

**VOLUNTARY INTERIM MEASURES
WORK PLAN
and
AFTER ACTION REPORT**

**SWMU 7
OLD RIFLE RANGE**

NAVAL SURFACE WARFARE CENTER CRANE, INDIANA

October 2003

**CONTRACT NO. N68950-00-D-0200
DELIVERY ORDER # FC78
ToLTEST PROJECT NO. 75210.01**

Submitted to:

**OFFICER IN CHARGE OF NAVFAC CONTRACTS
NAVAL SURFACE WARFARE CENTER
BUILDING 2516
300 HIGHWAY 361
CRANE, INDIANA 47522-5082**

ToLTEST, INC.

VOLUNTARY INTERIM MEASURES WORK PLAN

**SWMU 7
OLD RIFLE RANGE**

NAVAL SURFACE WARFARE CENTER CRANE, INDIANA

July 2 2003

**CONTRACT N68950-00-D-0200
DELIVERY ORDER #FC78
TOLTEST PROJECT NO. 75210.01**

Prepared by:

**TOLTEST, INC.
508 West Elnora
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(812) 636-8501**

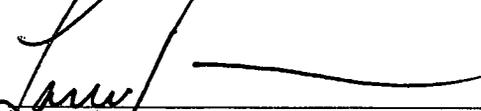
PREPARED BY:

TolTest Project Manager

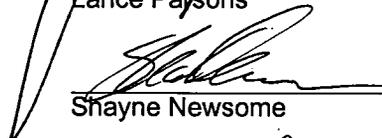

Peter J. Chevalier 9/17/03
(Date)

APPROVALS:

TolTest Regional Manager


Lance Parsons 9/17/03
(Date)

TolTest QA/QC Manager

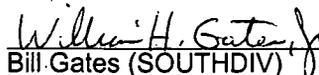

Shayne Newsome 9/17/03
(Date)

CLIENT ACCEPTANCE:

U. S. Navy Responsible Authority


Terry Mahoney (COTR) 9/17/03
(Date)


Thomas Brent (ECOTR) 10/9/03
(Date)


Bill Gates (SOUTH DIV) 10/29/03
(Date)

1.0 INTRODUCTION

TOLTEST has been retained by the Naval Facilities Engineering Command, Officer in Charge of Construction (OICC) under contract N68950-00-D-0200, Delivery Order (DO) #FC78 to provide a Voluntary Interim Measures Work Plan (WP) for completing remediation activities at the Old Rifle Range (ORR), Naval Surface Warfare Center (NSWC) Crane, Indiana.

The objective of this work is to remove and properly dispose of soil contaminated with TNT. After post-excavation sample results (samples to be obtained and submitted for analysis by TetraTech NUS) indicates that cleanup objectives have been met, the excavation will be backfilled with stone.

TolTest's Corporate Health and Safety Plan (HASP), available upon request) will supplement this WP and will govern the safe work practices of TolTest personnel. The WP and HASP conform to Occupational Safety and Health Administration (OSHA) regulations identified in 29 Code of Federal Regulations (CFR) 1910.120 "Hazardous Waste Operations and Emergency Response" and applicable parts of 29 CFR 1920 and 1926. A copy of this WP will be on site during remedial activities.

Transportation of waste materials will comply with United States Department of Transportation (USDOT 49CFR) regulations.

1.1 Site Description

SWMU 7 resides on the east side of the demolition range and is currently accessible by a gravel road through the demolition range. The area to be excavated is generally flat with a slight slope to the east. There is a drop in elevation of approximately four feet from the west and south sides of the site. The site is covered entirely in grass.

2.0 CONSTRUCTION EQUIPMENT AND PERSONNEL

Table 2-1 lists the equipment expected to be used and TOLTEST personnel positions assigned to this cleanup activity.

Equipment	Key TolTest Personnel
Backhoe/Excavator	Regional Manager
Dump Truck	Project Manager
Assorted hand tools	Site Supervisor
	Operators/Drivers
	Laborers

The Navy personnel involved and TOLTEST's personnel positions are described below.

NAVFACENGCOM Southern Division

Overview of project execution.

NSWC Crane Officer In Charge of Construction (OICC)

Southern Division's on-site representative and liaison between NSWC Crane and TOLTEST. This individual's title is Contracting Officer's Technical Representative.

NSWC Crane Environmental Protection Department (EPD)

The EPD is responsible for monitoring TOLTEST's performance for compliance with RCRA and other pertinent environmental regulations. A representative from EPD, referred to as the Environmental Contracting Officer Technical Representative, will sign, as the generator, any manifests for waste materials requiring disposal.

TOLTEST Regional Manager

TOLTEST's Regional Manager (RM) is responsible for implementing the project and has the authority to commit the resources necessary to meet project objectives and requirements. The RM will report directly to the OICC and will provide the major point of contact and control for matters concerning contractual issues on the project. The RM will approve all deliverables before their submission to the U.S. Navy and ultimately will be responsible for the quality of the After Action Report.

TOLTEST Project Manager

TOLTEST's Project Manager's (PM) primary function is to ensure that technical, financial, and scheduling objectives are achieved successfully. The PM has responsibility for ensuring that the project meets objectives and TOLTEST's quality standards. The PM is the primary point of contact with the ECOTR concerning environmental issues. The PM will:

- Develop a work schedule and arrange off-site disposal
- Obtain representative sample for waste characterization
- Direct the Site Supervisor and monitor the progress of the work
- Write the After Action Report
- Provides site-specific training as required by the HASP
- Stops work when necessary to ensure the safety of personnel and to prevent damage to the environment.

Site Supervisor

The TOLTEST Site Supervisor will be responsible for the on-site work and will report directly to the PM.

Operators/Drivers

Equipment operators will be responsible for proper operation and maintenance of heavy equipment utilized on the site. They will be familiar with the scope of work and will be under the direct supervision of the Site Supervisor.

Laborer

Laborers will report to the Site Supervisor and will be responsible for general site cleanup and maintenance.

3.0 EXCAVATION SEQUENCE AND OPERATIONAL APPROACH

The excavation sequence and operational approach to complete the project objectives are defined in the following sections.

3.1 Permitting and Notification

NSWC Crane facility requires issuance of permits before initiation of excavation activities. TolTest's PM will be responsible for obtaining an Excavation and Trenching Permit through the Public Works Department, Building 56. No unexploded ordnance clearance is required for this job. However, should a suspicious item be unearthed, TolTest will stop work and notify the NSWC Crane Explosive Ordnance Division and the ECOTR. TolTest will notify the ECOTR a minimum of 10 days in advance of commencement of field activities.

