSC Mr. Spurlin noted that the drums were labeled hydraulic oil, methyl ethyl ketone (MEK), and toluene diisocyanate. OSC Mr. Spurlin initiated an emergency removal action and mobilized ERRS and START contractors to mitigate ongoing releases and stabilize the site.

Multiple drums containing various chemicals and oils related to the former manufacturing process were stored in on-site buildings as well as outside the buildings (see Figure 2). The two buildings on the site were designated as the “north” and “south” buildings, and the area between the two buildings was designated as the “courtyard.” Access to the property, both the exterior and the interior of each building, was not restricted prior to the emergency removal action. The condition of the buildings and property indicated that vandalism, theft, and vagrancy had likely occurred at the site.

At the request of EPA, Tetra Tech START mobilized to the site on Monday, May 22, 2006, to conduct air monitoring, conduct hot-zone entries to assess the site, evaluate container integrity, oversee and



Legend

 Site Property Location

N



0 500 1,000 1,500 2,000 Feet



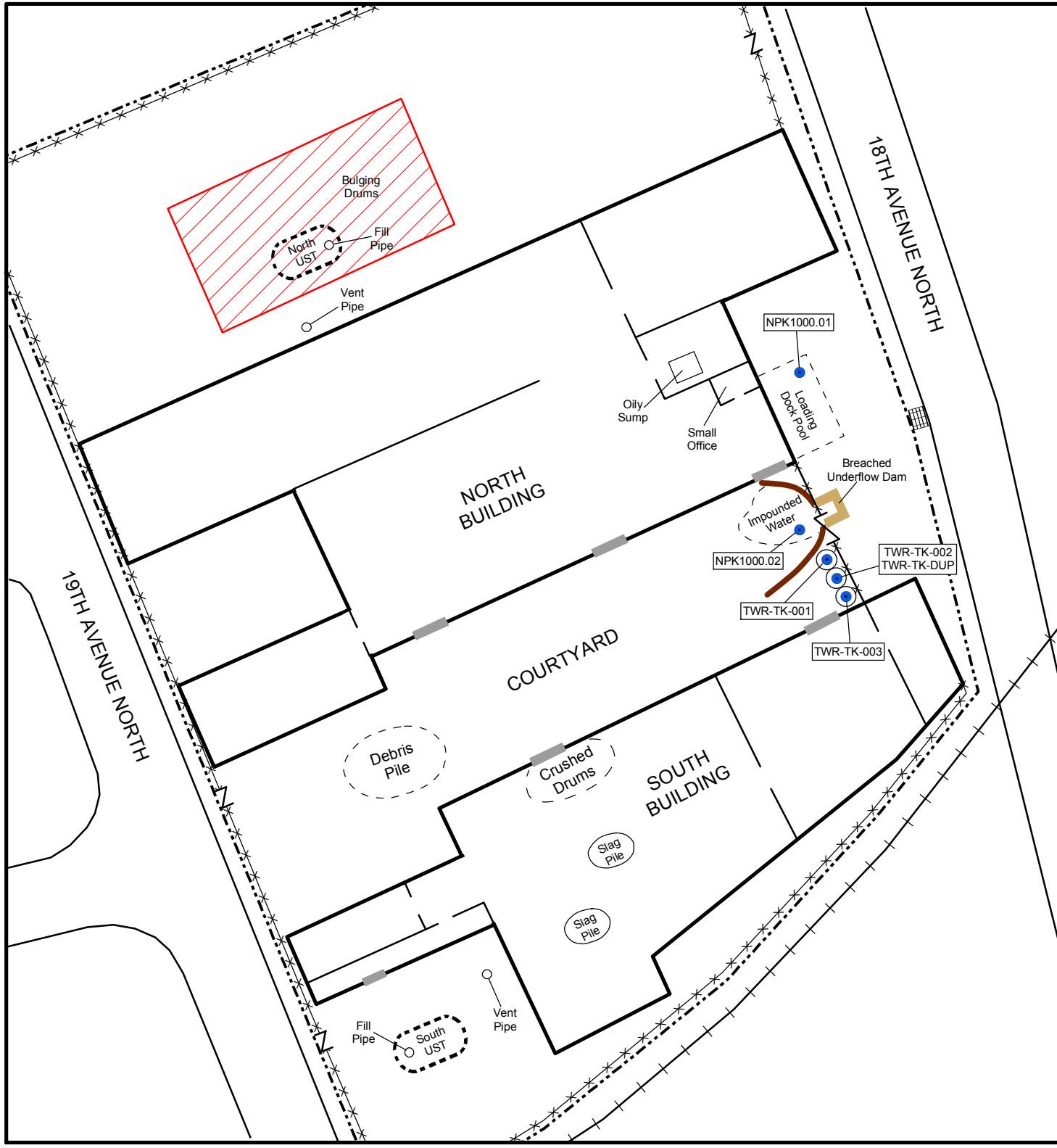
U. S. Environmental Protection Agency

TENNESSEE WHEEL & RUBBER SITE
817 18TH AVENUE NORTH
NASHVILLE, DAVIDSON CO., TENNESSEE
TDD NO. TTEMI-05-001-0017

**FIGURE 1
SITE LOCATION MAP**



TETRA TECH EM INC.



Legend

- Vegetated Area Where Drums Were Found
- Property Boundary
- Removed Soil Berm
- Fence
- Railroad
- Doorway
- Gate
- Storm Drain
- Non-Hazardous Wastewater Tanks
- Water Sample Location



NOT TO SCALE



U. S. Environmental Protection Agency

TENNESSEE WHEEL AND RUBBER SITE
817 18TH AVENUE NORTH
NASHVILLE, DAVIDSON CO., TENNESSEE
TDD NO. TTEMI-05-001-0017

**FIGURE 2
SITE LAYOUT AND
WASTEWATER SAMPLING
LOCATION MAP**



TETRA TECH EM INC.

document ERRS contractor activities, collect 14 multimedia samples, perform selected field hazardous characterization of samples, submit selected samples to a fixed laboratory for analysis, and photograph and document support activities. ERRS contractors worked to control site storm water runoff and stage drums for investigation and off-site disposal. After ERRS completed the emergency removal action activities on May 26, 2006, the site was secured and all parties demobilized from the site. Tetra Tech returned to the site on July 28, 2006 to collect four wastewater samples from on-site portable storage containers.

