JUN 07 RECD

ST. LOUIS FUSRAP OVERSIGHT COMMITTEE
c/o 111 So. Meramec
Clayton, MO 63105
314.854.6635

June 2, 1999

MEMORANDUM

TO: Members, Oversight Committee
Other Interested Parties

FROM: Richard R. Cavanagh, CHE
Chairperson

RE: June Meeting

The next meeting of the St. Louis FUSRAP Oversight Committee will be held on Friday, June 11, 1999, 11:30am - 1:00pm, at the Latty Avenue Trailers.

Members of the Committee who cannot attend are asked to call me to be excused.

Thank you.

ST. LOUIS FUSRAP OVERSIGHT COMMITTEE
c/o 111 So. Meramec
Clayton, Missouri 63105
314.854.6635

Summary of Meeting
May 14, 1999

Members Present: Sally price, Tom Binz, Donovan Larson, Krista Durlas, Jan Titus, Jack Frauenhoffer, Anna Ginsberg, Tom Manning, Ric Cavanagh

Committee Members Excused: Bill Brandes

Other Interested Parties: Sharon Cotner, Dennis Chambers, David Mueller, Tammy Atchison, Janet Williams, Chris Byrne, Thomas Horgan, Robert Geller, Eric Gilstrap, Bob Marchant, Wayne Schmidt, Dave Wagoner, Joan Reading

The following comments are in addition to the handouts provided by USACE (see attached):

Page 4 - The sedimentation ditch is done. There was a much higher quantity than topography studies had indicated.

Page 6 - There were no funds this year for VP's clean up. However, paperwork has been initiated to get "rights of way" (with properties remaining privately owned). The new lab will allow for some additional capacity, but not much. However, the lab will be cleaner and provide better quality studies.

USACE has received many requests for data about the remediation status of VP's (to facilitate the sale of property by current owners). This requires a lot of work, some of the information has to be gotten from Bechtel in Oak Ridge. **The question was raised as to whether such information is made part of County real estate records. The chairperson will research this and have a response by next meeting.**

The St. Denis Bridge does meet all criteria for release (which means it meets the 5/15/50 criteria, not totally clean).

Page 7 - The schedule has been moved up. Plant 2 will take less time than anticipated. Water release meets MSD criteria (mixed: storm and groundwater).

Page 8 - The big issue with the North County ROD is whether or not Coldwater Creek is to be included in the ROD. It would be best and easiest to include it. No decision made yet.

Sharon indicated that she has requested an additional $3 million for the rest of this year, mostly for HISS (eastern piles) and SLDS. She is optimistic about getting the funds.

The Disposal Contract is in litigation. USACE staff not at liberty to discuss, as promised. Hope to have the issue resolved by next meeting.

Page 9 - As requested by the Committee, USACE representative Dennis Chambers made a lengthy presentation about Personnel Protective Equipment. The Committee was asked to understand that use of PPE at a higher level than needed actually increases exposure and risk to workers (e.g. tripping, heat exhaustion, inability to hear well). Level C is anticipated only for the radium pits.

A demonstration of the personnel air sampling monitor was given. There is no alarm on the monitor. It meets NIOSH standards. Filters are evaluated for gross alpha and gross beta levels. It was also noted that there are three stationary monitors at all sites. The TLD's are left in a controlled environment at night, reviewed by a certified independent lab quarterly. Staff also have pre and post physical exams, regular urinalysis, etc.

The Committee asked to be able to see the daily reports on workers' monitors when they are working in the radium pits. The Committee also requests the specific numbers that prove that worker exposure really is as low as stated by USACE.

First quarter reports for water discharge were handed out to the Committee for evaluation and discussion (see attached). Sharon Cotner stressed the need to know both the location and direction of water flow when questions are raised about pictures taken at the site.

Next Meeting

Friday, June 11, 1999
11:30am - 1:00pm
Trailers on Latty Avenue

DEPARTMENT OF THE ARMY
ST. LOUIS DISTRICT, CORPS OF ENGINEERS
9170 LATTY AVENUE
BERKELEY, MISSOURI 63134

REPLY TO
ATTENTION OF:

April 28, 1999

Formerly Utilized Sites Remedial Action Program Project Office

SUBJECT: TRANSMITTAL OF FIRST QUARTER OF 1999 DISCHARGE REPORT FOR THE HAZELWOOD INTERIM STORAGE SITE (HISS) NPDES PERMIT MO-0111252 AND APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS) FOR DISCHARGES TO THE WATERS OF THE STATE AT THE ST. LOUIS AIRPORT SITE (SLAPS), ST. LOUIS, MISSOURI

Mr. Kurt Riebeling, Chief Water Unit
Missouri Department of Natural Resources
10805 Sunset Office Drive, Suite 100
St. Louis, Missouri 65127-1038

Dear Mr. Riebeling:

In accordance with NPDES Permit MO-0111252 for the Hazelwood Interim Storage Site (HISS), and the substantive requirements for stormwater discharge to the waters of the state at the St. Louis Airport Site (SLAPS), St. Louis, Missouri, this letter transmits the stormwater discharge monitoring report for the first quarter of 1999. Enclosed in this report are the analytical results for first quarter of 1999 for stormwater outfalls at HISS, Outfalls 001 and 002, respectively (Attachment A) and at SLAPS, Outfalls, 001a, 001b, 002, and 003, respectively (Attachment B).

- Hazelwood Interim Storage Site (HISS) - Permit MO-0111252 Summary
  During the first quarter of 1999, permit-specified parameters were measured in January, February, and March. All permit-specified parameters included in this report are within permit requirements and all contaminants are within guidelines. Problems with the flow meter at Outfall 1 were experienced at various times during the quarter; the dates when this occurred are identified with "ND" indicating no data available. In addition, positive values for total organic halogen (TOX) were detected at both Outfall 1 and Outfall 2. However, volatile organic compound analyses (VOC) were not conducted for each of the samples because holding times had been exceeded by the time the TOX data was received and evaluated. To remedy this in the future, the laboratory has been instructed to immediately analyze for VOC if a positive value for TOX occurs.

A baseline characterization effort was conducted in fourth quarter 1997, which included volatile organic compound (VOC) and semi-volatile organic compound (SVOC) analyses. The TOX values reported in this report are consistent with those reported for the characterization effort reported in the fourth quarter 1997 discharge monitoring report. It should be noted that the detection limits used for the current TOX and TOC analyses (5 µg/L) are lower than previous (12 µg/L).

- St. Louis Airport Site (SLAPS) – ARAR Summary
  During the first quarter of 1999 permit-specific parameters were measured in January, February, and March. All permit-specific parameters included in this report are within permit requirements. There was no discharge through Outfall 001a. All discharge through Outfalls 001b and 002 was a result of pumping activities. Discharge through Outfall 003 was a result of both pumping activities and stormwater flow.. For Outfall 001b, there was an accumulation of retained water for both events 1 and 2. The process for discharge and frequency of sampling was improved with events 3 and 4.