3.2 Pre-Removal Activities

The PM will obtain a representative sample of the soil to be excavated for waste characterization purposes. The sample will be obtained with a clean stainless steel spoon and mixing bowl. Aliquots of the soil from within the area to be excavated will be combined in the bowl to form one composite sample. Characterization, as required by the disposal facility, will include analysis for reactive cyanide and sulfide, flash point, pH, total TNT, and TCLP metals (performed on a leached extract). Analytical results will be submitted to the disposal facility for approval.

Once the WP has been approved, representatives of TOLTEST and NSWC Crane will conduct a site walk to delineate the boundaries of the area of excavation.

3.3 Soil Removal

The size of the area of contamination is small enough that the bucket of the excavator will be able to reach into the zone of contamination without the need for the excavator to enter the zone. In this manner, only the bucket of the excavator will come into contact with contaminated soil and thus only the bucket will require decontamination. If it is necessary for the excavator to enter the zone of contamination, then thick felt will be placed under the tracks of the excavator to prevent them from contacting contaminated soil.

Excavation of the contaminated soil will be accomplished with the excavator and hand tools. Hand digging will be necessary to ensure that: 1) excavation does not occur outside the boundaries of contamination; and 2) contaminated soil is not spread outside the zone of contamination. Contaminated soil will be loaded directly into a dump truck, which will be situated within the swing radius of the excavator and as close to the excavation as possible.

3.4 Field Screening

The zone of contamination will be excavated to a depth of approximately one-foot. TetraTech NUS will then obtain samples from within the excavation for the purpose of field screening to determine the presence of TNT. Based on the field screening results, the ECOTR may direct TolTest to excavate additional soil in six-inch depth increments.

3.5 Decontamination

The bucket will be the only part of the excavator that will require decontamination since it will be the only piece of equipment (aside from shovels) that will come into contact with the contaminated soil. The bucket will undergo a dry decontamination process whereby the contaminated soil is scraped off with shovels and scrapers. No water spray will be used for decontamination. The contaminated soil that is scraped off will be placed into the bed of the dump truck before it leaves the site. The ECOTR will approve the effectiveness of the decontamination procedure. Personal protective equipment and all consumables will be disposed of in an NSWC Crane dumpster for ultimate disposition at the NSWC Crane sanitary landfill.

3.6 Waste Management

Contaminated soil that is removed from the site will be loaded onto a dump truck and transported to the Republic Services landfill in Worthington, Indiana, for disposal. Shipping manifests will be completed by TOLTEST and signed by the ECOTR as the generator. Shipping manifests will accompany all loads to the disposal facility. The ECOTR and TolTest will retain a copy of the manifests.

3.7 Site Restoration

Site restoration will not commence until the ECOTR informs TolTest that post-excavation results have met the desired cleanup goals. Until that time, the excavation will be covered with 6 mil plastic sheeting and secured with sandbags and pins. The cover will be inspected once a week and repaired and maintained as necessary.

At the direction of the ECOTR, TolTest will commence with site restoration activities. This will include grading the work site around the area of excavation to repair ruts caused by heavy equipment, and filling the excavation with number 53 stone. Grass seed will be spread and covered with straw in the graded area. The stone will be compacted with the bucket of the excavator or similar equipment. If necessary, erosion control measures (i.e. installing silt fence) will be implemented to minimize erosion and runoff from the site.

3.8 Cleanup and Emergency Response

Each day upon completion of work, TOLTEST will remove all excess materials and debris from the NSWC Crane property. The work areas will be left in a neat and clean condition and all materials and/or debris will be disposed of properly. Spill cleanup or other repair of damage to the environment resulting from TOLTEST's actions will be the responsibility of TOLTEST.

4.0 SITE SAFETY AND HEALTH

The TolTest corporate HASP will govern the safe work practices of TolTest. All TolTest personnel have been trained in TolTest safe work practices and all TolTest personnel on site will have a current 8-hour HAZWOPER certification. Prior to the start of work, the PM will conduct a tailgate safety briefing to discuss the job-specific safety requirements.

5.0 REPORTING REQUIREMENTS

TolTest will develop a detailed After Action Report containing all closure documentation including; tabulated analytical results of post-excavation samples (supplied by TetraTech); debris removal activities; waste disposal documentation; photographic documentation; copies of waste manifests; chain-of-custody documentation; and a discussion of all work performed. This report will be completed within five days from receipt of the completed waste manifest, or from receipt of laboratory data (whichever is later).

6.0 SCHEDULE

The work schedule will be eight to ten-hour days, or as allowed by the NSWC Crane Army Ammunition Activity. Excavation will commence once approvals, permits, and notifications have been given or received and a date with TetraTech has been arranged. It is anticipated that excavation of the contaminated soil and restoration of the site will each be completed in one day.

**VOLUNTARY INTERIM MEASURES
AFTER ACTION REPORT**

**SWMU 7
OLD RIFLE RANGE**

NAVAL SURFACE WARFARE CENTER CRANE, INDIANA

October 2003

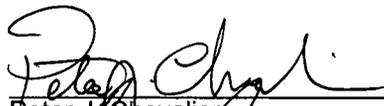
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Prepared by:

**TOLTEST, INC.
508 West Elnora
ODON, INDIANA 47562
(812) 636-8501**

PREPARED BY:

TolTest Project Manager


Peter J. Chevalier 10/2/03
(Date)

APPROVALS:

TolTest Regional Manager


Lance Parsons 10/7/03
(Date)

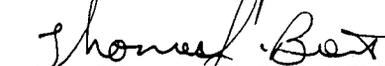
TolTest QA/QC Manager


Shayne Newsome 10/7/03
(Date)

CLIENT ACCEPTANCE:

U. S. Navy Responsible Authority


Terry Mahoney (COTR) 10/21/03
(Date)


Thomas Brent (ECOTR) 10/9/03
(Date)

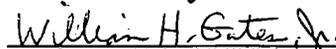

Bill Gates (SOUTH DIV) 11/7/03
(Date)

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1.0 INTRODUCTION

TolTest was retained by the Naval Facilities Engineering Command, Officer in Charge of Construction (OICC) under contract N68950-00-D-0200, Delivery Order (DO) #FC78 to perform a Voluntary Interim Measures cleanup at the Old Rifle Range (ORR), Solid Waste Management Unit (SWMU) 7, Naval Surface Warfare Center (NSWC) Crane, Indiana.

The objective of this work was to remove and properly dispose of soil contaminated with trinitrotoluene (TNT). Post-excavation samples were obtained and submitted for analysis by Tetra Tech NUS (Tetra Tech). TolTest completed backfill of the excavation.

TolTest's Corporate Health and Safety Plan (HASP) supplemented the Work Plan while performing this scope of work.

1.1 Site Description

SWMU 7 resides on the east side of the demolition range and is accessible by a gravel road through the demolition range or from Highway 8. The area that was excavated was generally flat with a slight slope to the east. The site was initially covered entirely in grass.