START submitted a total of 18 environmental samples to the fixed laboratory for analysis. Solid samples collected at the site contained measurable concentrations of many metals, including arsenic at concentrations as high as 48.5 milligrams per kilogram (mg/kg) and lead at concentrations as high as 1,070 mg/kg. Samples collected from drums at the site contained measurable concentrations of both volatile organic compounds and semivolatile organic compounds, including MEK at concentrations as high as 73.4 micrograms per liter (µg/L); tetrachloroethene at concentrations as high as 98.9 percent; toluene at concentrations as high as 90 percent; 2,6-dinitrotoluene at concentrations as high as 2,050 mg/kg; and 4-nitrophenol at an estimated concentration of 10,300 µg/L. The ignitability results for three of the drum samples indicated that the samples were “highly flammable and ignited upon contact.” In addition, the ignitability result for each of two other drum samples was 80.0 °F. The corrosivity plate result for one drum sample was 6.35 millimeters per year. The wastewater samples had oil and grease concentrations as high as 11,500 milligrams per liter. See Attachment 1 for a complete report of activities up to and including the sampling of the water from portable tanks on July 28, 2006.

The analytical results provided to EPA indicated numerous hazardous substances and prompted additional site actions following the initial response to stabilize the site. This report summarizes EPA activities since July 28, 2006, including:

- ❖ Clearing and grubbing of the north side of the site in order to extract 229 drums from the overgrown vegetation (see Attachment 2).
- ❖ Pumping of portable tanks used to impound non-hazardous site groundwater and water pumped from drums and containers to the Metro Water Services POTW in Nashville via a nearby storm drain (see Attachment 4).
- ❖ Transportation and disposal of 96 containers of waste discovered at the site and crushing approximately 450 empty drums (see Attachment 5).

- ❖ Sampling, pumping, transportation and recycling of 625 gallons of fuel oil identified in two USTs (see Attachments 6 and 7).

3.0 EMERGENCY RESPONSE ACTION ACTIVITIES

WEDNESDAY, NOVEMBER 1, 2006

Tetra Tech START member Mr. Chris Draper arrived on site at 0930 to meet with OSC Mr. Spurlin, and to verify the effectiveness of site security, including the condition of staged waste containers, since the initial response action (see Attachment 1). All gates, security measures, and waste containers were found to be in good condition with no evidence of disturbance or vandalism.

Tetra Tech START member Mr. Draper and OSC Mr. Spurlin then proceeded to the northern portion of the property to observe drums that were discovered in an area of overgrown vegetation during the initial response (see Figure 2). OSC Mr. Spurlin estimated that there were at least 75 containers that needed to be removed, characterized, and staged for disposal along with the containers from the initial response. OSC Mr. Spurlin contacted Mr. Dave Slauson of SWS First Response (SWS), a subcontractor of KEMRON Environmental Services, Inc. (KEMRON) and the local ERRS contractor, and asked him to meet START member Mr. Draper at the site on November 2, 2006 to formulate a plan to remove the drums from the area of overgrown vegetation.

THURSDAY, NOVEMBER 2, 2006

Tetra Tech START member Mr. Draper arrived on site at 1000 to meet with Mr. Slauson. Mr. Draper briefed Mr. Slauson on the site history, provided a tour of the facility, and assisted Mr. Slauson with preparation for clearing and grubbing of vegetation as necessary to extract all containers from the overgrown vegetation.

MONDAY, NOVEMBER 6, 2006

At approximately 1100 hours, Tetra Tech START member Mr. Tim Ward arrived and met OSC Mr. Andrews and Mr. Slauson. OSC Mr. Andrews was on site because OSC Mr. Spurlin had a scheduling conflict. Planned activities called for SWS personnel to clear vegetation as necessary to extract and stage drums. A brief letter report to OSC Mr. Spurlin describing the operations conducted on November 6 and 7, 2006, is included as Attachment 2.

Mr. Ward was informed by Mr. Slauson of the discovery of a second suspected UST at the site. SWS personnel had discovered the fill port for the UST on the northern side of the property while clearing

vegetation. SWS personnel conspicuously painted the fill port with orange marking paint to preclude accidental damage during operations.

The underflow dam erected in the courtyard during the initial response was retaining a substantial amount of storm water. After assuring that there was no evidence of oil sheen and using litmus paper to verify that the pH was in the neutral range, OSC Mr. Andrews tasked SWS personnel breach the dam and allow the impounded water to drain via gravity into another pool of water located at the loading dock on the eastern side of the north building. SWS later used a diaphragm pump to drain the area behind the underflow dam. Approximately one-half of the water impounded by the underflow dam was pumped prior to the end of daily operations.

TUESDAY, NOVEMBER 7, 2006

Tetra Tech START member Mr. James Caruthers arrived on site to document activities. Two samples were collected from behind the underflow dam and from the loading dock pool for analysis; however, after assuring that there was no evidence of sheen and using litmus paper to verify that the pH was in the neutral range, all water was pumped to the POTW via a nearby storm drain. The two samples and a trip blank were delivered to a locally-procured laboratory for analysis (see Attachment 3).

Ms. Sandra Custode of the Department of Codes Administration in Nashville arrived to review operations at 1255.

Of the 229 drums discovered during this 2-day operation, 216 were determined to be Resource Conservation and Recovery Act (RCRA) empty. All of the drums removed from the northern side of the property were staged within the south building. The site was then secured to the extent possible and all personnel demobilized at 1500 pending further direction from EPA.

WEDNESDAY, DECEMBER 6, 2006

Tetra Tech START member Mr. Draper arrived at 0800 to provide a site briefing to EPA personnel unfamiliar with the facility and to document sample collection activities performed by EPA's National Enforcement Investigations Center (NEIC) and Science Ecosystem Support Division.

At 1121, Mr. Daniel Roop and Mr. Ed Cox of TDEC arrived to review operations. Mr. Roop expressed concern to Mr. Draper that the water within three portable tanks, used to impound groundwater and water discovered in site containers during the initial response, might freeze and rupture during the winter. Mr. Draper agreed to discuss this with OSC Mr. Sims. The owner of the

facility, Mr. Ramsey, arrived at 1230 for discussions with Mr. Logue and Mr. Lamberth of EPA.

NEIC collected approximately 20 samples from waste containers, including at least 2 duplicate samples, and approximately 6 solid samples, including soils and slag. The NEIC sampling effort concluded at 1841. The site was secured to the extent possible and all personnel demobilized pending further direction from EPA.

WEDNESDAY, DECEMBER 20, 2006

Based on the request of Mr. Roop, OSC Mr. Sims tasked SWS to pump the contents of the three portable tanks used to collect storm water and water from containers to the POTW via a nearby storm drain. Tetra Tech START members Mr. Draper and Mr. Caruthers were tasked with supporting SWS and documenting activities. Following a safety briefing with OSC Mr. Sims, SWS personnel, and Mr. Gary Rogers of KEMRON, preparations were made to pump tank TWR-TK-001 to the POTW. OSC Mr. Sims tasked Tetra Tech START with collecting samples from each of the three tanks to be pumped for extractable petroleum hydrocarbon analysis at a locally-procured laboratory (see Attachment 4).