If you have any questions concerning this report please contact Mr. Ron Frerker at (314) 524-7329.

Sincerely,

Sharon R. Cotner

Sharon R. Cotner
FUSRAP Program Manager

Enclosure

1999 First Quarter – Stormwater Discharge Monitoring Report
Hazelwood Interim Storage Site, St. Louis, MO

FACILITY NAME	PERMIT NUMBER	COUNTY	OWNER	FACILITY CONTACT
Hazelwood Interim Storage Site (HISS)	MO-0111252	St. Louis	Jarboe Realty Investment	S.R. Cotner, Program Manager, USACE
OPERATOR OF FACILITY			TYPE OF FACILITY	
United States Army Corps of Engineers (USACE)			Standard industrial Classification –9999, non-classifiable[1]	
REQUIRED FREQUENCY OF MONITORING				THIS REPORT COVERS
Flow and rainfall – daily; settable solids – monthly; other parameters[2] – quarterly				1st quarter-January 1 through March 31, 1998
SAMPLES COLLECTED BY				
John Henry and Lon Hoover				
ANALYSIS PERFORMED BY				
Quanterra				

SAMPLE LOCATION	MONTH and TIME	MONTH and TIME	MONTH and TIME
Outfall 1	1/22/99 @ 13:40	2/12/99 @ 07:45	3/23/99 @ 10:00
Outfall 2	1/22/99 @ 13:40	2/12/99 @ 07:45	3/23/99 @ 10:05

MONITORING PARAMETER	LIMITS	UNITS	ANALYTICAL RESULTS		SAMPLE TYPE	REMARKS and COMMENTS
			OUTFALL 1	OUTFALL 2		
Settleable solids: January	Daily max=1.5 Monthly Avg=1.0	ml/l/hr	0.1[1]	0.1[1]	composite	
February		ml/l/hr	0.12[1]	0.1[1]	composite	
March		ml/l/hr	0.1[1]	0.1[1]	composite	
Ph	6.0-9.0	SU	6.9	6.8	grab	
Specific conductance	*	µmhos/cm	4	3	composite	
Total organic carbon	*	mg/l	15.1	6.76	composite	
Total organic halogen	*	mg/l	17.2	9.85	composite	
Gross alpha	*	pCi/l	40.76	7.78	composite	
Gross beta	*	pCi/l	23.84	40.37	composite	
Lead 210	30	pCi/l	0.40	0.38	composite	Assumes secular equilibrium with Ra-226
Radium 226	100	pCi/l	0.40	0.38	composite	
Radium 228	100	pCi/l	0.14	0.0	composite	Assumes secular equilibrium with Th-228
Uranium, total	600	pCi/l	24.62	3.37	composite	Calculated Value: addition of isotopic analysis
Thorium 230	300	pCi/l	0.82	0.55	composite	
Thorium 232	50	pCi/l	0	0	composite	
Rainfall	*	inches	See Table 1	See Table 1	24-hr total	Continuous recorder
Flow	*	MGD	See Table 1	See Table 1	24-hr total	Continuous recorder
REPORT APPROVED BY OWNER					DATE	

NOTES:

1. HISS is a CERCLA NPL.

2. Collect quarterly samples in the months of March, June, September, and December for: pH, specific conductance, total organic carbon, total organic halogen, gross alpha, gross beta, Pb-210, Ra-226, Ra-228, Uranium (total), Th-230, Th-232.

3. Final limits as specified in the permit for settable solids and pH. (*) indicates monitoring requirement only. Limits for radionuclides are not permit-specified. The DOE guidelines presented will continue to be followed until the USACE establishes limits for radionuclides in their transition to managing FUSRAP.

4. ND = Discharge intermittent or no discharge

5. NS = Not Sampled - monthly sampling for November of Outfall 1 and Outfall 2 were not sampled for settleable solids due to transition issues and intermittent/no discharge. Therefore signatures and details regarding analytical methods and results are not included.

6. NA = Not applicable

7. Settleable solids Sample Method = EPA 160.5
   Laboratory qualifier for all data =U. U –indicates that the compound was analyzed for, but was not detected above the reported sample quantitation limit.

8. Results are reported in required units.

TABLE 1
Hazelwood Interim Storage Site
Daily Rainfall and Daily Maximum Flow
First Quarter 1999

Date 1999	Rainfall (inches) 24-hour total	Daily Maximum Flow (MGD) [a] Outfall 001	Outfall 002
1/1	0.00	2.88	ND
1/2	0.00	0.74	ND
1/3	0.00	ND	ND
1/4	0.00	ND	ND
1/5	0.00	ND	ND
1/6	0.29	0.59	0.27
1/7	0.00	ND	ND
1/8	0.00	ND	ND
1/9	0.00	0.69	0.44
1/10	0.04	0.73	0.45
1/11	0.01	0.75	0.47
1/12	0.03	0.49	0.27
1/13	0.00	0.35	0.34
1/14	0.00	0.34	ND
1/15	0.15	0.34	0.24
1/16	0.01	0.34	0.24
1/17	0.29	0.15	0.22
1/18	0.00	0.10	0.11
1/19	0.00	0.02	ND
1/20	0.01	0.01	0.00
1/21	0.00	0.02	0.00
1/22	0.14	0.05	ND
1/23	0.77	0.18	0.06
1/24	0.00	0.01	0.00
1/25	0.00	0.01	0.00
1/26	0.00	0.00	0.00
1/27	0.00	0.01	0.00
1/28	0.04	0.01	0.00
1/29	0.00	0.00	0.00
1/30	0.58	0.29	0.00
1/31	1.30	0.44	ND
Monthly Average		0.37	0.16

Date 1999	Rainfall (inches) 24-hour total	Daily Maximum Flow (MGD) [a] Outfall 001	Outfall 002
2/1	0.00	0.01	ND
2/2	0.00	0.00	0.00
2/3	0.01	0.01	ND
2/4	0.00	0.00	0.00
2/5	0.00	0.00	0.00
2/6	0.78	0.33	0.00
2/7	1.57	0.69	0.00
2/8	0.00	0.00	0.00
2/9	0.00	0.00	0.00
2/10	0.00	0.00	0.00
2/11	0.32	0.21	0.00
2/12	0.00	0.00	0.00
2/13	0.00	0.03	0.00
2/14	0.00	0.03	0.00
2/15	0.00	0.00	0.00
2/16	0.21	0.03	0.00
2/17	0.00	0.00	0.00
2/18	0.02	0.00	0.00
2/19	0.00	0.00	0.00
2/20	0.00	0.00	0.00
2/21	0.00	0.00	0.00
2/22	0.00	0.00	0.00
2/23	0.10	0.01	0.00
2/24	0.00	0.00	0.00
2/25	0.00	0.00	0.00
2/26	0.00	0.00	0.00
2/27	0.05	0.00	0.00
2/28	0.00	0.00	0.00
Monthly Average		0.05	0.00