2.0 EXCAVATION SEQUENCE

The Statement of Work received from NSWC Crane included a hand drawing of the area of contamination (drawn by Tetra Tech). This drawing identified the locations of samples previously obtained by Tetra Tech and an outline of the area to be excavated. A copy of this drawing is included in **Appendix A**.

2.1 Permitting and Notification

NSWC Crane facility requires issuance of permits before initiation of excavation activities. TolTest's Project Manager (PM) obtained an Excavation and Trenching Permit through the Public Works Department, Building 56. No unexploded ordnance clearance was required for this job, per Mr. Tom Brent of the NSWC Crane Environmental Protection Department (EPD).

2.2 Pre-Removal Activities

Prior to excavation activities, the PM obtained a representative sample of the soil to be excavated for waste characterization purposes. The sample was obtained by mixing aliquots of the soil from within the area to be excavated into one composite sample. Analytical parameters for waste characterization required by the disposal facility included reactive cyanide and sulfide, flash point, pH, total TNT, and TCLP metals (performed on a leached extract). Analytical results of the waste characterization sample are provided in **Appendix B**.

The analytical results were submitted along with the Special Waste Acceptance Application (provided in **Appendix C**) to Republic Services, Inc. Approval for disposal of the soil at the Sycamore Ridge Landfill (also referred to as the Worthington Landfill) was granted on July 21, 2003. A copy of the approval is provided in **Appendix D**.

2.3 Soil Removal and Disposal

Excavation of the contaminated soil commenced on July 22, 2003, initially only to eight inches deep. Using the diagram drawn by Tetra Tech as a guide, the area to be excavated was marked out on the grass with white paint. Excavation of the soil within this boundary then commenced. Several of the sample location stakes placed by Tetra Tech are visible in Photo 1 (**Appendix E**). Stake SB16/47 is in the center of the excavation (the photo looks West). All sample location stakes within the boundary of excavation were removed along with the contaminated soil.

The soil was loaded into a dump truck, which was parked adjacent to the excavation. The bed of the truck had been lined with plastic sheeting to aid in ease of unloading and to prevent contaminated soil from contacting the truck. The truck shown in Photo 1 was loaded with soil and parked for the night in the gravel lot just to the north of Building 600. The next morning, a smaller single-axle dump truck was loaded with soil dug from eight inches to 12 inches deep. Both trucks were transported to the Sycamore Ridge Landfill on July 23, 2003. A Special Waste Disposal Notification/Manifest, signed by Mr. Jerry McCracken of EPD as generator, accompanied each truck. Copies of the completed Notifications are provided in **Appendix F**. A total of 24.84 tons of soil were disposed of at the landfill.

2.4 Field Screening

The Work Plan stated that Tetra Tech NUS was to obtain samples from within the excavation for the purpose of field screening for the presence of TNT. These samples were obtained and screened by Tetra Tech on July 22, 2003 after the initial eight inches of soil were removed. Additional soil was excavated on July 23, 2003 to one-foot deep (as described above) paying particular attention to ensuring that the side walls of the excavation were squared up and did not slope into the excavation. The contractual amount for tonnage (including a 50% contingency) was met by excavating the soil to one-foot deep (i.e., no additional excavation could be conducted under this contract).

2.5 Decontamination

The bucket of the backhoe was the only piece of equipment that required decontamination since it alone came into contact with the contaminated soil. The bucket was decontaminated by scraping off the contaminated soil with shovels. No water spray was used for decontamination. Personal protective equipment and all consumables were disposed of in an NSWC Crane dumpster for ultimate disposition at the NSWC Crane landfill.

3.0 SITE RESTORATION

Following excavation activities, the excavation was covered with 6 mil plastic sheeting and secured with sandbags (Photo 2). The cover was inspected once a week and repaired and maintained as necessary. Approximately 350 gallons of rainwater were pumped off the plastic sheeting onto the surrounding grass on August 26, 2003.

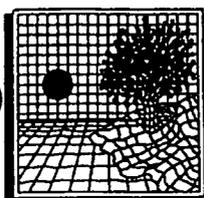
At the direction of Mr. Tom Brent of EPD, TolTest filled the excavation with number 53 stone on September 12, 2003 (Photo 3). The stone was compacted with the bucket of the backhoe.

APPENDIX A

Tetra Tech NUS Site Drawing

APPENDIX B

Waste Characterization Analytical Results



SOUTHWEST LABORATORY OF OKLAHOMA, INC.
1700 West Albany Broken Arrow, Oklahoma 74012 Office (918) 251-2858 Fax (918) 251-2599
LABORATORY RESULTS

LAB ID : 52783.01
SAMPLE : SWMU7-WC
SDG : 52783
MATRIX : S
SITE : SWMU 7

REPORTED : 07/11/03
SAMPLED : 07/07/03
SUBMITTED: 07/08/03

HAZARDOUS WASTE CHARACTERIZATION

PARAMETER	REPORTING		RESULTS	DATE/TIME		METHOD	
	LIMIT	UNITS		ANALYZED	ANALYST	REFERENCE	
CORROSIVITY PH	0.10	su	7.8	07-09-03	13:10	KAL	SW9045
IGNITABILITY	200	deg F	>200	07-10-03	09:05	SB	SW 1010
React. Sulfide	20.0	mg/Kg	ND	07-10-03	14:00	MS	SW7.3.4.2
REACTIVE CYANIDE	0.13	mg/kg	ND	07-11-03	15:21	DT	SW 7.3.3.2

COMPOUND* = RESULTS REPORTED AS RECEIVED

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

* = SURROGATE RECOVERY OUTSIDE OF QC LIMITS

N/A = NOT APPLICABLE

METHODOLOGY: SM = STANDARD METHODS, 18TH EDITION, 1992/19TH EDITION, 1995

EPA = #EPA600/4-79-020, MARCH 1985

SW = SW 846 Rev. 4 1996

1D
EXPLOSIVES ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SWMU7-WC

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TOLTEST SDG No.: 52783

Matrix: (soil/water) SOIL Lab Sample ID: 52783.01

Sample Amt: 2.0 G % Moisture: 9 Date Received: 07/08/03

Extraction Volume: 20 ML Date Extracted: 07/09/03

Extraction Method: SONC Date Analyzed: 07/11/03

GPC Cleanup: (Y/N) N Dilution Factor: 50.0

CAS NO.	COMPOUND	CONCENTRATION	UNITS: UG/KG	Q
2691-41-0-----	HMX	25000		U
121-82-4-----	RDX	25000		U
99-35-4-----	TNB	14000		PJ
99-65-0-----	DNB	25000		U
479-45-8-----	TETRYL	25000		U
98-95-3-----	NB	25000		U
118-96-7-----	TNT	1050000		
1946-51-0-----	4ADNT	25000		U
35572-78-2-----	2ADNT	25000		U
606-20-2-----	26DNT	25000		U
121-14-2-----	24DNT	25000		U
88-72-2-----	2NT	25000		U
99-99-0-----	4NT	25000		U
99-08-1-----	3NT	25000		U
3,4-DNT surrogate spiked		11500.00		