Any oil layer that had separated from the water within the tanks was skimmed off and collected in drums for disposal. Only water was to be discharged to the POTW. SWS also used an inline filter sock installed within a 55-gallon drum to screen solids as the water was discharged. Mr. Hugh Garrison with Metro Water Services was informed of the site activities and had approved the discharge to the POTW. Mr. Garrison arrived at 1010 to observe and was satisfied that operations were adequately protective of the Nashville POTW.

At 1040, Mr. Roop and Mr. Cox of TDEC arrived to review operations. All tanks were empty by 1114. KEMRON and SWS were also tasked by EPA to locate any additional containers of suspected hazardous substances and stage them for disposal with the balance of the waste from the initial response. KEMRON inventoried all site waste in order to arrange disposal or recycling as appropriate. Additionally, the water impounded by the underflow dam erected in the courtyard during the initial response was again pumped to the POTW. With the approval of OSC Mr. Sims, the dam was also breached and allowed to flow via gravity to the storm drain.

All operations were completed at 1500. The site was secured and all personnel demobilized.

TUESDAY, JANUARY 30, 2007

Tetra Tech START members Mr. Draper and Mr. Caruthers arrived to document the loading and transportation of waste from the site. OSC Mr. Sims, Mr. Rogers of KEMRON, and four SWS hazardous materials technicians were also on site. KEMRON had made arrangements to dispose of the waste at Chemtron Corporation (EPA ID No. OHD066060609) in Avon, Ohio via Potomac Environmental (Potomac). Mr. Ted Puchalski of Potomac, a waste disposal broker, was on site to label and document the shipment in accordance with applicable regulations. Robbie D. Wood, Inc. (EPA ID No. ALD0671138891) was selected as the primary waste transporter.

KEMRON arranged for Nashville Barrel and Drum to collect and recycle empty drums in good condition. An excavator operated by CMC, Inc., another EPA Region 4 ERRS contractor, would be utilized to crush empty drums that were unsuitable for recycling. The crushed drums would remain at the site.

OSC Mr. Sims tasked Mr. Draper to contact the Department of Codes Administration and try to arrange for a roll-off container for site debris. Neither the Department of Codes Administration nor Metro Public Works could provide the containers. SWS consolidated solid debris in a pile on the western end of the courtyard and placed the crushed drums inside the south building.

SWS used a vacuum truck to remove approximately 200 gallons of oil from the sump in the north building and two 250-gallon tanks. Tetra Tech START member Mr. Draper checked the two USTs discovered at the site to determine their fill level and, if possible, contents. The south UST (see Figure 2) contained approximately 9 inches of presumed fuel oil and the north UST contained approximately 18 inches of presumed fuel oil. Both USTs were estimated to be 10,000-gallon tanks.

KEMRON procured the services of Empire Security to guard the site and equipment overnight. The site was secured and daily operations ended at 1638.

WEDNESDAY, JANUARY 31, 2007

Tetra Tech START members Mr. Draper and Mr. Caruthers arrived and attended the safety briefing with KEMRON and SWS. Waste loading operations began at 0820, were completed by 0945, and the truck departed at 1010. Ninety-six containers of waste were shipped offsite, including:

❖ Flammable liquids	19 each 55-gallon drums
❖ Tetrachloroethylene	1 each 55-gallon drum
❖ Toluene diisocyanate	2 each 55-gallon drums

❖ Toluene diisocyanate	1 each 5-gallon pail
❖ Sulfuric acid	1 each 55-gallon drum
❖ Phosphoric acid	1 each 55-gallon drum
❖ Caustic liquids	1 each 55-gallon drum
❖ Non-RCRA materials	70 each 55-gallon drums

Drum crushing operations continued throughout the day. Approximately 450 empty containers from around the site were crushed and staged within the south building to preclude impacting site runoff.

OSC Mr. Sims requested that Tetra Tech START return to the site in a few days to sample the USTs. Operations concluded at 1540, the site was secured, and all personnel demobilized. A brief letter report to OSC Mr. Sims describing the removal activities, including a copy of the Uniform Hazardous Waste Manifest (No. 001753967 JJK) to Chemtron Corporation, is included as Attachment 5. All operations were completed at 1540. The site was secured and all personnel demobilized.

TUESDAY, FEBRUARY 6, 2007

Tetra Tech START members Mr. Draper and Mr. Caruthers arrived at 1211 to sample the USTs in order for OSC Mr. Sims to determine their disposition. The north UST was completed at 1252 and the south UST at 1336. All samples were preserved as appropriate, documented, placed on ice, and packaged for delivery to the locally-procured laboratory for the following analyses:

- ❖ Polycyclic aromatic hydrocarbons / polynuclear aromatics
- ❖ RCRA 8 metals
- ❖ Ignitability
- ❖ Benzene, toluene, ethylbenzene, and xylenes / methyl tertiary-butyl ether / naphthalene
- ❖ Ethylene dibromide / ethylene dichloride
- ❖ Polychlorinated biphenyls

All operations were completed at 1419. The site was secured and all personnel demobilized.

The sample data confirming the material discovered in both USTs as fuel oil is included as Attachment 6. Tennessee statute exempts certain tanks from all provisions of the Petroleum Underground Storage Tank Act in Tennessee Codes Annotated Section 68-215-124, which states: "Tanks used for storing heating oil for consumption on the premises where stored are exempted."

THURSDAY, JUNE 28, 2007

At 0715, Tetra Tech START member Mr. Draper met Mr. Roop and a vacuum truck driver for

Universal Environmental Services, LLC (Universal), of Murfreesboro, Tennessee. Mr. Roop arranged for Universal to pump and recycle the fuel oil discovered in the two USTs free of charge.

According to the vacuum truck driver, the north UST yielded approximately 275 gallons and the south UST yielded approximately 400 gallons of fuel oil. The manifest signed by Mr. Roop, however, indicated that a total of 625 gallons was transported from the site for recycling. A brief letter report to OSC Mr. Sims describing the UST pumping, including a copy of the manifest to Universal, is included as Attachment 7.

Mr. Roop and Mr. Draper then conducted a final site walk-through to verify the effectiveness of site security. All gates and security measures were found to be in good condition with no evidence of disturbance or vandalism. All operations were completed at 1500. The site was secured and all personnel demobilized.

