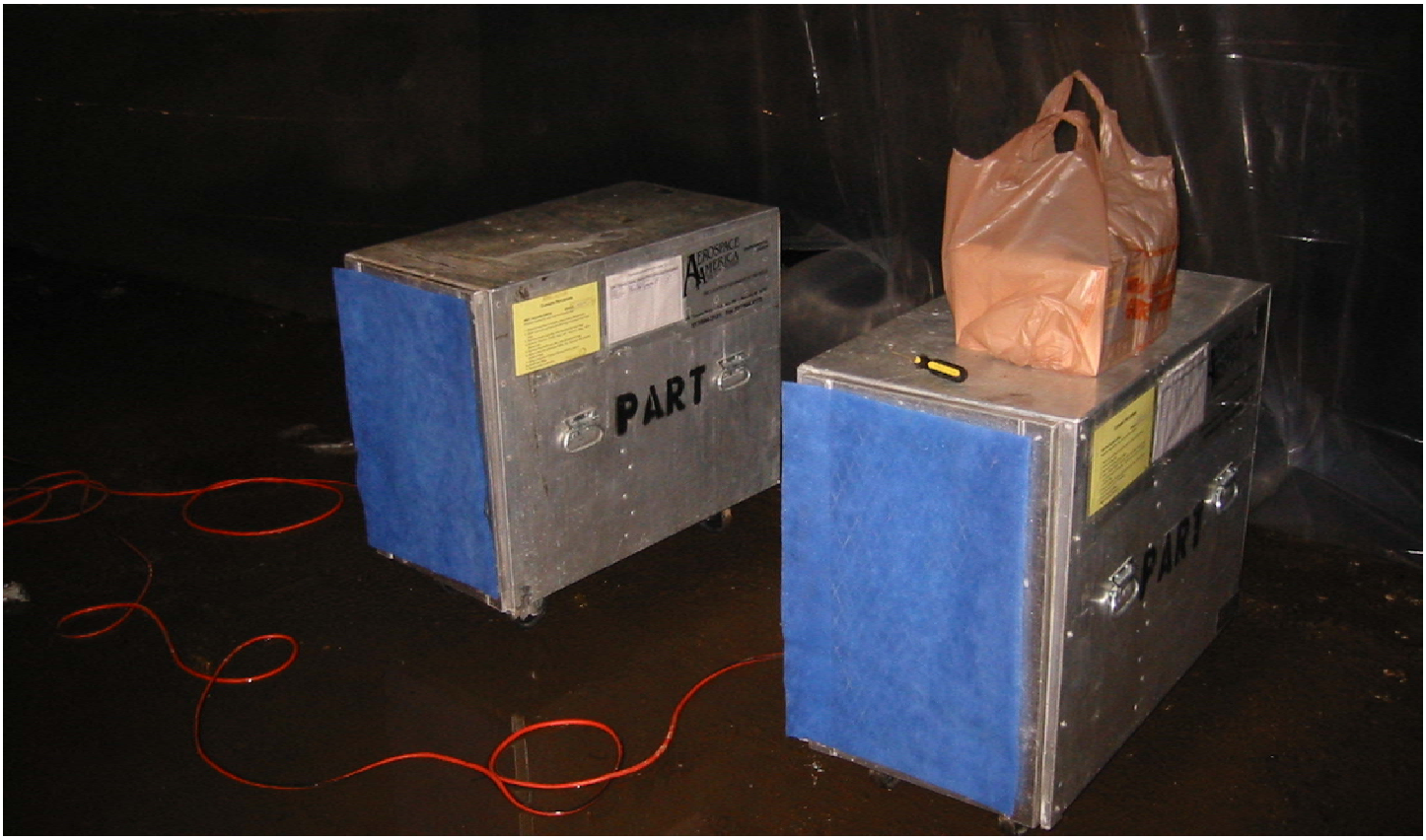
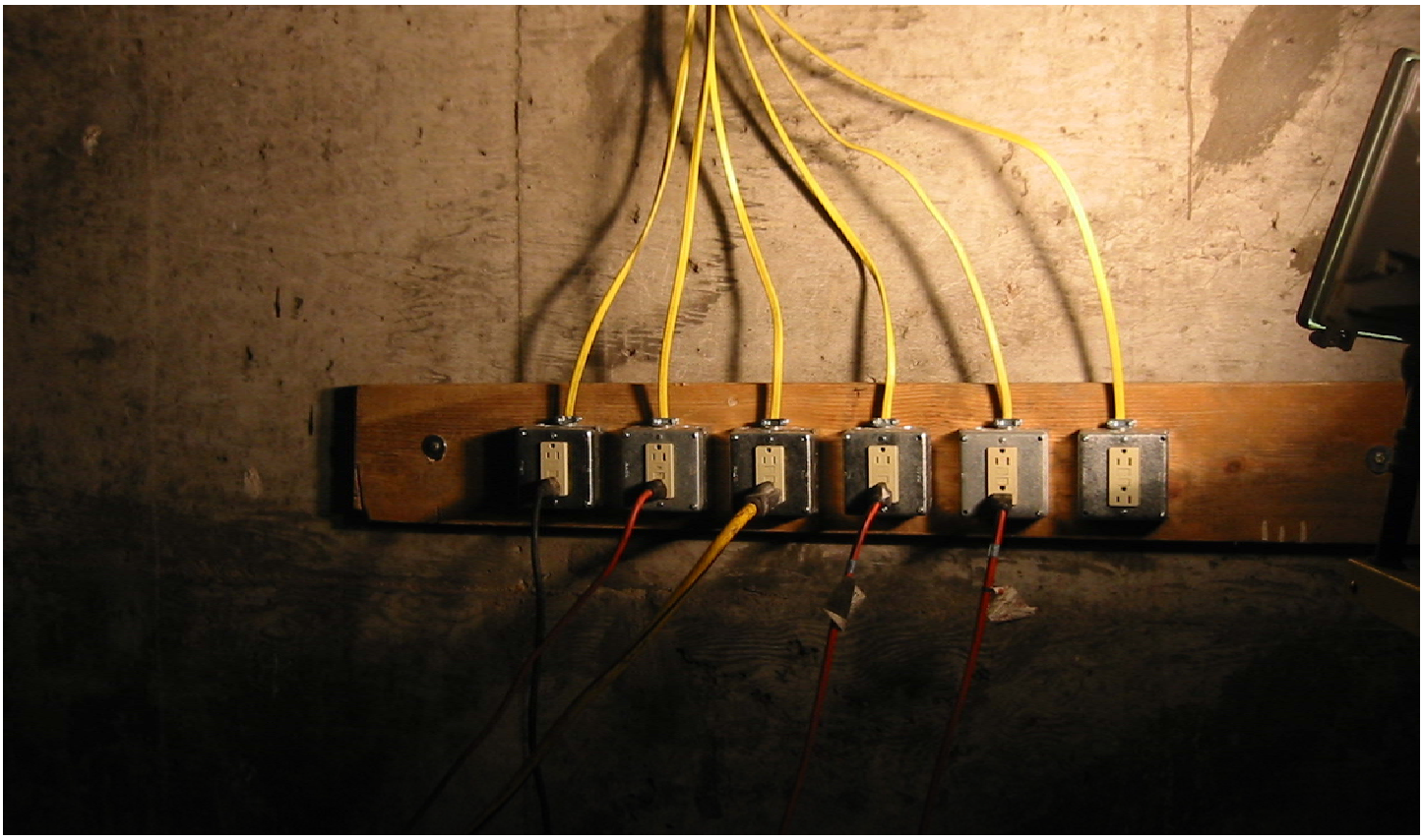
Photograph 9. Building 105 SAFR. West side of containment, September 2002.