1915 N. 12th St., P.O. Box 2186, Toledo, OH 43603-2186; Voice (419) 241-7175, Fax (419) 321-6259
 Ship To Address: ATTN: RECEIVING LAB, 1810 N. 12th St., Toledo, OH 43624-1304; Voice (419) 241-7175, Fax (419) 241-1808
 Sent From: Corporate Plymouth Pittsburgh Other

Chain of Custody Record

40074 Page 1 of 1

Project No.: 75210.01		Client:																													
P.O. No.: F-1660		Project/Location: NSWC Crane SWMU 7																													
Project Mgr.: P. Cavalier		Sampler's Name: Peter J. Cavalier																													
Phone No.: 412-1636-8501		Sampler's Signature: <i>[Signature]</i>																													
Item No.	Sample I.D.	Date Sampled	Time Sampled	Type	Matrix	Sample Location	Total No. of Containers	Parameters						Preserved Yes/No	LAB USE ONLY	Lab #															
1	SWMU7-WC	7/7/03	1453	C	Soil	composite for waste characteriz.	2	ICL Metals	TNT B330	Reac. Cy	Reac. Sulf.	pH	Flash point																		
2																															
3																															
4																															
5																															
6																															
7																															
8																															
9																															
10																															
Item No.	Relinquished By:	Date / Time	Received By:	Date / Time	LAB USE ONLY																										
	<i>[Signature]</i>	7/7/03 1800	<i>[Signature]</i>	7/8/03 10:00	Were samples delivered	<input type="checkbox"/> in person	<input type="checkbox"/> by courier	Were samples preserved	<input type="checkbox"/> in field	<input type="checkbox"/> in lab	<input type="checkbox"/> N/A	Temp of samples	0.9 °C	Did samples arrive intact and sealed?	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> N/A	Were proper containers used?	<input type="checkbox"/> yes	<input type="checkbox"/> no	Was container labeled properly for contents?	<input type="checkbox"/> yes	<input type="checkbox"/> no	Were samples packaged properly for type of material?	<input type="checkbox"/> yes	<input type="checkbox"/> no	Was shipping label completed properly per regulations? (49 CFR 170, etc.)	<input type="checkbox"/> yes	<input type="checkbox"/> no	Comments:	TAT
Item No.	Relinquished By:	Date / Time	Received By:	Date / Time																											
Item No.	Relinquished By:	Date / Time	Received By:	Date / Time																											

Distribution: Original plus one accompanies shipment (white and yellow); copy to coordinator field files (pink)

SOUTHWEST LABORATORY OF OKLAHOMA
1700 West Albany, Suite A/ Broken Arrow, OK 74012
918-251-2858

SDG NARRATIVE

July 16, 2003

CLIENT: TOLTEST
PROJECT: NSWC CRANE
SDG NO: 52783
FRACTION: 8330 EXPLOSIVES

One soil sample was extracted and analyzed for explosives by SW-846, method. It should be noted that the Carbosorb reverse phase column is necessary as the quantitation column for this method since all compounds can be separated to a reasonable degree of resolution. The Zorbax SB-CN column is used as the confirmation column as it has two peaks with co-elution, including five compounds. The compounds that co-elute on this column are:(DNB&TNB) and (4NT, 2NT&HMX). Therefore if any or all of these individual compounds in each peak are present on the quantitation column and the peak is also present in the confirmation column the compound is considered present and reported as a positive result. Any target hit detected above the MDL is analyzed for confirmation.

Note: (1) A P-flag qualifier on the FORM 1 report indicates that the relative percent difference between the concentration detected on quantitation column and confirmation column was greater than 25% difference. (2) All target analytes detected between the reporting limit and the MDL are reported with a J-flag indicating an estimated value and any target analytes detected below the MDL are reported at the reporting limit with a "U" flag indicating undetected. A manual integration report is included for each manual integration performed on this data including a before and after picture of the peak, as well as the reason for the integration.

The following problems occurred during the analysis of this sample: The sample extract was discolored. Historically this indicates potentially high concentrations of organic extractables. The sample was analyzed at a 50-fold dilution as a screening measure and to guard against system performance degradation. The sample contained 1050000ug/kg of TNT at this dilution and therefore no lesser dilution was analyzed. The sample was reanalyzed for confirmation and TNT was confirmed. The surrogate was diluted out at this dilution, therefore 0% recovery.

Initial Calibration: Within method requirements.

Continuing calibration verifications: Within method requirements.

Blanks: No target analytes were detected in the extraction blank.

Surrogates: All surrogates were within QC limits with the following exceptions: The sample had 0% recovery due to the 50-fold dilution (see comment above).

Laboratory Control Spikes: The laboratory control spikes had all recoveries within QC control limits.

Matrix Spikes: No matrix spikes were requested on this sample.

Diana L. Hoke

Diana L. Hoke
Organic Program Manager

July 16, 2003

1D
EXPLOSIVES ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MBLK1

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TOLTEST SDG No.: 52783

Matrix: (soil/water) SOIL Lab Sample ID: BL0709SB

Sample Amt: 2.0 G % Moisture: _____ Date Received: _____

Extraction Volume: 20 ML Date Extracted: 07/09/03

Extraction Method: SONC Date Analyzed: 07/11/03

GPC Cleanup: (Y/N) N Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION	UNITS: UG/KG	Q
2691-41-0	-----HMX	500		U
121-82-4	-----RDX	500		U
99-35-4	-----TNB	500		U
99-65-0	-----DNB	500		U
479-45-8	-----TETRYL	500		U
98-95-3	-----NB	500		U
118-96-7	-----TNT	500		U
1946-51-0	-----4ADNT	500		U
35572-78-2	-----2ADNT	500		U
606-20-2	-----26DNT	500		U
121-14-2	-----24DNT	500		U
88-72-2	-----2NT	500		U
99-99-0	-----4NT	500		U
99-08-1	-----3NT	500		U
3,4-DNT surrogate spiked		11500.00		

1D
EXPLOSIVES ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS1

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TOLTEST SDG No.: 52783

Matrix: (soil/water) SOIL Lab Sample ID: LC0709SB

Sample Amt: 2.0 G % Moisture: _____ Date Received: _____

Extraction Volume: 20 ML Date Extracted: 07/09/03

Extraction Method: SONC Date Analyzed: 07/11/03

GPC Cleanup: (Y/N) N Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/KG	Q
2691-41-0-----	HMX	9030	
121-82-4-----	RDX	9600	
99-35-4-----	TNB	7870	
99-65-0-----	DNB	9030	
479-45-8-----	TETRYL	10400	
98-95-3-----	NB	8910	
118-96-7-----	TNT	9140	
1946-51-0-----	4ADNT	9190	
35572-78-2-----	2ADNT	9170	
606-20-2-----	26DNT	9210	
121-14-2-----	24DNT	9070	
88-72-2-----	2NT	8980	
99-99-0-----	4NT	8950	
99-08-1-----	3NT	9130	
3,4-DNT surrogate spiked		11500.00	