4.0 SUMMARY AND CONCLUSIONS

The Tennessee Wheel and Rubber site, owned by Mr. Stephen C. Ramsey, is located at 817 18th Avenue North in Nashville, Davidson County, Tennessee. The site manufactured wheels and casters for various applications but is presently abandoned and bankrupt. EPA OSC Mr. Spurlin conducted an initial site inspection and observed ongoing releases of potential hazardous substances such as MEK, toluene diisocyanate, and oil from drums and containers stored at the site. OSC Mr. Spurlin initiated an emergency removal action and mobilized ERRS and START contractors to investigate the site, mitigate ongoing releases, and stabilize the site on May 22, 2006.

The analytical results provided to EPA indicated the presence of numerous hazardous substances and prompted additional site actions following the initial response to stabilize the site. Based on site conditions following the initial response (see Attachment 1) to mitigate releases and stabilize the site; as well as subsequent removal-related activities conducted by the EPA Emergency Response and Removal Branch (ERRB), current data indicates actions taken during the time-critical cleanup were successful in eliminating or reducing risk of the imminent threat to human health and the environment posed by hazardous substances identified at the site during this response action. No further response action is planned by EPA ERRB at the Tennessee Wheel and Rubber facility.

APPENDIX A

LOGBOOK NOTES (13 Pages)



"Rite in the Rain"
ALL-WEATHER WRITING PAPER



HORIZONTAL LINE

All-Weather Notebook
No. 391

U

TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TN
TDD NO. ITEM1-05-001-0017

4 5/8" x 7" - 48 Numbered Pages

11/01/06

0930 ARRIVE @ TNW:R TO MEET OSC
SPURGIN AND CHECK ON SITE
SECURITY AND CONTAINER CONDITION.
SECURITY WAS ADEQUATE.

CONTAINERS ARE NOT LEAKING IN
STAGING AREAS.

ESTIMATE ~75+ CONTAINERS ON
N. SIDE IN TREES. WILL REQUIRE
CLEARING AND GRUBBING TO EXTRACT.

1102 DEPART

11/02/06

1000 ARRIVE @ TNW:R TO MEET DAVE S. W/
SWS TO DISCUSS REMOVAL AND
PROVIDE SITE ORIENTATION.

1100 DEPART

Chapman

11/02/06

11/6/06 TN WHEEL + RUBBER

TDD NO. TTEM1-05-001-0017

SOW: DRUM REMOVAL OVERSIGHT AND DOCUMENTATION

1100 ARRIVE ON SITE

1105 SPOKE W/ DAVE SLAUSON W/ SWS

UST - 734 FT, JUST FILL PIPE SHOWN

N 36° 09.795'

W 86° 48.218'

DRUMS - 436'

N 36° 09.805'

W 86° 48.243'

SWS EQUIPMENT - SKIDSTEER + BACKHOE W/ DRUM
LIFTER

1110 BEGIN TAKING PHOTOS, SWS PERSONNEL

CLEARING BRUSH TO ACCESS DRUM AREA, WILL

SEPERATE EMPTIES VS FULL, STORE ALL IN

SECONDARY BLDG WHERE OTHER DRUMS ARE

STORED, SWS MARKING DRUM LOCATIONS W/

ORANGE SAFETY PAINT

SWS PERSONNEL - BENNY HOWELL, SUPERVISOR

DAVE SLAUSON, MANAGER

3 LABORERS

EPA PERSONNEL - DAVE ANDERSON, OSC

1135 D. SLAUSON INFORMED TTEM1 OF ACCUMULATED

RAINWATER ON OTHER PORTION, WILL

PH TEST THEN DISCHARGE TO LOADING DOCK

AREA, WILL THEN PUMP TO STORM SEWER FOR
DISCHARGE

1140 BEGIN LOADING EMPTY DRUMS ONTO FLATBED

F-450 FOR TRANSPORT TO OTHER BLDG

DRUM COUNT - 23 EMPTY

1155 DAVE ANDERSON, OSC, DEPARTS SITE

1225 SWS DEPART SITE FOR LUNCH

1230 SPOKE W/ CHUCK BERRY FOR DEBRIEFING

1235 DEPART SITE FOR LUNCH

1333 ARRIVE ON SITE, SWS IN PROCESS OF

UNLOADING 2ND DRUM LOAD

DRUM COUNT - 23 EMPTY

1400 SWS CLEARING BRUSH FOR DRUM EXTRACTION,

BEGIN LOADING EMPTY DRUMS

DRUM COUNT - 26 EMPTY

1435 UNLOAD DRUMS, CLEAR BRUSH

1455 RE-CONFIRMED STORMWATER SITUATION

W/ DAVE ANDREWS, SWS MOVING

EQUIPMENT AND PREPARE TO BREACH

DAM. ALL PH STRIPS COLORED NEUTRAL

AND NO SHEEN NOTED

1510 BEGIN PUMPING FROM UPPER TRAP AREA

TO LOADING DOCK AREA AS DIRECTED BY

SWS - BENNY HOWELL

1555 END PUMPING (APPROX. 50% PUMPED), SWS
BEGINS PACKING EQUIPMENT

1600 SWS DEPART SITE, DAVE ANDERSON ARRIVES,
DEBRIEF

1615 DEPART SITE FOR OFFICE

11-7-06

0715 ON SITE. LITE RAIN/OVERCAST.

0720 SWS - B. HOWELL ON SITE.

APPROX. 50 DRUMS REMAIN.

PLAN TO FINISH TODAY.

0725 SAFETY MTG. SLIP, TRIP, FALL
HEAVY EQUIP. ETC.

MOVE DRUMS, MONITOR W/PID

0730 PH STANDING WATER

PH - 6.0, WILL DISCHARGE
THRU. UNDERFLOW DAM &
ON TO STORMDRAIN.

0800 MOST REMAINING DRUMS

ARE POLYURETHANE COMP.

PUMP WATER FROM LOADING
RAMP ON E. SIDE OF SITE TO
STORMDRAIN.

DRUMS: UNIROVAL-VIBRATHANE

0830 BEGIN LOADING DRUMS

0915 OSC ANDREWS ON SITE.

PHOTO LOG FOR 11-7-06

PHOTO #

DESCRIPTION

- 1 RELEASING WATER THRU
UNDERFLOW DAM.
- 2 DRUMS ON N. END OF SITE
- 3 UST AT N. END OF SITE.
- 4 LOADING DRUMS.
- 5 DRUM STAGING AREA.
- 6, 7, 8 N. DRUM AREA - TAKEN
FROM D. B. TODD OVERHEAD.
- 9 COURTYARD - FROM D. B. TODD.
- 10, 11 RESIDENTIAL AREAS W. &
NW OF SITE.
- 12 OFF LOADING DRUMS.
- 13, 14, 15 N. AREA CLEAR OF DRUMS.