Photograph 10. Building 105 SAFR. HEPA filters at work, September 2002.



Photograph 11. Building 105 SAFR. Portable HEPA filters inside of containment, September 2002.



Photograph 12. Building 105 SAFR. Temporary electrical outlets for lighting and equipment, September 2002.

Appendix C

P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

State Form LPC 62 8/81 IL 532-0610

EPA Form 8700-22 (Rev. 6-89)

RECEIVED APR 3 1 2003 BY:

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.
MOD2210090088			

GENERATOR

3. Generator's Name and Mailing Address
GENERAL SERVICES ADMINISTRATION
MIKE CROOKER

Location If Different
4300 GOODFELLOW
ST. LOUIS, MO 63120

A. Illinois Manifest Document Number: IL10429442 FEE PAID IF APPLICABLE

B. Generator's IL ID Number: 9 2 9 0 0 1 9 9 9

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS* (314) 263-3001

5. Transporter 1 Company Name: MID-WEST SANITARY SERVICES

6. US EPA ID Number: ILD053980272

C. Transporter's ID Number: UPW-044816-OM

D. Transporter's Phone (618) 254-0171

7. Transporter 2 Company Name: SAME

8. US EPA ID Number:

E. Transporter's ID Number:

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
PDC #1
4349 SOUTHPORT ROAD
PEORIA, IL 61615