Date 1999	Rainfall (inches) 24-hour total	Daily Maximum Flow (MGD) [a] Outfall 001	Outfall 002
3/1	0.00	0.00	0.00
3/2	0.17	0.02	0.00
3/3	0.00	0.00	0.00
3/4	0.00	0.01	0.00
3/5	0.20	0.02	0.01
3/6	0.00	0.01	0.00
3/7	0.00	0.00	0.00
3/8	0.71	0.12	0.12
3/9	0.01	0.02	0.01
3/10	0.00	0.00	0.00
3/11	0.00	0.00	0.00
3/12	0.00	0.00	0.00
3/13	0.00	0.00	0.00
3/14	0.00	0.00	0.00
3/15	0.00	0.00	0.00
3/16	0.00	0.00	0.00
3/17	0.00	0.00	0.00
3/18	0.00	0.00	0.00
3/19	0.00	0.00	0.00
3/20	0.00	0.00	0.00
3/21	0.00	0.00	0.00
3/22	0.34	0.00	0.00
3/23	0.58	0.14	0.13
3/24	0.00	0.00	0.00
3/25	0.00	0.00	0.00
3/26	0.00	0.00	0.00
3/27	0.00	0.00	0.00
3/28	0.12	0.00	0.00
3/29	0.00	0.00	0.00
3/30	0.00	0.00	0.00
3/31	0.00	0.00	0.00
Monthly Average		0.01	0.01

Notes:

[a] Daily maximum flow values are based on 24-hour measured flow. Flow is reported in million gallons per day (MGD). Flow was measured continuously using ISCO Models 4210 ultrasonic flowmeters installed at each outfall.

1999 First Quarter-Storm Water Discharge Monitoring Report
St. Louis Airport Site (SLAPS), St. Louis, MO

FACILITY NAME	PERMIT NUMBER	COUNTY	OWNER	FACILITY CONTACT
St. Louis Airport Site (SLAPS)	NA	St. Louis	U.S Army Corps of Engineers, St. Louis District	S.R. Cotner, Program Manager, USACE
OPERATOR OF FACILITY			**TYPE OF FACILITY**	
United States Army Corps of Engineers (USACE)			Standard Industrial Classification–9999, non-classifiable	
REQUIRED FREQUENCY OF MONITORING				**THIS REPORT COVERS**
Flow-monthly, 24 hour estimate; **Effluent Parameters**- *Chemical and radiological*[1]: monthly during rainfall that results in a discharge; *Radiological*[2]: per rainfall event that results in a discharge; *Radon*-semi-annually during rainfall that results in a discharge; **Monitoring Report**-quarterly				1st Quarter-January 1 through March 31, 1999
SAMPLES COLLECTED BY				
Environmental Dimensions, Inc.				
ANALYSIS PERFORMED BY				
Quanterra and American Testing and Analytical Services (ATAS) for chemical analysis; HISS site laboratory for radiological analysis.				

SAMPLE LOCATION	EVENT[6] 1	EVENT[6] 2	EVENT[6] 3	EVENT[6] 4
Outfall 001b[3]				
Outfall 002[4]				
Outfall 003[5]	1/1/99 through 1/29/99	1/30/99 through 3/7/99	3/8/99 through 3/21/99	3/22/99 through 3/31/99

REPORT APPROVED BY OWNER	DATE

1999 First Quarter-Stormwater Discharge Monitoring Report - Outfall 001b
St. Louis Airport Site (SLAPS), St. Louis, MO (continued)

MONITORING PARAMETER	FINAL EFFLUENT LIMITATIONS		UNITS[7]	ANALYTICAL RESULTS				SAMPLE TYPE	REMARKS and COMMENTS
	Daily Maximum	Monthly Average		Outfall 001b					
				Chemical Parameters					
				1/18/99	2/5/99	3/10/99			
Flow	Monitor only	Monitor only	MGD	see Table 1	see Table 1	see Table 1		24-hr estimate	
Oil and Grease	15	10	mg/L	6.7	<1.0	<0.5		Grab	
Total Petroleum Hydrocarbons	10	10	mg/L	<0.5	<1.0	<0.5		Grab	
pH-Units	6.0-9.0	NA	SU	7.6	7.5	7.8		Grab	
Chemical Oxygen Demand	120	90	mg/L	38.0	17.1	32.9		Grab	
Settleable Solids	1.5	1	mL/L/hr	<0.1	<0.1	<0.1		Grab	DL[8] = 0.1 mL/L/hr
Arsenic, Total Recoverable	100	100	µg/L	3.2	<50.0	<50.0		Grab	
Lead, Total Recoverable	190	190	µg/L	6.5	<50.0	<50.0		Grab	
Chromium, Total Recoverable	280	280	µg/L	3.0	<5.0	<5.0		Grab	
Copper, Total Recoverable	84	84	µg/L	17.1	11.0	<10.0		Grab	
Cadmium, Total Recoverable	94	94	µg/L	0.7	6.0	<5.0		Grab	
Polychlorinated Biphenyls	No release	No release	µg/L	<1.0	<1.0	<1.0		Grab	DL[8] = 1 µg/L
				Radiological Parameters[9]					
				Event 1	Event 2	Event 3	Event 4		
Uranium 234	Monitor only	Monitor only	pCi/L	229.6	162.0	55.7	90.6	Grab	
Uranium 235	Monitor only	Monitor only	pCi/L	12.5	10.0	3.3	2.7	Grab	
Uranium 238	Monitor only	Monitor only	pCi/L	247.6	165.5	51.7	89.6	Grab	
Uranium, Total[10,11]	Monitor only	Monitor only	µg/L	742.7	496.5	155.0	268.9	Grab	Calculated estimates
Radium-226	Monitor only	Monitor only	pCi/L	2.9	4.3	3.2	5.5	Grab	
Radium-228	Monitor only	Monitor only	pCi/L	NA[12]	NA[12]	NA[12]	NA[12]	Grab	
Radium, Total[10,11]	Monitor only	Monitor only	µg/L	2.9E-06	4.4E-06	1.9E-12	2.2E-20	Grab	Calculated estimates
Thorium-228	Monitor only	Monitor only	pCi/L	<1.8	<2.1	<1.3	<1.6	Grab	
Thorium-230	Monitor only	Monitor only	pCi/L	5.5	3.7	1.0	<1.3	Grab	
Thorium-232	Monitor only	Monitor only	pCi/L	<0.8	<1.1	<1.3	<0.5	Grab	
Thorium, Total[10,11]	Monitor only	Monitor only	µg/L	7.1	9.1	6.3	4.0	Grab	Calculated estimates
Gross Alpha[10]	Monitor only	Monitor only	pCi/L	572.5	456.3	117.4	236.4	Grab	
Gross Beta[10]	Monitor only	Monitor only	pCi/L	435.0	80.4	39.4	39.6	Grab	
Protactinium-231[10]	Monitor only	Monitor only	pCi/L	<3.7	<4.1	<2.6	<2.1	Grab	
Actinium-227[10]	Monitor only	Monitor only	pCi/L	<3.7	<4.1	<2.6	<2.1	Grab	
Radon (semi-annual monitoring)[10]	Monitor only	Monitor only	pCi/L	NS[13]	NS[13]	NS[13]	NS[13]	Grab	