1015 OSC ANDREWS REQUESTS
2 H₂O SAMPLES OF STANDING
WATER - DISCHARGING TO
STORM DRAIN. ANALYSIS:
VOCs, SVOCs & TPH.

1030 D. CARDEN ON SITE w/
SAMPLE JARS.

1115 SAMPLE RAMP POOL.

1125 D. ANDREWS - OSC OFF SITE

1145 SAMPLE COURT POOL (COURT-
YARD)

VOCs, SVOCs, TPH - DRO - GRO.
SWS CONTINUE MOVING
DRUMS

1255 NASH. CODES DEPT. ON SITE
SANDRA CUSTODE, WANTED
TO LOOK AROUND & PROGRESS
FROM MON.

1415 LOADING LAST OF DRUMS.

1430 DRUM TOTAL:

FULL - 16

MT - 213

229

16 FULL - FLUID & SOLID

FLUID DRUMS - BELIEVED TO
BE MOSTLY WATER.

1500 SITE SECURED, OFF SITE.
DELIVER SAMPLES TO TA.
NASH.



50 Visco COURT
NASHVILLE, TN 37210-2148
615-291-9852 OFFICE
615-291-5356 FAX
615.947.3103 CELL

DAVID SLAUSON
SERVICE CENTER MANAGER

INTERNET: WWW.SWSEFR.COM

EMAIL: DAVID.SLAUSON@SWSEFR.COM

24-HOUR EMERGENCY RESPONSE
1-800-852-8878



50 Visco Ct.
Nashville, TN 37210
615-291-9852 Office
615-291-5356 Fax

Benny Howell
Supervisor

Internet: www.swsefr.com Email: benny.howell@swsefr.com

24-Hour Emergency Response
1-800-852-8878

Blank

12/06/06

0800 ARRIVE @ TWR

0810 DAVE LOGUE AND OTHER AGENTS, POLICE
AND SAMPLERS ARRIVE TO SERVE
WARRANT, CLEAR BUILDING AND COLLECT
EVIDENCE AGAINST R.P.

FROM NEIC, SESD, AND CID, ^{RPA ENFORCEMENT}
CARRETA, LARRY CAMARETH, KEVIN, ART
MASTERS, MIRE NEIL, ALISON

0827 BUILDING CLEARED FOR CIVILIAN ENTRY

0840 COMPLETE SITE WALK ORIENTATION

0846 CALL JAMES CARUTHERS, ETCMI, TO ASK
WHERE 16 FULL NORTHSIDE DRUMS WERE
STAGED. DRUMS IN S. BLDG NEAR
FURNACES AND CONVEYORS.

0855 IN TO ID SAMPLE DRUMS

0947 DRUMS SELECTED FOR SAMPLING

NEIC FOLKS PREPARE TO SAMPLE
IN EPA LEVEL B PPE

1025 SWS ON SITE W/ LIGHTS

1 MAN, TRUCK AND ER TRAILER
John Long

Q

- 1043 3 IN LEVEL B GO IN
 1044 DAVE SLOWHARTSON, SWS, ON SITE
 1100 BOTTLE CHANGE (1 PERSON)
 1121 DANIEL ROOP AND ED COY, TDEC
 ARRIVE
 RECOMMENDS WATER DISPOSAL SOON
 ASKED FOR LES SIMS, EPA, TO CALL HIM
 1127 ANOTHER BOTTLE CHANGE
 1135 ALL 3 OUT
 RAW FLASH ON OPS - Ø18 - Ø2Ø - ALL FLASH
 ~ 80°F
 1208 LUNCH BREAK
 1230 OWNER ON SITE
 1233 JODY S., TCEM, DELIVERS HAZCAT
 SHEETS
 1405 SCREENING CONTINUES
 1435 PULL SOLID SAMPLE FROM OVER-TURNED
 FIBER DRUM ON PAD NEAR SOUTH SIDE
 OF N. BLDE, BEHIND AST DIESEL TANK
 1443 PULL SOLID SAMPLE FROM PILE INSIDE
 AREA WHERE BOILER WAS (BURNED
 AREA) THAT IS LITTERED W/ 1-GAL
 PAINT CANS

1453 - DRUM 1008 FP 131°F

Ø12 - NO FLASH

CREW OUT

STUCK LIST TO ABOUT 6'; NO
 FID READING NO LIQ, BUT THAT'S
 NOT THE BOTTOM

- SELECTED DRUMS (18, 19) 24 (25), 27, 28, 29
 • 11 EA MER; 106, 107, 099, 113, 112,
 105, 089, 005, 061, 020, 004
 • OIL - Ø31 (53Ø)
 • PERC - Ø17 (517)
 • SOLID - TWR-S-Ø1 (504, 505 DWP)
 • SOLID - FROM FURNACES (EAST MOST
 VAT 1 5Ø3)
 • ACID - Ø16 (507, 508 DWP)
 • SUMP OIL - 117 (509)
 • TOLUENE - Ø18 (510)
 • KEROSENE - 090, 108 (512, 513)
 • NAPHTA - 118 (515)
 • 1,4-BUTANEDIOL - 119 (516) COULD NOT
 SAMPLE
 • SOLID - FROM 1435 IN CY (501)
 • SOLID - FROM 1443 IN CY (502)
 • TDI - 078 (511) 109 (514)

THERE IS 110 506
 516, 518

12/20/06

~1615 CREW IN TO SAMPLE 20 DRUMS
2 DURS AND 6 SOLIDS
1650 PULL SOLIDS - (504) FROM SW
CORNER OF COURTYARD
20-GAL FIBER - NOT COLLECTED
1841 SAMPLING COMPLETE
SWS RELEASED
DOCUMENTATION CONTINUES
DAVE LOGUE LEFT COPY OF
WARRANT IN OFFICE
ALL BUT MAIN GATE LOCKED
1928 OFF-SITE