10. US EPA ID Number: ILD 000 805 812

G. Facility's IL ID Number: 1 4 3 8 1 2 0 0 0 3

H. Facility's Phone (309 676-4893

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, HAZARDOUS WASTE SOLID, NOS, 9, NA3077, PGIII, (D008)	001	CM	00015	Y	EPA HW Number D008 000327
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Description for Materials Listed Above
SHOOTING RANGE SAND/LEAD
WMDS #30352
20531

K. Handling Codes for Wastes Listed Above In Item #14

15. Special Handling Instructions and Additional Information
NAERG = 171
24 HR. EMG #

MAIL TO: SCS ENGINEERS, ATTN: DAVID BREWER
10401 HOLMES RD, STE. 400
KANSAS CITY, MO 64131

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR,** if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Kevin Santee | Signature: (b) (6) redacted | Date: Month 10 Day 03 Year 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Chris Andrews | Signature: (b) (6) redacted | Date: Month 04 Day 08 Year 03

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name: Don Crotchett | Signature: (b) (6) redacted | Date: Month 04 Day 08 Year 03

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name: Duane Gray | Signature: (b) (6) redacted | Date: Month 04 Day 10 Year 03

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1[illegible] this information may result in a civil penalty against the owner or operator not to exceed $25,000 per da[illegible]gency. Failure to provide [illegible]n a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1. TSD MAIL TO GENERATOR

In case of a spill call the Illinois Office of Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.

Peoria Disposal Company
4349 Southport Rd., Peoria, Illinois 61615
(309) 676-4893

Fingerprint Analysis

Scale Ticket 1070782 **Sample No.** 49

Destination

Landfill ____ Stabilization ✓ Solidification/Landfill ____ WWT ____

Physical Characteristics:

State: solid ✓ semi-solid ____
liquid ____ solid/liq ____
Odor: strong ____ mild ____ none ✓
Color Blk
pH 8.0 IP

Flashpoint: °F ____ N/A ____

Water Reactivity:

	yes	no
Generate gasses	____	✓
Temperature change	____	✓
Soluble ____ Insoluble ____ Slight ✓		

Acceptance status:

Conforms ✓ Does not Conform ____
Accepted ✓ Rejected ____

Comments ____

____

____

____ **Analyst** JF

NO: 1070762

Peoria Disposal Company

SCALE TICKET

CUSTOMER COPY

P.O. Box 9071
Peoria, IL 61612-9071
(309) 688-0760

General Information

Customer : 138869 OCS ENGINEERS

Permit : 10030352 SHOOTING RANGE SAND Job type: T TREATMENT Prod Cd: H HAZ

Hauler : 55 MIDWEST SANITARY SER Load ticket: Schedule:

Volume Info

Manifested

Manifest Number 10429442

Quantity: 15 CORRECTED

Rejected Units:

Non-Manifested

Quantity: 0

Wastes on-board:

Scale Info

	Time	Date	Weight
In	3:18 PM	04/10/03	50,380
Out	4:01 PM	04/10/03	39,880
Net:			10,500 7.25T

Charges

	Count	Rate	Amount
Disposal Charges:	** YOU'LL BE INVOICED FOR ANY AMTS OUTSTANDING **		
Extra Charges :			

Cash Collected: 0.00

Total Charges: *******

Laboratory Info

Color: BRN Penetrometer: Paint Filter: F PH: 0

Truck-Id: 69

Driver Signature:

Appendix D

Metropolitan
St. Louis Sewer
District

Office of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

October 4, 2002

David Hempleman, P.E.
SCS ENGINEERS
10401 Holmes Rd., Suite 400
Kansas City, MO 64131

Dear Mr. Hempleman:

We have reviewed your application dated October 2, 2002 requesting approval to discharge up to 700 gallons of wastewater to the Metropolitan St. Louis Sewer District for treatment. This wastewater is generated from the wash down of walls and floors at the General Service Administration building 105 located at 4300 Goodfellow, St. Louis, Missouri. We understand that the wash down is related to remediation of the former shooting range area.

Based on the analytical results, this wastewater meets MSD Ordinance 8472 standards and is approved for discharge into a sanitary sewer on site subject to 0.5 micron filter treatment for lead, as indicated in your application. This approval is valid for 30 days from the date of this letter.