1D
EXPLOSIVES ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCSD1

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TOLTEST SDG No.: 52783

Matrix: (soil/water) SOIL Lab Sample ID: LD0709SB

Sample Amt: 2.0 G % Moisture: _____ Date Received: _____

Extraction Volume: 20 ML Date Extracted: 07/09/03

Extraction Method: SONC Date Analyzed: 07/11/03

GPC Cleanup: (Y/N) N Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION	UNITS: UG/KG	Q
2691-41-0	HMX	8890		
121-82-4	RDX	9420		
99-35-4	TNB	7700		
99-65-0	DNB	8870		
479-45-8	TETRYL	10200		
98-95-3	NB	8720		
118-96-7	TNT	9000		
1946-51-0	4ADNT	9010		
35572-78-2	2ADNT	9020		
606-20-2	26DNT	9030		
121-14-2	24DNT	8920		
88-72-2	2NT	8800		
99-99-0	4NT	8830		
99-08-1	3NT	8950		
3,4-DNT surrogate spiked		11500.00		

3H
SOIL EXPLOSIVES LABORATORY CONTROL SPIKE/DUPLICATE RECOVERY

Lab Name: SWL-TULSA

Case No.: TOLTEST

SDG No.: 52783

LCS Sample NO.: LCS1

COMPOUND	SPIKE ADDED (UG/KG)	LCS CONCENTRATION (UG/KG)	LCS % REC #	QC. LIMITS REC.
HMX	4000	4520	113	76-119
RDX	4000	4800	120	80-120
TNB	4000	3940	98	73-121
DNB	4000	4520	113	79-120
TETRYL	4000	5210	130	24-139
NB	4000	4450	111	79-121
TNT	4000	4570	114	74-128
4ADNT	4000	4590	115	64-142
2ADNT	4000	4590	115	80-122
26DNT	4000	4600	115	77-119
24DNT	4000	4530	113	79-122
2NT	4000	4490	112	79-121
4NT	4000	4480	112	80-120
3NT	4000	4570	114	79-122

COMPOUND	SPIKE ADDED (UG/KG)	LCSD CONCENTRATION (UG/KG)	LCSD % REC #	% RPD #	QC LIMITS RPD REC.
HMX	4000	4450	111	2	30 76-119
RDX	4000	4710	118	2	30 80-120
TNB	4000	3850	96	2	30 73-121
DNB	4000	4440	111	2	30 79-120
TETRYL	4000	5110	128	2	45 24-139
NB	4000	4360	109	2	30 79-121
TNT	4000	4500	113	2	35 74-128
4ADNT	4000	4510	113	2	40 64-142
2ADNT	4000	4510	113	2	40 80-122
26DNT	4000	4510	113	2	35 77-119
24DNT	4000	4460	112	2	35 79-122
2NT	4000	4400	110	2	35 79-121
4NT	4000	4420	110	1	35 80-120
3NT	4000	4470	112	2	35 79-122

Column to be used to flag recovery values

* Values outside of QC limits

RPD: 0 out of 14 outside limits
Spike Recovery: 0 out of 28 outside limits

Comments: _____

4C
EXPLOSIVES METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MBLK1

Lab Name: SWL-TULSA

Lab Code: SWOK

Case No.: TOLTEST

SDG No.: 52783

Lab Sample ID : BL0709SB

Lab File ID : 4_071110

Matrix: (soil/water) SOIL

Date Extracted : 07/09/03

Extraction Method : SONC

Date Analyzed : 07/11/03

Time Analyzed : 1406

Instrument ID : LC4

LC Column ID : CARBOSORB

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES AND QC'S:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	LCS1	LC0709SB	07/11/03
02	LCSD1	LD0709SB	07/11/03
03	SWMU7-WC	52783.01	07/11/03
04			
05			
06			
07			
08			
09			
10			
11			
12			
13			
14			
15			
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17			
18			
19			
20			
21			
22			
23			
24			
25			
26			

Comments: _____

6D
EXPLOSIVES INITIAL CALIBRATION RT SUMMARY

Lab Name: SWL-TULSA Case No.: TOLTEST SDG No.: 52783

Lab Code: SWOK Instrument ID: LC4

GC Column: CARBOSORB Date(s) Analyzed: 07/11/03 07/11/03

COMPOUND	RT OF STANDARDS					RT WINDOW	
	L1	L2	L3	L4	L5	FROM	TO
HMX	4.99	4.99	4.99	4.99	4.98	4.91	5.07
RDX	7.53	7.50	7.49	7.48	7.47	7.37	7.61
TNB	10.18	10.17	10.17	10.15	10.15	10.01	10.33
DNB	12.42	12.41	12.41	12.39	12.39	12.21	12.61
TETRYL	13.25	13.22	13.22	13.18	13.19	13.00	13.44
NB	14.08	14.08	14.09	14.07	14.08	13.86	14.32
TNT	15.98	15.97	15.98	15.95	15.97	15.72	16.24
4ADNT	16.63	16.60	16.60	16.55	16.57	16.33	16.87
2ADNT	17.56	17.52	17.51	17.45	17.46	17.22	17.80
26DNT	18.68	18.67	18.68	18.65	18.67	18.38	18.98
24DNT	19.35	19.33	19.33	19.29	19.31	19.02	19.64
2NT	22.70	22.72	22.74	22.71	22.74	22.37	23.11
4NT	24.27	24.27	24.29	24.26	24.28	23.89	24.69
3NT	26.16	26.18	26.20	26.16	26.20	25.77	26.63
3,4-DNT	15.19	15.18	15.19	15.15	15.16	14.94	15.44

RT Window based on level L3

6E
SOIL EXPLOSIVES INITIAL CALIBRATION : CALIBRATION FACTOR SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TOLTEST SDG No.: 52783 Inst. ID: LC4

LC Column: CARBOSORB Date(s) Analyzed: 07/11/03 07/11/03

Method: EXPG11

COMPOUND	CALIBRATION FACTORS		
	LEVEL 1	LEVEL 2	LEVEL 3
HMX	238016	308941	242563
RDX	255108	284284	268763
TNB	701960	700299	673971
DNB	952019	935635	901621
TETRYL	460783	460489	444476
NB	647020	654394	630788
TNT	649647	651009	625603
4ADNT	442302	438322	417625
2ADNT	652157	653644	624982
26DNT	450011	454032	436430
24DNT	866851	846429	819497
2NT	439175	399720	382771
4NT	369211	344737	337042
3NT	457386	435686	419080
3,4-DNT	285380	283438	274087