12/20/06

12/20/06

12/20/06

0752 ARRIVE TW:R, START DRAPER AND
CARUTHERS
0756 SWS SAFETY BRIEFING
SWS: B, HOWELL AND 3 TECHS
KEMRON: GARY ROGERS AND TONY CREWS (FA)
0810 LES SIMS, RH FOSC ARRIVES
SWS PREPARES TO PUMP TWR-TK-001
RUNS HOSE OUT TO STORM DRAIN NEAR
18TH AVE. (N 36.16327 / W -89.80353)
0830 OSC SIMS OFF-SITE
REQUESTS H₂O SAMPLES FROM EACH
TANK FOR EPH ANALYSIS ONLY
2 EACH 1-L JARS W/ HCl PER TANK
0902 JAMES C. OFF TO GET SAMPLE JARS
0905 SWS SKIMS OIL OFF TWR-TK-002
0918 1 EA SS-G O/T FILLED W/ SKIMMED OIL,
TWR-DR-2000, FROM TWR-TK-002
0936 SAMPLE JARS ARRIVE
0939 BEGIN PUMPING TWR-TK-001 TO
STORM DRAIN VIA FILTER SOCK
INSIDE A 55-GAL DRUM
1010 HUGH GARRISON, METRO WATER, ARRIVED
AGREED DISCHARGE OK, SAMPLING MAY
BE OVER KILL BUT OK. SAMPLE TWR-TK-001
1022 DEPARTS

14

TANK DRAIN PHOTO LOG 12/20/00

1, 2, 3 TANKS TWR-TK-001, 002, 003,

4 PUMPING TWR-TK-001

5 SWS TECH AT FILTER SOCK DRUM

6 PUMPING TWR-TK-002

7 CODES. PROPER WARNING POSTED

ON DOOR

8 PUMPING TWR-TK-003

9, 10, 11, 12 SAMPLING OF WATER AT
STORM DRAIN

13 BREACHED UNDERFLOW DAM

14 DRAINING OF IMPOUNDED H₂O THROUGH
HAY, ABSORBENT SOCKS

15

1026 TWR-TK-001 EMPTY

1031 FOSC SEMS ONSITE

1035 BEGIN PUMPING TWR-TK-002

1040 DANIEL LOOP AND EDCOX, TDEC,
ON-SITE

1045 SAMPLE TWR-TK-002

1058 TWR-TK-002 COMPLETE

1100 BEGIN PUMPING TWR-TK-003

1114 SAMPLE TWR-TK-003

1125 FOSC SEMS OFF-SITE FOR CONF. CALL

1130 TWR-TK-003 COMPLETE

KEMRON TO INVENTORY AND GATER ANY
REMAINING CONTAINERS AND STAGE UP.1132 BEGIN PUMPING OF WATER IMPOUNDED
BEHIND UNDERFLOW DAM

NO SAMPLES COLLECTED

FILTER SOCK USED

1139 CALLED FOSC SEMS AND ASKED IF
WE COULD CRACK THE UNDERFLOW
DAM AND LET THE WATER DRAIN
TO THE STORM DRAIN NATURALLY;
FOSC SEMS AGREED

1141 UNDERFLOW BREACHED

184P

1145 SWS BEGINS PUMPING REMAINING
OIL: GREASE LAYER FROM
TWR-TK-002; INTO DRUM
TWR-DR-2001

1208 TWR-TK-002 EMPTY

1213 BEGINS PUMPING AND DRAINING OF
TWR-TK-003 INTO DRUM ~~2003~~
TWR-DR-2002 ~~2003~~ ~~2004~~

TOTAL: 4 ft SSs OF OILY H₂O
1 EA SSct w/PAD: BOOM
2000, 2001, 2002, 2003 - LQ
2004 = BOOM & PAD

1245 LUNCH

1340 BACK ON SITE

1350 KEMPON: SWS COUNT/INV
DRUMS

1430 COWLEY CONTAINER ARRIVES TO LOOK
AT EMPTIES w/GARY ROGERS

1500 SITE SECURED. ALL OFF-SITE

17
01/12/2007

1116 DEPART FOR TW:R

1135 ARRIVE SITE

MET w/ RON MARLIN OF NASHVILLE
BARRELL

1144 ENTER SITE TO SHOW EMPTY DRUMS

MR. MARLIN STATED THAT HE COULD
STAGE A TRAILER TO COLLECT EMPTIES
FOR REUSE OR RECYCLING

TARE ONLY METAL SS's

48' TRAILER HOLDS 264 (TRIPLE-
STACKED)

INSTRUCTED MR. MARLIN TO CONVEY
ALL INFO AND WORK LOGISTICS WITH
GARY ROGERS OF KEMPON AND PROVIDED
CONTACT NUMBERS

1158 DEPART SITE AFTER SECURING GATE

1226 ARRIVE TEEMI, NV

01/30/2007 REMOVAL BEGINS

- 0650 START DRAPER; CRUTHERS ARRIVE
A TRACKHOE AND SKID LOADER HAVE
BEEN STAGED OUTSIDE THE GATES
- 0730 TED PUCHALSKI, POTOMAC ENV.
W/ SITE FOR DISPOSAL
BREAKER TO CHEMTRON IN
AVON, OH.
- 0800 GARY ROGERS AND 4 SWS PERS
ON-SITE; ALSO ROBERT FROM CMC
TO OPERATE
- 0810 H'S BRIEF BY GARY ROGERS
PLAN IS TO STAGE FOR LOADING;
THEN SEGREGATE EMPTIES
LOAD CLOS AND CLOS OLD EMPTIES
- 0815 LESSONS ON-SITE
- 0838 ASKED TO CALL CODES AND SEE ABOUT
GETTING ROLL OFF
- 0900 CALL SANDRA CUSTODE
WILLIAM PENN 862-6516
- 0905 CALL PENN
SPOKE W/ MR. KENT
LAURENCE JACKSON @ PUBLIC WORKS
862-8418

- 0915 CALL MR. JACKSON @ PUBLIC WORKS
LEFT MESSAGE TO CALL DRAPER
- 0918 PER BENNY HOWELL
GREG ~ 250 GAL TANK IN COURTYARD
IS EMPTY
RED TANK INSIDE N. BLDG. NEAR
SUMP HAS 24 INCHES OF OIL
- 0921 TONY W/ REMON ON-SITE AS FIELD
ACCOUNTANT
- 0945 SWS VAC RED TANK IN N. BLDG.
1035 STICK SW UST - 18" FUEL
OIL
- 1120 CALL MR. JACKSON, LEFT 2ND MESSAGE
- 1138 CALL KERITA KEGLER, NEIC
303-462-9296; LEFT MESSAGE
REGARDING SOLIDS DATA
- 1146 OPEN AND STICK N. SIDE UST
126" TO BOTTOM
~ 9" PRODUCT - SAME AS SW UST
SMELLS OF DIESEL
- 1206 LUNCH
- 1303 ON-SITE

PHOTO LOG 1-30-07

- 105 Tens w/PEI LABELING DRUMS
 104 STICK SW UST
 103 DIP STICK - 18" FUEL OIL
 102 DIP N. UST
 101 APPROX. 9" DIESEL N. UST
 100 SKID LOADER MOVING DRUMS OUT OF
 S. BLDG (13:28)
- 99 WASTE LABELING AND CONSOLIDATION
 98 CF-BASED PAINT BULKING 1-31-07
 97 LOADING WASTE FOR TRANSPORT
 95 " " " "
 94 CRUSHING MT DRUMS W/OIL DRY
 ON SURFACE
 93 CRUSHED DRUMS INSIDE S. BLDG.
 92 DRUM CRUSHING
 91 " " "
 90, 89, 88, 87, SITE SECURED AS
 WE LEFT IT.