You must be certain the waste is discharged into a sanitary or combined sewer inlet only. This letter does not authorize any discharge to a separate storm sewer, or to any watercourse, as any such discharge would be in violation of state and federal laws. **Please notify me at the number below when the discharge is to commence.**

This discharge has been approved based upon the information and sample analysis you provided, and is subject to the conditions stated above. This approval may be revoked by the District at any time if any of the information is found to be incorrect, or if the conditions of this approval are violated. Also, if the discharge causes any operational or maintenance problem within the District's collection or treatment system, or results in violations of any conditions of the District's NPDES permit, SCS Engineers and the property owner, U.S. General Service Administration, will be considered responsible for damages.

If you have any questions, please call me at (314) 436-8742.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

(b) (6)

Roland A. Biehl
Environmental Associate Engineer

dss

Pc: Bernie Rains

File: IU, General Service Administration, 4300 Goodfellow, St. Louis, Missouri

Metropolitan St. Louis Sewer District
Office of Environmental Compliance, 10 East Grand Avenue, St. Louis, Missouri 63147
Phone No: (314) 436-8710
Fax No: (314) 436-8766

APPLICATION FOR SPECIAL DISCHARGE APPROVAL

I. WASTEWATER SOURCE IDENTIFICATION:

Site name: General Service Administration
Premise Address: Building 105, 4300 Goodfellow
City: St. Louis State: MO Zip: 63147
Owner: U.S. General Service Administration
Contact person: Michael P. Crocker
Title: Director
Phone: 314-263-3001 ext. 228 Fax: 314-263-9099

II. APPLICANT (mailing information):

Applicant name: David Hempleman, P.E
Title: Project Manager
Company name: SCS Engineers
Mailing address: 10401 Holmes Rd Suite 400
City: Kansas City State: MO Zip: 64131
Phone: 816 941 7510 Fax: 816 941 8025

III. A. MATERIAL TO BE DISCHARGED (check all applicable boxes):

1. Wastewater description/location: Water resulting from washdown of walls and floors
2. Process/activity generating wastewater: Remediation of former shooting range

3. Physical and chemical composition: List all constituents, and known or potentially present regulated contaminants below.
☐ See separate listing enclosed, and/or ☒ See analytical results enclosed, and/or ☐ Material Safety Data Sheet enclosed.

Description	Range	Unit	Description *(continued)*	Range	Unit

4. Is this wastewater from a process subject to EPA's categorical standards in 40 CFR Subchapter N? ☐ Yes ☒ No
   a. If yes, the applicable standards are in: 40 CFR Part _____, Subpart _____ ☐ Existing source ☐ New source
5. Does this wastewater contain polychlorinated biphenyls, asbestos or radioactive material? ☒ Yes ☐ No
   a. If yes, describe: Analyses attached: 5.6 ug/L Aroclor 1260 (PCB)
6. Representative sample: ☒ Laboratory results attached, and/or ☐ Sample provided (1/2 gallon minimum, clear container)
   a. Sample collection point/location: Open top storage vessels Collection method: hand dipping-Composite
   b. Sampler's name/Co.: Brett Engard SCS Engineers Sample date/time: 9-11-02 9:00 a.m.
   c. Attach chain of custody as available
7. Discharge will occur over the following time period: ☐ < 30 days ☐ ≥ Two years ☒ Other: < 24 hrs
   a. Expected total volume of wastewater to be discharged over the time period above: 700 Gallons
   b. Proposed discharge volume: 700 Gallons, at a frequency of: ☒ One time ☐ Daily ☐ Weekly ☐ Monthly ☐ Once/three months ☐ Once/six months ☐ Other: _____
8. Pretreatment of wastewater prior to discharge: ☐ None ☒ Yes, describe: Water will be filtered using 0.5 um mesh filters prior to discharge
   a. If yes, attach site plan, pretreatment system schematic, and design specifications.
9. Wastewater from a remediation project under: ☐ Superfund/CERCLA ☐ RCRA ☐ Voluntary program ☐ UST ☒ Not applicable
   a. If from a remediation project, briefly describe the past and present utilization of the property: Ammunition manufacturing and testing facility

III. B. MATERIAL FROM UNDERGROUND STORAGE TANK SOURCE

☒ Not applicable (go to Section IV.)

Please answer the following questions if you are requesting to discharge wastewater associated with an underground storage tank system.