MONITORING PARAMETER	FINAL EFFLUENT LIMITATIONS		UNITS[7]	ANALYTICAL RESULTS				SAMPLE TYPE	REMARKS and COMMENTS
	Daily Maximum	Monthly Average		Outfall 002					
				Chemical Parameters					
				1/25/99	1/23/99	3/10/99			
Flow	Monitor only	Monitor only	MGD	see Table 1	see Table 1	see Table 1		24-hr estimate	
Oil and Grease	15	10	mg/L	<0.5	<0.5	<0.5		Grab	
Total Petroleum Hydrocarbons	10	10	mg/L	<0.5	<0.5	<0.5		Grab	
pH-Units	6.0-9.0	NA	SU	7.7	7.7	7.9		Grab	
Chemical Oxygen Demand	120	90	mg/L	15.6	12.7	27.5		Grab	
Settleable Solids	1.5	1	mL/L/hr	<0.1	<0.1	<0.1		Grab	DL[8] = 0.1 mL/L/hr
Arsenic, Total Recoverable	100	100	µg/L	<50.0	<50.0	<50.0		Grab	
Lead, Total Recoverable	190	190	µg/L	<50.0	<50.0	<50.0		Grab	
Chromium, Total Recoverable	280	280	µg/L	<5.0	<5.0	<5.0		Grab	
Copper, Total Recoverable	84	84	µg/L	<10.0	12.0	<10		Grab	
Cadmium, Total Recoverable	94	94	µg/L	<5.0	<5.0	<5.0		Grab	
Polychlorinated Biphenyls	No release	No release	µg/L	<1.0	<0.5	<1.0		Grab	DL[8] = 1 µg/L
				Radiological Parameters[9]					
				Event 1	Event 2	Event 3	Event 4		
Uranium 234	Monitor only	Monitor only	pCi/L	9.6	56.9	46.7	2.8	Grab	
Uranium 235	Monitor only	Monitor only	pCi/L	<1.4	3.3	1.4	<0.9	Grab	
Uranium 238	Monitor only	Monitor only	pCi/L	10.8	54.3	48.7	5.7	Grab	
Uranium, Total[10,11]	Monitor only	Monitor only	µg/L	32.5	162.8	146.1	17.1	Grab	Calculated estimates
Radium-226	Monitor only	Monitor only	pCi/L	<6.2	2.1	<4.4	<1.8	Grab	
Radium-228	Monitor only	Monitor only	pCi/L	NA[12]	NA[12]	NA[12]	NA[12]	Grab	
Radium, Total[10,11]	Monitor only	Monitor only	µg/L	3.8E-06	2.1E-06	2.3E-06	1.4E-06	Grab	Calculated estimates
Thorium-228	Monitor only	Monitor only	pCi/L	<20.3	<1.2	<0.9	<0.9	Grab	
Thorium-230	Monitor only	Monitor only	pCi/L	19.0	1.0	0.5	<0.9	Grab	
Thorium-232	Monitor only	Monitor only	pCi/L	<6.8	<1.0	0.5	<1.0	Grab	
Thorium, Total[10,11]	Monitor only	Monitor only	µg/L	38.1	5.6	4.3	6.4	Grab	Calculated estimates
Gross Alpha[10]	Monitor only	Monitor only	pCi/L	60.2	154.2	91.0	<20.5	Grab	
Gross Beta[10]	Monitor only	Monitor only	pCi/L	51.0	36.9	32.6	<31.7	Grab	
Protactinium-231[10]	Monitor only	Monitor only	pCi/L	<6.6	<2.4	<1.9	<2.2	Grab	
Actinium-227[10]	Monitor only	Monitor only	pCi/L	<6.6	<2.4	<1.9	<2.2	Grab	
Radon (semi-annual monitoring)[10]	Monitor only	Monitor only	pCi/L	NS[13]	NS[13]	NS[13]	NS[13]	Grab	

1999 First Quarter-Stormwater Discharge Monitoring Report - Outfall 003
St. Louis Airport Site (SLAPS), St. Louis, MO (continued)