COMPOUND	CALIBRATION FACTORS			
	LEVEL 4	LEVEL 5	MEAN	%RSD
HMX	266113	258476	262822	10.73
RDX	324750	330602	292701	11.49
TNB	795329	779461	730204	7.35
DNB	1058089	1053703	980213	7.29
TETRYL	530192	523964	483981	8.25
NB	743609	741976	683558	8.01
TNT	735016	734417	679138	7.62
4ADNT	489760	486823	454966	7.00
2ADNT	735202	732886	679774	7.48
26DNT	513152	508839	472493	7.57
24DNT	963934	964998	892342	7.61
2NT	451184	452161	425002	7.48
4NT	394441	394550	367996	7.32
3NT	493202	492732	459617	7.25
3,4-DNT	319722	327164	297958	7.99
MEAN RSD				8.03

6D
EXPLOSIVES INITIAL CALIBRATION RT SUMMARY

Lab Name: SWL-TULSA Case No.: TOLTEST SDG No.: 52783
 Lab Code: SWOK Instrument ID: LC5
 GC Column: ZORBAX SB-CN Date(s) Analyzed: 05/29/03 05/29/03

COMPOUND	RT OF STANDARDS					RT WINDOW	
	L1	L2	L3	L4	L5	FROM	TO
HMX	16.99	16.96	16.85	16.84	16.92	16.77	16.93
RDX	11.70	11.66	11.60	11.40	11.47	11.48	11.72
TNB	11.00	10.98	10.95	10.93	10.95	10.79	11.11
DNB	11.00	10.98	10.95	10.93	10.95	10.75	11.15
TETRYL	34.13	33.93	33.77	33.80	33.88	33.55	33.99
NB	10.24	10.23	10.20	10.15	10.19	9.97	10.43
TNT	21.30	21.23	21.14	21.16	21.23	20.88	21.40
4ADNT	22.85	22.69	22.37	22.30	22.41	22.10	22.64
2ADNT	22.07	21.92	21.52	21.55	21.86	21.23	21.81
26DNT	20.21	20.13	19.96	19.98	20.06	19.66	20.26
24DNT	18.74	18.65	18.53	18.53	18.60	18.22	18.84
2NT	16.99	16.96	16.85	16.84	16.92	16.48	17.22
4NT	16.99	16.96	16.85	16.84	16.92	16.45	17.25
3NT	18.07	18.00	17.88	18.08	18.07	17.45	18.31
3,4-DNT	25.19	25.07	24.83	24.91	25.00	24.58	25.08

RT Window based on level L3

6E

SOIL EXPLOSIVES INITIAL CALIBRATION : CALIBRATION FACTOR SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK

Case No.: TOLTEST

SDG No.: 52783

Inst. ID: LC5

LC Column: ZORBAX SB-CN

Date(s) Analyzed: 05/29/03 05/29/03

Method: CEXPE30

COMPOUND	CALIBRATION FACTORS		
	LEVEL 1	LEVEL 2	LEVEL 3
HMX	717413	828458	825321
RDX	366391	310676	288769
TNB	2240897	2231375	2168907
DNB	2255100	2231375	2168907
TETRYL	621003	671114	582585
NB	771016	711526	692133
TNT	885393	998031	1061698
4ADNT	556023	447561	421536
2ADNT	871335	739106	640853
26DNT	622130	581053	593660
24DNT	1207624	1127009	1129727
2NT	727305	828458	825321
4NT	720338	828458	825321
3NT	421331	394200	423341
3,4-DNT	597964	403809	342130

COMPOUND	CALIBRATION FACTORS			
	LEVEL 4	LEVEL 5	MEAN	%RSD
HMX	955373	966654	858644	12.07
RDX	361672	350051	335512	10.16
TNB	2539493	2557167	2347568	7.90
DNB	2528585	2527046	2342203	7.36
TETRYL	670373	674413	643898	6.34
NB	814069	811224	759994	7.39
TNT	1171330	1212549	1065800	12.40
4ADNT	481973	465004	474419	10.71
2ADNT	806966	771714	765995	11.15
26DNT	682315	667745	629381	7.08
24DNT	1297934	1354214	1223302	8.27
2NT	955373	958258	858943	11.43
4NT	955373	958258	857550	11.72
3NT	497814	428439	433025	8.91
3,4-DNT	409316	427084	436060	22.02
MEAN RSD				10.33

EXPLOSIVES CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK

Case No.: TOLTEST

SDG No.: 52783

Inst. ID: LC4

Method: EXPG11

LC Column: CARBOSORB

Init. Calib Date(s): 07/11/03 07/11/03

Client Sample No.: EXPL3

Date Analyzed : 07/11/03

Lab Sample ID : 6-82-10

Time Analyzed : 1645

COMPOUND	RT	RT WINDOW		CAL. FACTOR	MEAN CAL. FACTOR	%D #
		FROM	TO			
HMX	4.98	4.91	5.07	239787	262822	8.8
RDX	7.46	7.37	7.61	272065	292701	7.1
TNB	10.14	10.01	10.33	666163	730204	8.8
DNB	12.37	12.21	12.61	896319	980213	8.6
TETRYL	13.13	13.00	13.44	441733	483981	8.7
NB	14.07	13.86	14.32	625800	683558	8.4
TNT	15.93	15.72	16.24	630342	679138	7.2
4ADNT	16.50	16.33	16.87	407979	454966	10.3
2ADNT	17.38	17.22	17.80	622049	679774	8.5
26DNT	18.62	18.38	18.98	432193	472493	8.5
24DNT	19.26	19.02	19.64	815421	892342	8.6
2NT	22.70	22.37	23.11	381500	425002	10.2
4NT	24.24	23.89	24.69	332833	367996	9.6
3NT	26.15	25.77	26.63	416236	459617	9.4
3,4-DNT	15.13	14.94	15.44	274884	297958	7.7
Average % D						8.7

QC LIMITS: RPD of amounts must be less than or equal to 15.0%.