1. a. Wastewater from: ☐ Inside UST(s) ☐ UST system pit ☐ Excavation outside UST system pit ☐ Monitoring well ☐ Groundwater remediation system

   b. UST project involves wastewater from: ☐ UST(s) closed in place ☐ UST(s) removed ☐ Remediation ☐ Upgrade ☐ Maintenance activities ☐ Well monitoring ☐ Other, explain:_____

   c. If wastewater is from a closure project, how long has UST(s) been out of service:_____ years

2. a. State assigned UST site identification number:_____ ☐ Not applicable

   b. Number of USTs affected: _____ ☐ Unknown

   c. For the UST(s) involved, their state identification number(s):_____ ☐ Not applicable

   d. Service Station Identification Number, as applicable: _____

3. Tank contents/former contents: ☐ Gasoline ☐ #2 diesel ☐ Used oil ☐ Unknown ☐ Other:_____

IV. DISCHARGE LOCATION

1. ☒ On-site. Describe proposed point of entry to sewer and the discharge rate (must be a sanitary or combined sewer): Basement Sewer inlet at < gal/min Note: Rate of discharge must not surcharge sewer line.

2. ☐ Haul to MSD Bissell Point Hauled Waste Receiving Station at 10 E. Grand, St. Louis, MO.

   a. Transporters Name:_____ and MSD Hauler ID Number:_____

   b. Hazardous Waste Certification:

   For wastewater which is hauled to MSD's Bissell Point Hauled Waste Receiving Station, I hereby certify that to the best of my knowledge and belief, the above hauled waste is not classified as a RCRA "hazardous waste" as defined by the MDNR in 10 CSR 25 or USEPA in 40 CFR Part 261.

   Applicant name (print):_____

   Signature:_____ **Date:**_____

ADDITIONAL INFORMATION:

V. APPLICANT SIGNATURE AND CERTIFICATION:

This application must be signed by the applicant: either the source contact, or a contractor or agent directly responsible for site activities.

I hereby certify that I am directly responsible for activities at the site regarding the wastewater to be discharged, and to the best of my knowledge and belief, based on appropriate inquiry, the information in this application is true, complete, and accurate. The samples or analyses submitted are representative of the materials to be discharged. If granted approval to discharge, I agree to abide by the MSD Ordinances, and all applicable federal, state and local regulations. I agree to pay the costs of any pre-approval analyses performed by MSD and to pay any applicable disposal charges for the volume and strength of the wastes discharged.

Applicant name (print): David G. Hemeleman

Signature: (b) (6) **Date:** 10-2-02

FOR MSD USE ONLY:

File Name: ID No: Sample Point No:

SEVERN TRENT SERVICES

Job Number: 211977

LABORATORY TEST RESULTS

Date:09/26/2002

CUSTOMER: SCS Engineers, Inc. PROJECT: GSA - SLOP ATTN: David Brewer

Customer Sample ID: SRDECON
Date Sampled.....: 09/11/2002
Time Sampled.....: 09:00
Sample Matrix.....: Water

Laboratory Sample ID: 211977-4
Date Received.....: 09/12/2002
Time Received.....: 09:10

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
608	Pesticides/PCBs (Organochlorine)											
	Aroclor 1016	ND		U	0.20	0.25	1.00000	ug/L	63780		09/21/02 0325	kdl
	Aroclor 1221	ND		U	0.19	0.25	1.00000	ug/L	63780		09/21/02 0325	kdl
	Aroclor 1232	ND		U	0.12	0.25	1.00000	ug/L	63780		09/21/02 0325	kdl
	Aroclor 1242	ND		U	0.19	0.25	1.00000	ug/L	63780		09/21/02 0325	kdl
	Aroclor 1248	ND		U	0.20	0.25	1.00000	ug/L	63780		09/21/02 0325	kdl
	Aroclor 1254	ND		U	0.15	0.25	1.00000	ug/L	63780		09/21/02 0325	kdl
	Aroclor 1260	5.6			0.17	0.25	1.00000	ug/L	63780		09/21/02 0325	kdl
HACH 8000	Chemical Oxygen Demand (HACH)											
	Chemical Oxygen Demand (COD)	77			3.4	5.0	1	mg/L	63693		09/25/02 0855	cvw
150.1	pH (Water)											
	pH	7.24			0.20	0.20	1	pH Units	62704		09/13/02 1501	cvw
160.3	Solids, Total (TS-Water)											
	Solids, Total (TS-Water)	1190			6.1	10.0	1	mg/L	62831		09/14/02 0810	jmk
160.4	Solids, Total Volatile (TVS)											
	Solids, Total Volatile Suspended (TVSS)	14.0			4.8	5.0	1	mg/L	62954		09/17/02 0752	jmk
160.2	Solids, Total Suspended (TSS)											
	Solids, Total Suspended (TSS)	27			8.0	10	1	mg/L	62801		09/14/02 0645	jmk
7470A	Mercury (CVAA)											
	Mercury	0.0098			0.00032	0.0010	5	mg/L	62669		09/13/02 1531	gok
200.7	Metals Analysis (ICAP Trace)											
	Cadmium	0.0026			0.00028	0.0010	1	mg/L	63617		09/23/02 1836	tds

* In Description = Dry Wgt.