MONITORING PARAMETER	FINAL EFFLUENT LIMITATIONS		UNITS[7]	ANALYTICAL RESULTS				SAMPLE TYPE	REMARKS and COMMENTS
	Daily Maximum	Monthly Average		Outfall 003					
				Chemical Parameters					
				1/18/99	1/25/99	3/10/99			
Flow	Monitor only	Monitor only	MGD	see Table 1	see Table 1	see Table 1		24-hr estimate	
Oil and Grease	15	10	mg/L	3.3	<0.5	<0.5		Grab	
Total Petroleum Hydrocarbons	10	10	mg/L	<0.5	<0.5	<0.5		Grab	
pH-Units	6.0-9.0	NA	SU	7.79	8.0	8.1		Grab	
Chemical Oxygen Demand	120	90	mg/L	17.0	13.3	31.4		Grab	
Settleable Solids	1.5	1	mL/L/hr	<0.1	<0.1	<0.1		Grab	DL[8] = 0.1 mL/L/hr
Arsenic, Total Recoverable	100	100	µg/L	3.2	<50.0	<50.0		Grab	
Lead, Total Recoverable	190	190	µg/L	4.5	<50.0	<5.0		Grab	
Chromium, Total Recoverable	280	280	µg/L	2.3	<5.0	<5.0		Grab	
Copper, Total Recoverable	84	84	µg/L	6.7	<10.0	<5.0		Grab	
Cadmium, Total Recoverable	94	94	µg/L	0.5	<5.0	<5.0		Grab	
Polychlorinated Biphenyls	No release	No release	µg/L	<1.0	<1.0	<1.0		Grab	DL[8] = 1 µg/L
				Radiological Parameters[9]					
				Event 1	Event 2	Event 3	Event 4		
Uranium 234	Monitor only	Monitor only	pCi/L	121.2	43.6	15.7	11.0	Grab	
Uranium 235	Monitor only	Monitor only	pCi/L	9.8	2.7	1.5	<0.9	Grab	
Uranium 238	Monitor only	Monitor only	pCi/L	115.0	41.0	18.4	11.5	Grab	
Uranium, Total[10,11]	Monitor only	Monitor only	µg/L	345.0	122.9	55.2	34.5	Grab	Calculated estimates
Radium-226	Monitor only	Monitor only	pCi/L	<2.3	2.3	<4.1	<2.0	Grab	
Radium-228	Monitor only	Monitor only	pCi/L	NA[12]	NA[12]	NA[12]	NA[12]	Grab	
Radium, Total[10,11]	Monitor only	Monitor only	µg/L	1.6E-06	2.3E-06	3.1E-06	1.8E-06	Grab	Calculated estimates
Thorium-228	Monitor only	Monitor only	pCi/L	<4.7	<3.0	<1.6	0.6	Grab	
Thorium-230	Monitor only	Monitor only	pCi/L	3.9	1.4	<0.9	2.1	Grab	
Thorium-232	Monitor only	Monitor only	pCi/L	<1.7	0.6	<1.0	<0.5	Grab	
Thorium, Total[10,11]	Monitor only	Monitor only	µg/L	8.7	5.7	4.8	4.1	Grab	Calculated estimates
Gross Alpha[10]	Monitor only	Monitor only	pCi/L	233.4	89.0	45.3	410.0	Grab	
Gross Beta[10]	Monitor only	Monitor only	pCi/L	40.7	19.0	24.2	<39.9	Grab	
Protactinium-231[10]	Monitor only	Monitor only	pCi/L	<4.9	<5.5	<2.5	<1.9	Grab	
Actinium-227[10]	Monitor only	Monitor only	pCi/L	<4.9	<5.5	<2.5	<1.9	Grab	
Radon (semi-annual monitoring)[10]	Monitor only	Monitor only	pCi/L	NS[13]	NS[13]	NS[13]	NS[13]	Grab	

NOTES:

1. Collect monthly samples for the following parameters: oil and grease, total petroleum hydrocarbons, pH, chemical oxygen demand, settleable solids, total recoverable arsenic, total recoverable lead, total recoverable chromium, total recoverable copper, total recoverable cadmium, polychlorinated biphenyls, total uranium, total radium, total thorium, gross alpha, gross beta, protactinium-231, and actinium-227.
2. Collect samples per rainfall event that results in a discharge for the following parameters: total uranium, total radium, total thorium, gross alpha, gross beta, protactinium-231, and actinium 227.
3. During construction of the Sedimentation Basin, stormwater was retained from entering the basin in a drainage ditch located east of the western entrance to the site. Therefore, all discharge through the specified outfall was a result of pumping activities. Representative stormwater samples were collected during pumping events.
4. During excavation at the North Ditch, stormwater was pumped to the specified outfall from areas that impacted the removal action. All discharge through the specified outfall was a result of pumping activities. Representative stormwater samples were collected during discharge events.
5. During excavation at the East End, stormwater was pumped to the specified outfall from areas that impacted the removal action. Stormwater also flowed through the specified outfall as a result of excessive rainfall events. Representative stormwater samples were collected during discharge events.
6. An event is defined as one or more occurrences of precipitation which result in pumping during a period of time sufficient to remove the volume of water necessary to conduct construction activities in a specified area.
7. Results are reported in required units.
8. DL = Detection limit
9. Value reported is based on a volume weighted average of analyte activity concentrations for samples collected during the defined event. Corresponding radiological samples were collected on the same date as chemical samples, however, the radiological results are incorporated into the volume weighted average for the specified event.
10. Final limits as specified in the permit indicate monitoring requirement only for radionuclides. Limits for radionuclides are not permit specified.
11. Total nuclide values in µg/L units were calculated using the activity concentration values reported by the laboratory and values for specific activity listed in Table 8.4.1 of *The Health Physics and Radiological Health Handbook*, 1992 Edition.
12. NA = not analyzed. Ra-228 was not analyzed. It is assumed that Ra-228 and Th-228 are in equilibrium.
13. NS = not sampled during this reporting period. Semi-annual reporting requirement only.

TABLE 1
St. Louis Airport Site (SLAPS)
Daily Rainfall and Daily Maximum Flow
First Quarter 1999

Date 1999	Rainfall (inches) 24-hour total	Daily Maximum Flow (MGD)* Outfall 001b	Outfall 002	Outfall 003
1/1	0.60	0.00	0.00	0.00
1/2	0.54	0.00	0.00	0.00
1/3	Trace	0.00	0.00	0.00
1/4	0.00	0.00	0.00	0.00
1/5	Trace	0.00	0.00	0.00
1/6	0.03	0.00	0.00	0.00
1/7	0.09	0.00	0.00	0.00
1/8	0.01	0.00	0.00	0.00
1/9	Trace	0.00	0.00	0.00
1/10	0.00	0.00	0.00	0.00
1/11	0.00	0.00	0.00	0.00
1/12	0.04	0.00	0.00	0.00
1/13	0.21	0.00	0.00	0.00
1/14	Trace	0.00	0.00	0.00
1/15	0.00	0.00	0.00	0.00
1/16	0.00	0.02	0.00	0.00
1/17	0.27	0.00	0.00	0.00
1/18	0.00	0.01	0.00	0.00
1/19	Trace	0.02	0.00	0.00
1/20	Trace	0.02	0.00	0.00
1/21	0.01	0.00	0.00	0.00
1/22	0.15	0.00	0.00	0.01
1/23	0.87	0.00	0.00	0.01
1/24	0.00	0.00	0.00	0.01
1/25	0.00	0.00	0.00	0.00
1/26	0.00	0.00	0.00	0.00
1/27	0.00	0.00	0.15	0.00
1/28	0.07	0.00	0.15	0.00
1/29	0.00	0.00	0.00	0.00
1/30	0.88	0.00	0.00	0.01
1/31	1.43	0.00	0.00	0.04
Monthly Average		0.00	0.01	0.00