Q

- 1307 ~ 200 GALLONS PUMPED FROM
 RED TANK, GRAY TANK, SUMP AND
 PAN
 LABELING AND DRUM (WASTE) STAGING
 CONTINUES
- 1341 SPOKE W/ OSC SARKIS. ABOUT SITE
 AND HIS ER EQUIPMENT
- 1343 OSC SIMS ON-SITE
- 1401 OPs SCHEDULED:
 • TRUCK LOAD-OUT (01/31/07)
 • EMPRIES (01/31/07)
 OTHER OPs (USTs, SAND, SOLIDS, ETC)
 WILL BE LATER DATE
- 1457 DRUMS OF WASTE ARE BEING
 CONSOLIDATED; SKID LOADER MOVING
 HOPPERS AND MAKING A PILE IN
 COURTYARD
- 1523 EMPIRE SECURITY ON-SITE
- 1542 GARY ROGERS TASKS SWS TO BEGIN
 SEGREGATING GOOD/BAD EMPRIES
- 1557 NASHVILLE BARREL AND DRUM ON-SITE
- 1638 OPs COMPLETE FOR DAY

Ch 2

27
08/31/07

0715 ON-SITE (DENVER: CARUTHERS)

0738 SAFETY BRIEF

COLD, S/T/F, LOG-IN/OUT, EQUIP

• LOAD TRUCK

• PUT OIL-DRY DOWN; CRUSH DRUMS
STAGE INSIDE

0758 LES SIMS TASKS START TO SAMPLE

2 USTs FOR
TAL METALS:

VOLS

SEMI

FLASH

PCBs

EPH

ROBBIE D. WOOD

0811 TRANSPORT FOR WASTE ARRIVES (53')

0820 LOADING BEGINS

0845 - TN - UNK. - UST - TDEC

PAHS

RCRA 8

BTEX

MTBE

EDB

EDC

ANALYSIS TDEC USES ON AN
UNKNOWN UST.

0945 WASTE TRANSPORT LOADED
DRUM CRUSHING BEGINS

1005 TRAILER # W47736

TRACTOR # 5276

CARRIER - ROBBIE D. WOOD

DESTINATION - CHEMTRON - AVON,
OHIO.

PLACARDED: FLAMMABLE

1010 WASTE OFF SITE.

1100 LUNCH

1200 CONTINUE CRUSHING DRUMS

1350 " " "

1400 UNK. UST ANALYTICAL

TDEC - UNK. UST LIST +

PCBs & FLASHPOINT AS

PER OSC SIMS.

1540 SITE CLEANED & SECURED.

Ch. R.

21 (92)
02/06/07

1211 ARRIVE TWR TO SAMPLE TWO
USTS

START DRAPEE: CARUTHERS

1214 SAMPLE N. UST

SAMPLE BOTH FOR

PAH/PNAs

PCRA & METALS

IGNITABILITY

BTEX + MTBE + NAPHTHALENE

EDB + EDC

PCBs

WATER/OIL DEBRIS

1246 PHOTO OF FULL SAMPLE BOTTLES AND
UST FILL CAP

1252 N. GATE SECURED

1304 SAMPLE SW UST FOR SAME AS N
FILL IN DRYER AND THICKER THAN
N. UST; ALSO LESS H₂O

1336 PHOTO OF FULL BOTTLES AND FILL VALVE

1419 ALL SAMPLE DOCUMENTED AND ICED

ALL GATES SECURED

ALL OFF-SITE

25
6/28/07

0715 ARRIVE TWR
MEET w/ KEVIN STEWART OF
UNIVERSAL ENV. SVCS. OF MURFREESBORO, TN

0725 DANIEL ROOP, TREC, ARRIVES
w/ SANS TO CUT VINES TO ACCESS
N. UST

0745 BEGIN PUMP
N. UST PREVIOUSLY MEASURED 9"
UNIVERSAL TO RECYCLE/FUEL BLENDING
FREE-OF-CHARGE

PHOTO 1: (N) UES STANGING MUST

2: (E) UES TRUCK

0755 N. UST COMPLETE. ~275-325-GAL

0813 BEGIN SW. UST

BEGAN w/ ~ 18"

0833 DONE. ~ 400

633 625-GALLONS TOTAL

0849 OFF-SITE

Ch: R
06/28/07

APPENDIX B

PHOTOGRAPHIC LOG (40 Pages)





OFFICIAL PHOTOGRAPH NO. 1
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: November 6, 2006

Photographer: Tim Ward, Tetra Tech START

Witness: Dave Andrews, EPA

Subject: Drums in area of dense vegetation on the northern portion of the site.



**OFFICIAL PHOTOGRAPH NO. 2
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE**

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: November 6, 2006

Photographer: Tim Ward, Tetra Tech START

Witness: Dave Andrews, EPA

Subject: A typical bulging drum removed from area of overgrown vegetation near the northern property boundary.



OFFICIAL PHOTOGRAPH NO. 3
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: East

Date: November 6, 2006

Photographer: Tim Ward, Tetra Tech START

Witness: Dave Andrews, EPA

Subject: Typical empty drums removed from the overgrown vegetation.



OFFICIAL PHOTOGRAPH NO. 4
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: North

Date: November 6, 2006

Photographer: Tim Ward, Tetra Tech START

Witness: Dave Andrews, EPA

Subject: Loading of drums onto a flat-bed truck for transport to the on-site drum storage area.



OFFICIAL PHOTOGRAPH NO. 5
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: East

Date: November 6, 2006

Photographer: Tim Ward, Tetra Tech START

Witness: Dave Andrews, EPA

Subject: Off-loading of drums at the on-site drum storage area located within the south building.



OFFICIAL PHOTOGRAPH NO. 6
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: South

Date: November 6, 2006

Photographer: Tim Ward, Tetra Tech START

Witness: Dave Andrews, EPA

Subject: SWS First Response (SWS) personnel using a skid loader to move containers on site.



OFFICIAL PHOTOGRAPH NO. 7
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: November 6, 2006

Photographer: Tim Ward, Tetra Tech START

Witness: Dave Andrews, EPA

Subject: Drum storage area located within the south building.