7E
EXPLOSIVES CALIBRATION VERIFICATION SUMMARY

Lab Name: SWL-TULSA

Lab Code: SWOK

Case No.: TOLTEST

SDG No.: 52783

Inst. ID: LC5

Method: CEXPE30

LC Column: ZORBAX SB-CN

Init. Calib Date(s): 05/29/03 05/29/03

Client Sample No.: EXPL3

Date Analyzed : 07/15/03

Lab Sample ID : 6-82-10

Time Analyzed : 1431

COMPOUND	RT WINDOW			CAL.	MEAN CAL.	%D #
	RT	FROM	TO	FACTOR	FACTOR	
HMX	19.52	19.28	19.60	919706	858644	-7.1
RDX	13.26	12.95	13.31	365536	335512	-8.9
TNB	12.64	12.46	12.62	2526190	2347568	-7.6
DNB	12.64	12.38	12.70	2558122	2342203	-9.2
TETRYL	39.03	38.76	39.18	653172	643898	-1.4
NB	11.84	11.54	11.86	786609	759994	-3.5
TNT	24.46	24.37	24.65	1060990	1065800	0.5
4ADNT	26.29	25.90	26.64	549423	474419	-15.8*
2ADNT	25.34	24.91	25.65	835929	765995	-9.1
26DNT	23.24	23.05	23.41	626471	629381	0.5
24DNT	21.44	21.00	21.86	1287004	1223302	-5.2
2NT	19.52	19.01	19.87	919706	858943	-7.1
4NT	19.52	19.01	19.87	919706	857550	-7.2
3NT	20.69	20.48	20.84	428949	433025	0.9
3,4-DNT	29.02	28.80	29.20	387167	436060	11.2
Average % D						6.4

QC LIMITS: RPD of amounts must be less than or equal to 15.0%.

8D
EXPLOSIVES ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TOLTEST SDG No.: 52783

LC Column: CARBOSORB Init. Calib. Date(s): 07/11/03 07/11/03

Instrument ID: LC4

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT
01	EXPL1	6-84-10	07/11/03	1055	15.19
02	EXPL2	6-83-10	07/11/03	1127	15.18
03	EXPL3	6-82-10	07/11/03	1159	15.19
04	EXPL4	6-86-10	07/11/03	1231	15.15
05	EXPL5	6-80-10	07/11/03	1302	15.16
06	MBLK1	BL0709SB	07/11/03	1406	15.14
07	LCS1	LC0709SB	07/11/03	1438	15.16
08	LCSD1	LD0709SB	07/11/03	1510	15.15
09	SWMU7-WC	52783.01	07/11/03	1542	0.00
10	EXPL3	6-82-10	07/11/03	1645	15.13
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					

S1 = 3,4-DNT

QC LIMITS
(+/- 0.25 MINUTES)

8D
EXPLOSIVES ANALYTICAL SEQUENCE

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TOLTEST SDG No.: 52783

LC Column: ZORBAX SB-CN Init. Calib. Date(s): 05/29/03 05/29/03

Instrument ID: LC5

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT
01 EXPL1	6-84-10	05/29/03	1624	25.19
02 EXPL2	6-83-10	05/29/03	1705	25.07
03 EXPL3	6-82-10	05/29/03	1747	24.83
04 EXPL4	6-81-10	05/29/03	1828	24.91
05 EXPL5	6-80-10	05/29/03	1910	25.00
06 EXPL3	6-82-10	07/15/03	1306	29.00
07 SWMU7-WC	52783.01	07/15/03	1348	0.00
08 EXPL3	6-82-10	07/15/03	1431	29.02
09				
10				
11				
12				
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28				
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31				
32				
33				
34				
35				
36				

S1 = 3,4-DNT

QC LIMITS
(+/- 0.20 MINUTES)

SOIL EXPLOSIVES CALIBRATION STANDARD CONCENTRATION SUMMARY

Lab Name: SWL-TULSA

Case No.: TOLTEST

SDG No.: 52783

Lab Code: SWOK

Injection volume = 100uL Amount Units = ug/mL

COMPOUND	SPIKE AMOUNTS COLUMN 1				
	Level 1	Level 2	Level 3	Level 4	Level 5
HMX	5.00	20.0	80.0	320	1280
RDX	5.00	20.0	80.0	320	1280
TNB	5.00	20.0	80.0	320	1280
DNB	5.00	20.0	80.0	320	1280
TETRYL	5.00	20.0	80.0	320	1280
NB	5.00	20.0	80.0	320	1280
TNT	5.00	20.0	80.0	320	1280
4ADNT	5.00	20.0	80.0	320	1280
2ADNT	5.00	20.0	80.0	320	1280
26DNT	5.00	20.0	80.0	320	1280
24DNT	5.00	20.0	80.0	320	1280
2NT	5.00	20.0	80.0	320	1280
4NT	5.00	20.0	80.0	320	1280
3NT	5.00	20.0	80.0	320	1280
3,4-DNT	5.00	20.0	80.0	320	1280

COMPOUND	SPIKE AMOUNTS COLUMN 2				
	Level 1	Level 2	Level 3	Level 4	Level 5
HMX#2	5.00	20.0	80.0	320	1280
RDX#2	5.00	20.0	80.0	320	1280
TNB#2	5.00	20.0	80.0	320	1280
DNB#2	5.00	20.0	80.0	320	1280
TETRYL#2	5.00	20.0	80.0	320	1280
NB#2	5.00	20.0	80.0	320	1280
TNT#2	5.00	20.0	80.0	320	1280
4ADNT#2	5.00	20.0	80.0	320	1280
2ADNT#2	5.00	20.0	80.0	320	1280
26DNT#2	5.00	20.0	80.0	320	1280
24DNT#2	5.00	20.0	80.0	320	1280
2NT#2	5.00	20.0	80.0	320	1280
4NT#2	5.00	20.0	80.0	320	1280
3NT#2	5.00	20.0	80.0	320	1280
3,4-DNT#2	5.00	20.0	80.0	320	1280

10A
EXPLOSIVES IDENTIFICATION SUMMARY

EPA SAMPLE NO.

SWMU7-WC

Lab Name: SWL-TULSA

Contract: NSWCCRANE

Lab Code: SWOK

Case No.: TOLTEST SAS No.:

SDG No.: 52783

Lab Sample ID: 52783.01

Date(s) Analyzed: 07/11/03 07/15/03

Instrument ID (1): LC4

Instrument ID (2): LC5

GC Column (1): CARBOSORB

GC Column (2): ZORBAX SB-CN

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
TNB	1	10.15	10.01	10.33	7020	
	2	12.58	10.87	11.03	5310	27.7
TNT	1	15.94	15.72	16.24	527000	
	2	24.72	21.00	21.28	520000	1.3
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

APPENDIX C

Special Waste Acceptance Application

07/16/2003 15:51 8126367572 TOLTEST
06/12/2003 THU 12:30 FAX 812 299 9228 Republic Services

PAGE 02
002/002

File no. only
Code #
Expiration Date:

SPECIAL WASTE ACCEPTANCE APPLICATION

Republic Services
 Brent Run National Serv-All Webaash New Application
 Carlisle Farms Elk Run Whitefeather Change in Waste Stream
 Forest Lawn Victory Other Sycamore Ridge Process or Characteristic

GENERATOR INFORMATION

Generator Name: NSWC Crane Billing Name: TolTest, Inc.
Address: B3260 Code 0951 300 Address: 508 W. Elnora St.
HWY 361 County: Marion
City: Crane State: IN Zip: 47522 City: Adon State: IN Zip: 47562
Generation Location:
(if different than above) Street City County State Zip
Generator Contact: Jerry McCracken Consultant: TolTest, Inc.
Phone Number: 812 854-6153 Phone Number: 812 636-8501
Fax Number: - 4177 Fax Number: 812 636-7572