Date 1999	Rainfall (inches) 24-hour total	Daily Maximum Flow (MGD)* Outfall 001b	Outfall 002	Outfall 003
2/1	0.02	0.00	0.00	0.01
2/2	0.01	0.00	0.00	0.00
2/3	0	0.03	0.19	0.00
2/4	0	0.00	0.10	0.01
2/5	Trace	0.02	0.00	0.02
2/6	0.81	0.02	0.00	0.02
2/7	1.79	0.00	0.00	0.01
2/8	0	0.02	0.20	0.02
2/9	0	0.05	0.18	0.08
2/10	0	0.08	0.09	0.06
2/11	0.41	0.10	0.03	0.03
2/12	Trace	0.09	0.02	0.03
2/13	Trace	0.11	0.08	0.00
2/14	0	0.08	0.13	0.00
2/15	0	0.08	0.04	0.00
2/16	0.26	0.07	0.00	0.00
2/17	0	0.06	0.04	0.03
2/18	0.02	0.00	0.08	0.03
2/19	Trace	0.00	0.04	0.01
2/20	Trace	0.00	0.00	0.00
2/21	Trace	0.00	0.00	0.00
2/22	Trace	0.00	0.00	0.01
2/23	0.12	0.02	0.08	0.00
2/24	0	0.02	0.00	0.00
2/25	0	0.02	0.00	0.00
2/26	0	0.01	0.00	0.00
2/27	0.08	0.00	0.00	0.00
2/28	0	0.00	0.00	0.00
Monthly Average		0.03	0.05	0.01

Date 1999	Rainfall (inches) 24-hour total	Daily Maximum Flow (MGD)* Outfall 001b	Outfall 002	Outfall 003
3/1	0	0.02	0.01	0.01
3/2	0.19	0.02	0.03	0.00
3/3	0	0.01	0.03	0.00
3/4	0	0.01	0.00	0.00
3/5	0.27	0.00	0.00	0.00
3/6	Trace	0.00	0.00	0.00
3/7	0	0.00	0.00	0.00
3/8	0.85	0.00	0.00	0.01
3/9	0	0.00	0.00	0.00
3/10	Trace	0.02	0.08	0.00
3/11	0	0.01	0.00	0.02
3/12	0	0.02	0.00	0.02
3/13	Trace	0.02	0.00	0.02
3/14	0.01	0.00	0.00	0.00
3/15	0	0.02	0.00	0.00
3/16	0	0.02	0.01	0.00
3/17	0	0.02	0.01	0.00
3/18	0	0.00	0.00	0.00
3/19	0	0.00	0.00	0.00
3/20	0	0.00	0.00	0.00
3/21	0	0.00	0.00	0.00
3/22	0.3	0.00	0.00	0.00
3/23	0.64	0.01	0.02	0.01
3/24	0	0.02	0.02	0.01
3/25	0	0.02	0.00	0.01
3/26	0	0.02	0.00	0.00
3/27	0	0.02	0.00	0.00
3/28	0.14	0.00	0.00	0.00
3/29	0	0.02	0.00	0.01
3/30	0	0.02	0.00	0.00
3/31	0	0.02	0.00	0.00
Monthly Average		0.01	0.01	0.00

Notes:
*Daily maximum flow values area based on 24-hour

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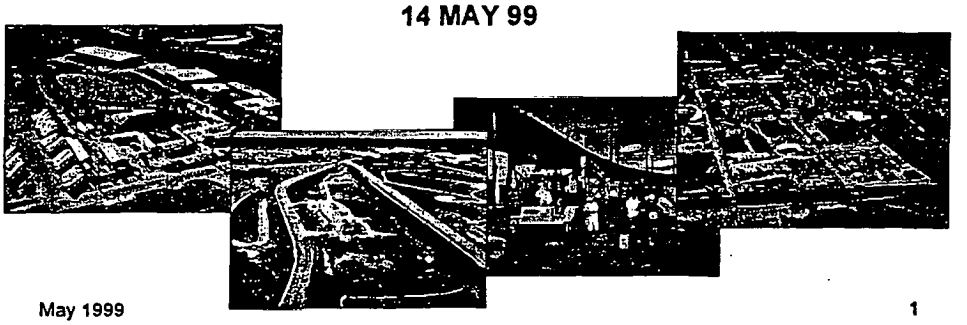
FUSRAP

Gateway to Excellence

St. Louis
Oversight Committee Meeting
Corps Update

14 MAY 99



May 1999

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Notes

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Agenda

Gateway to Excellence

- Mississippi Valley Division
- Progress Report
- Personnel Protective Equipment (PPE)
- Community Interactions
- Taskers
- Questions

May 1999

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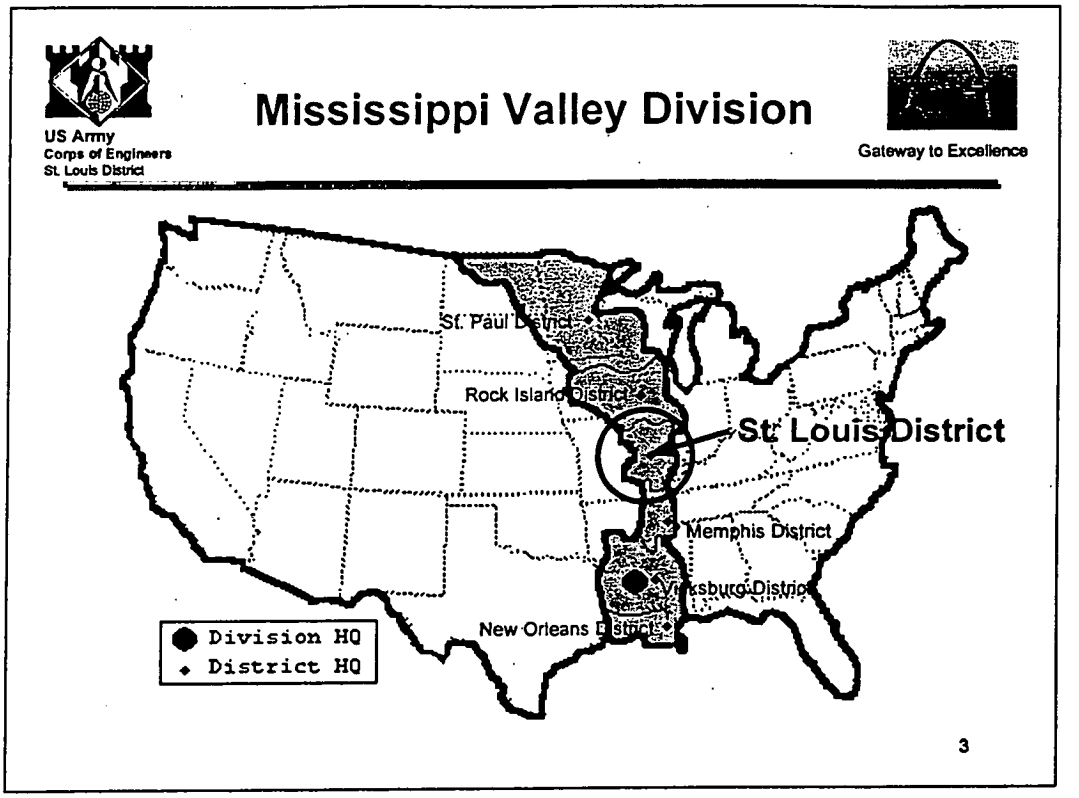
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Mississippi Valley Division
Gateway to Excellence
St. Paul District
Rock Island District
St. Louis District
Memphis District
Vicksburg District
New Orleans District
Division HQ
District HQ
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Progress Report
St. Louis Airport Site (SLAPS)