SEVERN TRENT SERVICES

Job Number: 211977

LABORATORY TEST RESULTS

Date:09/26/2002

CUSTOMER: SCS Engineers, Inc. PROJECT: GSA - SLOP ATTN: David Brewer

Customer Sample ID: SRDECON
Date Sampled.....: 09/11/2002
Time Sampled.....: 09:00
Sample Matrix.....: Water

Laboratory Sample ID: 211977-4
Date Received.....: 09/12/2002
Time Received.....: 09:10

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	Chromium	0.0097			0.0010	0.0050	1	mg/L	63425		09/20/02 1702	pfk
	Copper	0.24			0.0010	0.0050	1	mg/L	63425		09/20/02 1702	pfk
	Iron	2.4			0.018	0.025	1	mg/L	63617		09/23/02 1836	tds
	Lead	1.9			0.0018	0.0025	1	mg/L	63617		09/23/02 1836	tds
	Nickel	0.021			0.0017	0.0050	1	mg/L	63425		09/20/02 1702	pfk
	Zinc	0.19			0.0029	0.010	1	mg/L	63425		09/20/02 1702	pfk
624	Volatile Organics											
	Chloromethane	ND			1.8	10	1.00000	ug/L	63799		09/25/02 0045	jab
	Vinyl chloride	ND			1.9	10	1.00000	ug/L	63799		09/25/02 0045	jab
	Bromomethane	ND			2.1	10	1.00000	ug/L	63799		09/25/02 0045	jab
	Chloroethane	ND			2.4	10	1.00000	ug/L	63799		09/25/02 0045	jab
	Acrolein	ND			130	500	1.00000	ug/L	63799		09/25/02 0045	jab
	1,1-Dichloroethene	ND			2.1	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	Methylene chloride	5.6			1.0	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	trans-1,2-Dichloroethene	ND			1.6	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	Acrylonitrile	ND			48	100	1.00000	ug/L	63799		09/25/02 0045	jab
	1,1-Dichloroethane	ND			1.0	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	Chloroform	ND			0.64	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	1,1,1-Trichloroethane	ND			0.62	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	Carbon tetrachloride	ND			0.77	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	Benzene	ND			0.60	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	1,2-Dichloroethane	ND			0.57	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	Trichloroethene	ND			0.48	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	1,2-Dichloropropane	ND			1.0	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	Bromodichloromethane	ND			1.8	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	2-Chloroethylvinylether	ND			5.8	10	1.00000	ug/L	63799		09/25/02 0045	jab
	cis-1,3-Dichloropropene	ND			1.3	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	Toluene	ND			1.6	5.0	1.00000	ug/L	63799		09/25/02 0045	jab

* In Description = Dry Wgt.

SEVERN TRENT SERVICES

Job Number: 211977

LABORATORY TEST RESULTS

Date:09/26/2002

CUSTOMER: SCS Engineers, Inc. PROJECT: GSA - SLOP ATTN: David Brewer

Customer Sample ID: SRDECON
Date Sampled.....: 09/11/2002
Time Sampled.....: 09:00
Sample Matrix.....: Water

Laboratory Sample ID: 211977-4
Date Received.....: 09/12/2002
Time Received.....: 09:10

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	trans-1,3-Dichloropropene	ND	U		1.4	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	1,1,2-Trichloroethane	ND	U		1.3	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	Tetrachloroethene	ND	U		1.3	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	Dibromochloromethane	ND	U		1.4	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	Chlorobenzene	ND	U		0.35	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	Ethylbenzene	ND	U		0.51	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	Bromoform	ND	U		1.4	5.0	1.00000	ug/L	63799		09/25/02 0045	jab
	1,1,2,2-Tetrachloroethane	ND	U		1.0	5.0	1.00000	ug/L	63799		09/25/02 0045	jab

* In Description = Dry Wgt.