WASTE PROFILE

Waste Name: (Please list all similar waste streams for this certification - separate applications are required for other waste streams)
TNT-contaminated soil
Quantity: 2 Cubic Yards _____ Tons per Year Month Day One Time
Delivery Method: Bulk Drums Other
Transporter: TolTest, Inc. Phone: _____
Is the waste a listed hazardous waste? Yes No Delisted hazardous waste? Yes No
Does the waste contain any of the following: Asbestos? Yes No PCB's? Yes No
Pesticides/Herbicides? Yes No Free liquids? Yes No
Is the waste an infectious waste? Yes No Heat generating waste? Yes No
Physical state at 70° F Solid Semi-solid Liquid Color: brown
Flash Point? 2000°F Fugitive dust? Yes No Water reactive? Yes No
Odor? Yes No If yes describe:
Process Generating Waste: Open Burning of Explosives

Supporting documentation attached: Analytical Data w/ Chain of Custody MSDS Generator Knowledge
If analytical data is attached, is the data derived from testing a representative sample in accordance with 40 CFR 261.20(c) and/or other applicable laws? Yes No

Generator's Certification Statement:

I hereby certify that the above and attached information is complete and accurate to the best of my ability, that no deliberate information was omitted, that all known and suspected hazards have been disclosed, and that the waste is not a regulated hazardous waste by government or local authority, and does not contain PCBs regulated by TSCA or any other regulatory authority. If any of the above changes, I agree to notify Republic Services.
Signature: Jerry L. McCracken Date: 7/17/03
Name: Jerry L. McCracken
Am 444-02 White: Special Waste Coordinator Yellow: Landfill Pink: Generator
Revised 2/01

APPENDIX D

Special Waste Approval



Special Waste Management Decision

I. Decision Request: Initial Renewal Amendment

Management Facility: Sycamore Ridge
Intermediate Transfer Facility: N/A

Generator Name: NSWC Crane
Address: B3260 Code 0951 300 Hwy 361
Crane, IN 47522
Contact: Jery McCracken
Phone: 812-854-6153
Site Location: Same as generator

Billing Name: ToiTest Inc.
Address: 508 W. Elnora St - Odon, IN 47562
Consultant Name: ToiTest Inc.
Consultant Phone: 812-636-8501
Transporter Name: ToiTest Inc.
Transporter Phone: 812-636-8501

Waste Name: TNT-Contaminated Soil
Estimated Quantity: 12 cy/1X

II. Special Waste Manager Decision: *sg* Approved Disapproved
If disapproved, Explain: _____

Management Method(s): Landfill Solidification Bioremediation Other:
*Manifest all loads
*No Free Liquids

Precautions, Conditions or Limitations on approval: _____

Approval Number: 307130 Decision Expiration Date: 7/21/2004

Attached Document(s): None MSDS Certified Analytical Report Memo/Letter
 Process Knowledge

Special Waste Mgr. Signature: Stephanie Goodman Name(print): Stephanie Goodman
Date: 7/21/2003

III. Facility Operations Acknowledge: _____ Approved _____ Disapproved

State any additional Precautions, conditions, or limitations _____

Facility Mgr. Signature: Melissa L. Minnick Name(print): Melissa L. Minnick
Date: _____ 7/22/03

APPENDIX E

Photographs



Photo 1



Photo 2



Photo 3

APPENDIX F

Special Waste Disposal Notification Manifests



**SPECIAL WASTE DISPOSAL NOTIFICATION/MANIFEST
GENERATOR INFORMATION**

Generator Name: NSWC Crane
Mailing Address: B3260 Code 0951 300
Hwy 361, Crane IN 47522

Generation Location: Hwy 361, Crane, IN
County: Martin
Date of Spill/ Clean-out: July 2003

Generator Contact: Jerry McCracken
Consultant/Contractor: Toltest
Consultant/Contractor Address: 508 W. Elnor St, Oden <IN 47562

Generator Phone: 812-854-4177
Consultant/Contractor Phone: 812-636-7572

Waste Name/ Material Spilled	Republic Services Approval #	Expiration Date	Volume/ Weight
TNT contaminated soil	307130	7/21/2004	12 cy 1/X

Attach additional sheet if necessary

I hereby certify that the above information is true and accurate to the best of my knowledge. I also certify that no changes have been made to any relevant raw material or to the waste generating process, since the last shipment of the waste.

Jerry L McCracken Jerry L McCracken 7/23/03
Name (print or type) Signature Date (MM/DD/YY)

TRANSPORTER INFORMATION

Company Name: customer will provide Contact: Peaton Chevalier
Address: Toltest Inc. Phone: 812 636 8501
508 west Elnora st Oden In.

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

Bill Webster Bill Webster 07/23/03
Driver's Name (print or type) Signature Date (MM/DD/YY)

DISPOSAL SITE INFORMATION

Site Name: Worthington Landfill Operating Number: 28-02 Qty Received:
1636 1636 7/23/03
Name (print or type) Signature Date (MM/DD/YY)

1636 TW.

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**SPECIAL WASTE DISPOSAL NOTIFICATION/MANIFEST
GENERATOR INFORMATION**

Generator Name: NSWC Crane
Mailing Address: B3260 Code 0951 300
Hwy 361, Crane IN 47522

Generation Location: Hwy 361, Crane, IN
County: Martin
Date of Spill/ Clean-out: July 2003

Generator Contact: Jerry McCracken
Consultant/Contractor: Toltest
Consultant/Contractor Address: 508 W. Elnor St, Oden <IN 47562

Generator Phone: 812-854-4177
Consultant/Contractor Phone: 812-636-7572

Waste Name/ Material Spilled	Republic Services Approval #	Expiration Date	Volume/ Weight
TNT contaminated soil	307130	7/21/2004	12 cy 1/X

Attach additional sheet if necessary

I hereby certify that the above information is true and accurate to the best of my knowledge. I also certify that no changes have been made to any relevant raw material or to the waste generating process, since the last shipment of the waste.

Jerry L.M. Crick Jerry M. Crick 7/23/03
Name (print or type) Signature Date (MM/DD/YY)

TRANSPORTER INFORMATION

Company Name: customer will provide Contact: Peeter Chevalier
Address: Toltest Inc. Phone: 812 636 8501
508 West Elnor St. Oden In.

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

James Houser James Houser 07/23/03
Driver's Name (print or type) Signature Date (MM/DD/YY)

DISPOSAL SITE INFORMATION

Site Name: Worthington Landfill Operating Number: 28-02 Qty Received:
RETAKERT ReB... 7/23/03
Name (print or type) Signature Date (MM/DD/YY)

6.48 TW

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