Gateway to Excellence

- **Radian International to be replaced by Stone & Webster 17 MAY**
- **Radian North Ditch / Sedimentation Basin Construction effort**
  - North Ditch (including Sediment Trap) - 16,148 cyds - 63%
    - Descoped to 10,173 cubic yards
    - Stone and Webster will complete Sedimentation Trap backfill
  - Sedimentation Basin - 13,978 cyds - 100%
    - Treated and released 1,000,000 gallons of water - S Ditch
    - Released 2.8 million gallons - N Ditch, S Ditch & East End
- **SLAPS East End Construction ongoing**
  - 9,000 cy by PRAC (Radian) -100%
    - Prepared 800 cyds of asbestos for shipment
    - Stone and Webster will ship asbestos
  - 15,000 cy by TERC (Stone & Webster) starting 1 JUN 99
    - Task Orders have been negotiated and awarded
- **Rail Shipments off SLAPS and Eva**
  - 474 gondola railcars shipped to date (33,654 cyds)

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Notes

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Progress Report
Hazelwood Interim Storage Site (HISS)/Latty Avenue

Gateway to Excellence

- **HISS and Eastern Pile Removal (40,000 cy total).**
  - Finalizing Plans and Specifications for HISS piles
  - RFP to contractor May 15th for Eastern Piles (7,500 cubic yards)
    - Continue coordination with Property Owner
  - Estimated FY99 removal is 4,000 cy (constrained by funds)
  - Initial start date is July 99

May 1999

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Notes

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Progress Report
SLAPS Vicinity Properties

Gateway to Excellence

- **Negotiating Laboratory lease and Right-of-Way with several Vicinity Property owners.**
  - SUPERVALU property is the likely lab location
- **No remediation currently scheduled this fiscal year**
- **Developing remediation strategy**
  - Risk based priorities list by end of FY99.
- **Finalizing release letter for remediated properties.**
  - VP56 (Pershall Road) and St. Denis Bridge
    - Will coincide with PRAR (Post Remedial Action Report)

May 1999

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Notes

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Progress Report
St. Louis Downtown Site (SLDS)

Gateway to Excellence

- **IT Corp. design activities**
  - Plant 1 Remedial Design - mid Jun completion
    - Data gap analysis ongoing - 40 additional borings to further define the extent of contamination
    - Class II sampling ongoing
- **IT Corp remediation efforts**
  - Remediation of City Properties is 100% complete - backfill complete. (4,500 cy)
  - Plant 2 began on 6 JAN with slab break up. Subsurface excavation ongoing (8,500) - 42% complete.
  - Treated 142,000 gallons to date - released to MSD
- **Partnering Meeting held 22 APR**
  - MDNR, Mallinckrodt, SAIC, IT and USACE attended
  - Communication of contract requirements was primary issue
- **107 gondola cars shipped to date. (7,597 cy)**

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Notes

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Progress Report
Other Issues

Gateway to Excellence

- **North County Feasibility Study/ROD & ARARs**
  - First pass of ARAR's in MVS Office of Counsel
  - PCOC Assessment Memo to regulators by end of month
  - Eco risk meeting held with USEPA on 29 April
    - Screening Risk Assessment provided to USEPA 10 May
    - ECO risk sampling starts 20 May
    - 7 Jun follow up meeting with USEPA
    - 1 Aug determination date for CWC inclusion in North County ROD
  - Land use designation under CoE review
  - Definition of operable units under CoE review
  - Definition of inaccessible soils under CoE review
- **Request for additional funds to HQUSACE submitted**
  - **Funds request submitted by priority**
- **Nationwide Disposal Contract**
  - Award in May? No change in status from last month

Notes

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Personnel Protective Equipment (PPE)

Gateway to Excellence

- Level of PPE is addressed on a task by task basis (Activity specific)
- Levels of Protection (USEPA Terminology is used)
  - A/B - Not anticipated (Full protective clothing and supplied air respiratory protection)
  - C - Is anticipated during this project (Protective clothing, air purifying respiratory protection and Level D)
    - Used in removal actions (e.g. initial entry into the radium pits)
    - Required when airborne concentrations of contaminants are unknown or may exceed action levels for contaminants
  - D Modified - Is used frequently (Protective clothing, gloves and Level D)
    - Used in removal actions
    - Excavate and remove contaminated soil / install berms and silt fences / load out of soil
  - D - Minimum level of protection to be used on the site (Hard hat, safety glasses and work boots)
    - Used for General Site Conditions
    - Field mobilization / install temporary facilities

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Notes

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Community Interactions

Gateway to Excellence

- **Recent Events**
  - Post Dispatch article on Corps disposal
    - Based on concerns of Envirocare and their litigation of the CoE Nationwide Disposal Contract.
  - Supported Real Life Adventures in Science Day at the District
    - FUSRAP display for school kids in 6th to 9th grade
- **Upcoming Events**
  - Earth Day at Chain of Rocks

May 1999

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Notes

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Taskers

Gateway to Excellence

- **Old Taskers**
  - List of Nationwide Disposal Contract Bidders (Not Complete - bidders names not releasable until award - will furnish names upon award)
  - Participation at Air & Waste Management Conference - called Mr. Binz and Mr. Frauenhoffer. Due to the late date we will not be able to participate (Complete)
  - Develop color maps showing completed areas (Working)
  - Send O&M manual of the treatment facility to the Oversight Committee members (Complete)
  - Discuss how USACE dresses out for work (Complete)
  - Respond to the Mr. Larson memorandum (Complete)
  - How often are the air monitors around the site checked? (Complete)
  - Distribute the Quarterly Monitoring Report to the Committee at the May meeting (Complete)
- **New Taskers**