OFFICIAL PHOTOGRAPH NO. 8
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: November 6, 2006

Photographer: Tim Ward, Tetra Tech START

Witness: Dave Andrews, EPA

Subject: Underground storage tank (UST) fill port discovered during clearing and grubbing activities near the northern boundary of the site. The fill port was marked with highly visible safety paint by SWS personnel.



OFFICIAL PHOTOGRAPH NO. 9
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSEE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: East

Date: November 7, 2006

Photographer: James Caruthers, Tetra Tech START **Witness:** Dave Andrews, EPA

Subject: Standing water impounded in the courtyard by the underflow dam erected during the initial response.



OFFICIAL PHOTOGRAPH NO. 10
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: November 7, 2006

Photographer: Dave Slauson, SWS

Witness: James Caruthers, Tetra Tech

Subject: Tetra Tech START member samples a pool of water at the loading dock on the east side of the north building.



**OFFICIAL PHOTOGRAPH NO. 11
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE**

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: East

Date: December 20, 2006

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Portable tank (TWR-TK-001) used to impound site groundwater and water pumped from drums and containers on site pending sampling. Sampling results indicated that the water in all three tanks was nonhazardous and the City of Nashville publicly-owned treatment works (POTW) agreed to allow the water to be pumped or released into a nearby storm drain.



OFFICIAL PHOTOGRAPH NO. 12
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: East

Date: December 20, 2006

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Tank designated TWR-TK-002.



OFFICIAL PHOTOGRAPH NO. 13
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: East

Date: December 20, 2006

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Tank designated TWR-TK-003.



OFFICIAL PHOTOGRAPH NO. 14
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: December 20, 2006

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: SWS personnel pumping tank water through an inline filter sock (inside drum) prior to discharge to the POTW via a nearby storm drain.



OFFICIAL PHOTOGRAPH NO. 15
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: December 20, 2006

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Storm drain used by SWS personnel to discharge water from on-site holding tanks to the POTW.



**OFFICIAL PHOTOGRAPH NO. 16
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE**

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: December 20, 2006

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Sign posted on a door of the north building by Department of Codes Administration prohibiting use or occupancy of the building.



OFFICIAL PHOTOGRAPH NO. 17
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: East

Date: December 20, 2006

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: SWS personnel actively pumping water from tank TWR-TK-003 to the storm drain via an inline filter sock.



OFFICIAL PHOTOGRAPH NO. 18
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: North

Date: June 28, 2007

Orientation: West

Date: December 20, 2006

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Underflow dam breached to allow water to gravity flow to the POTW via a nearby storm drain.



OFFICIAL PHOTOGRAPH NO. 19
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: January 30, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Waste staging, labeling and documentation prior to loading aboard the transport vehicle for disposal.



**OFFICIAL PHOTOGRAPH NO. 20
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE**

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: South

Date: January 30, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: UST discovered in the southwestern portion of the site.



OFFICIAL PHOTOGRAPH NO. 21
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: South

Date: January 30, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Close-up view of gauge stick coated with presumed fuel oil from UST discovered in the southwestern portion of the site.



OFFICIAL PHOTOGRAPH NO. 22
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSEE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: January 30, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: UST discovered in the northern portion of the site.



OFFICIAL PHOTOGRAPH NO. 23
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSEE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: January 30, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Close-up view of gauge stick coated with presumed fuel oil from UST discovered in the northern portion of the site.



OFFICIAL PHOTOGRAPH NO. 24
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: East

Date: January 30, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Waste staging for shipment.



OFFICIAL PHOTOGRAPH NO. 25
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSEE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: East

Date: January 30, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Waste staging, labeling, and documentation for shipment.



OFFICIAL PHOTOGRAPH NO. 26
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: East

Date: January 31, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Loading waste aboard the transport vehicle (1).



OFFICIAL PHOTOGRAPH NO. 27
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: North

Date: January 31, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Loading waste aboard the transport vehicle (2).



OFFICIAL PHOTOGRAPH NO. 28
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: January 31, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Empty drum crushing activities (1).



**OFFICIAL PHOTOGRAPH NO. 29
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE**

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: South

Date: January 31, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Empty drums staged within the south building to preclude impacting site runoff.



OFFICIAL PHOTOGRAPH NO. 30
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: January 31, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Empty drum crushing activities (2).



**OFFICIAL PHOTOGRAPH NO. 31
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE**

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: January 31, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Empty drum crushing activities (3).



OFFICIAL PHOTOGRAPH NO. 32
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: January 31, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Northern side of the courtyard prior to demobilization, including debris pile.



OFFICIAL PHOTOGRAPH NO. 33
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: January 31, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Southern side of the courtyard prior to demobilization.



**OFFICIAL PHOTOGRAPH NO. 34
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE**

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: January 31, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Courtyard prior to demobilization.



OFFICIAL PHOTOGRAPH NO. 35
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: January 31, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Secured gate prior to demobilization.



OFFICIAL PHOTOGRAPH NO. 36
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSEE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: February 6, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Samples collected from the north UST.



OFFICIAL PHOTOGRAPH NO. 37
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: North

Date: February 6, 2007

Photographer: James Caruthers, Tetra Tech START **Witness:** Chris Draper, Tetra Tech START

Subject: Samples collected from the south UST.



**OFFICIAL PHOTOGRAPH NO. 38
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE**

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: West

Date: June 28, 2007

Photographer: Chris Draper, Tetra Tech START

Witness: Daniel Roop, Tennessee Department
of Environment and Conservation

Subject: Universal Environmental Services, LLC (Universal) uses vacuum truck to pump
material remaining in the north UST.



**OFFICIAL PHOTOGRAPH NO. 39
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE**

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: North

Date: June 28, 2007

Photographer: Chris Draper, Tetra Tech START

Witness: Daniel Roop, Tennessee Department
of Environment and Conservation

Subject: Universal vacuum truck used to pump USTs discovered at the site.



**OFFICIAL PHOTOGRAPH NO. 40
U.S. ENVIRONMENTAL PROTECTION AGENCY
TENNESSEE WHEEL AND RUBBER
NASHVILLE, DAVIDSON COUNTY, TENNESSE**

TDD Number: TTEMI-05-001-0017

Location: Nashville, Tennessee

Orientation: North

Date: June 28, 2007

Photographer: Chris Draper, Tetra Tech START

Witness: Daniel Roop, Tennessee Department
of Environment and Conservation

Subject: Universal pumps material remaining in the south UST.

APPENDIX C

TABLE OF WITNESSES (2 Pages)



TABLE OF WITNESSES
TENNESSEE WHEEL AND RUBBER
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