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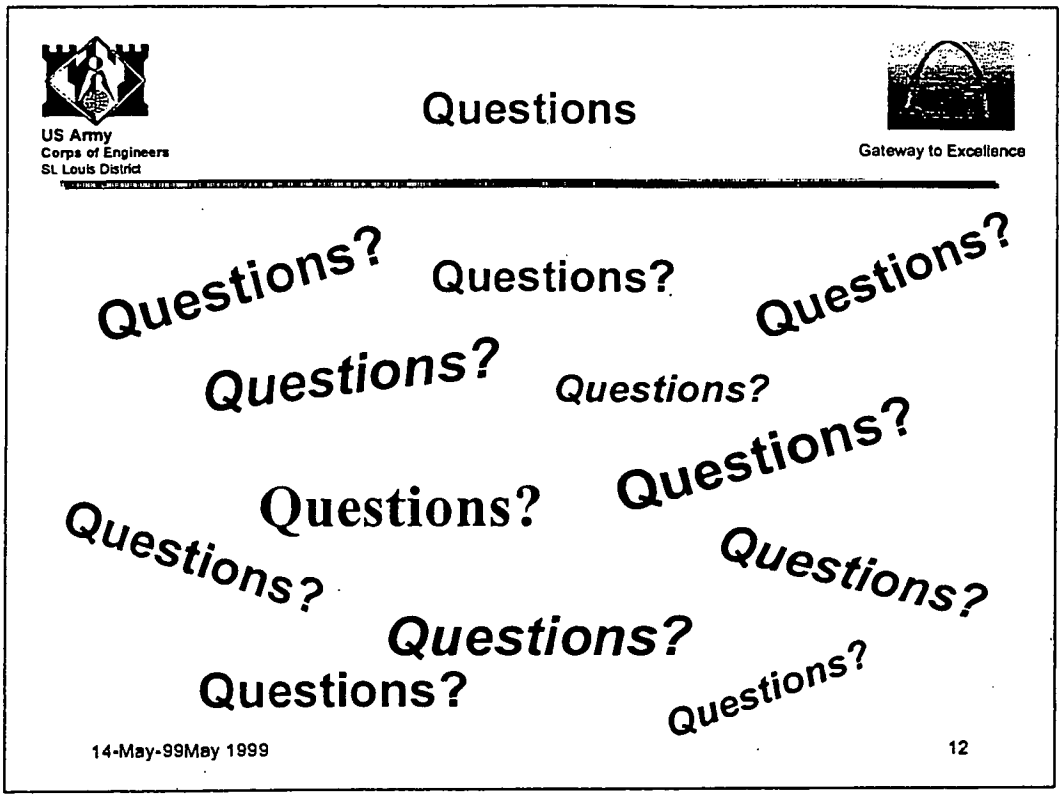
Notes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Notes

Cataloging Form

{Technical/Project Managers fill in C through G, K through Q. RM completes other fields}

A. Document ID Number: Assigned by database 796 B. *Further Information Required?*: ☐

C. *Operable Unit (Choose One):*

USACE	☐
St. Louis Sites	☐
Downtown	☐
North County	☐
Madison Sites	☐
Inaccessible Areas	☐
PRP	☐
Oversight Committee	☒

D. *Site (Optional):*

SLDS VPs	☐
Mallinckrodt	☐
SLAPS	☐
SLAPS VPs	☐
CWC	☐
HISS	☐
Madison	☐

E. *Area (Optional):* _____

F. *Primary Document Type (Choose One):*

Site Management Records	☐	Remedial Action	☐
Removal Response	☐	Public Affairs/Community Relations	☒
Remedial Investigation	☐	Congressional Relations	☐
Feasibility Study	☐	Freedom of Information Act	☐
Record of Decision	☐	Real Estate	☐
Remedial Design	☐	Project Management	☐

G. *Secondary Document Type (see back of form):* Correspondence

H. *Bechtel Number:* _____ I. *SAIC Number:* _____

J. *MARKS Number(Choose One):* FN: 1110-1-8100e ☐ FN: 1110-1-8100f ☐ FN: 1110-1-8100g ☐

K. *Subject:/Title:* St. Louis Oversight Committee Meeting Minutes from 5/14,

L. *Author:* Richard Cavanaugh M. *Author's Company:* Oversight Committee

N. *Recipient(s):* _____ O. *Recipient(s) Company:* Distribution

P. *Version (Choose One):* Draft ☐ Final ☒ Q. Date: 6/2/99

R. *Include in the ARF?* ☒ S. *Include in the AR?* ☐ T. *Filed as Confidential/Privileged?* ☐

U. *Document Format (Choose one):*

Paper	☒	Photographic	☐	Cartographic/Oversize	☐
Electronic	☐	Audio-visual	☐	Microform	☐

V. *Filed in AR Volume Number:* _____

W. *Physical Location (Choose One):*

Central Files	☒	Microfilm Vendor	☐	In ARF	☐
Records Holding Area	☐	Department of Energy	☐	In AR	☐

X. *Associated with Document(s):* _____

Secondary Document Types

- ☐ Amendments to Record of Decision (ROD)
- ☐ Anomaly Review Board Documents (Management Plan, Correspondence, Standard Operating Procedures, Findings)
- ☐ Applicable or Relevant and Appropriate Requirements (ARAR) Determinations
- ☐ Archives Search Reports (ASR)
- ☐ Briefing Papers
- ☐ Chain of Custody Forms
- ☐ Community Relations Plan
- ☐ Correspondence
- ☐ Daily Operations Summary/Situation Reports
- ☐ Engineering Evaluation and Cost Analysis (EE/CA) Action Memo
- ☐ Engineering Evaluation and Cost Analysis (EE/CA) Approval Memorandum
- ☐ Engineering Evaluation and Cost Analysis (EE/CA)
- ☐ Explanation of Significant Differences
- ☐ Fact Sheets/Newsletters
- ☐ Feasibility Study (FS) Reports
- ☐ Federal, State, Local Tech. Records
- ☐ Final Approved Findings and Determinations
- ☐ Final Remedial Design Documents
- ☐ Freedom of Information (FOIA) Requests
- ☐ Freedom of Information (FOIA Responses)
- ☐ Health and Endangerment Assessments
- ☐ Interagency Agreements/Memoranda
- ☐ Interim Deliverables
- ☐ Inventory Project Report (INPR) Risk Assessment Code (RAC)
- ☐ Invoices/Contractor Payments/Cost Reports
- ☐ Land Grants/Deeds
- ☐ Mailing Lists
- ☐ News Clippings and Press Releases
- ☐ No Further Action Docs (NOFA)
- ☐ On-Scene Coordinator Reports
- ☐ Proposed Plans for Remedial Action
- ☐ Public Meeting Minutes/Transcripts
- ☐ Public Notices
- ☐ Public notices, Comments Received, Responses to the Comments
- ☐ Published Hearings
- ☐ Record of Decision (ROD)
- ☐ Reference Documents
- ☐ Remedial Action Documents
- ☐ Remedial Investigation (RI) Reports
- ☐ Removal Response Reports (Emergency Evacuation Orders)
- ☐ Rights of Entry Documents
- ☐ Sampling/Analysis Data and Plans
- ☐ Scopes of Work/Contractual Documents
- ☐ Site Descriptions and Chronologies
- ☐ Site Inspection Documents
- ☐ Site Photographs and Maps
- ☐ Testimonies
- ☐ Title Search Documents
- ☐ Work Logs
- ☐ Work Plans and Progress Reports
- ☐ Work Plans/Site Safety and Health Plans and Progress Reports
- ☐ Work Register and Logs