November 24, 2008

Louis F. (Rick) Smith, Jr.
East Goshen Township Manager
1580 Paoli Pike
West Chester, PA 19380-6199

RE: Summary of Sediment Sampling Results
Hershey Mill Dam, East Goshen Township, PA

Dear Mr. Smith:

URS is pleased to present this letter report summarizing sediment sampling activities conducted at the above referenced site. URS conducted our sampling of the impounded sediment at Hershey Mill Dam on November 3, 2008. URS completed sampling at the locations shown on attached Figure 1. The site was discretized into three areas for collection of a representative composite sediment sample from each area, representing the inflow areas for each contributing tributary stream; L-2 at the northwest portion of the impoundment, L-3 at the northeast portion of the impoundment, and L-1 in the area immediately upstream of the dam. Within each area, five or six individual samples made up the composite sample.

The sample locations were accessed by boat and the two-man sampling crew conducted sediment sampling probes using a combination of a drive core sampler and stainless steel hand auger. The drive sampler uses a slide hammer to drive a Lexan sampling core so that the sample can be retrieved and viewed in a relatively undisturbed state. In some cases where the entire sample could not be retrieved in the core sampler, a stainless steel auger was advanced to capture the remaining sediment. All sampling locations were sampled to the point of sampler refusal, which is interpreted to indicate the historic streambed and/or man-made features. Sampling equipment was decontaminated between each sampling location using a de-ionized water rinse. Samples from each sampling location were segregated in a stainless steel tray to make up the composite sample for each of the three sampled areas. Field notes were taken documenting the water depth, depth of impounded sediment to sampler refusal, Global Positioning System (GPS) location (x, y, and z coordinates), and a description of the encountered sediments including texture, color, and other pertinent observations.

The composite samples were stored in an iced cooler and transported under chain-of-custody to the analytical laboratory, Pace Analytical, where each composite sample was analyzed for United States Environmental Protection Agency (USEPA) Priority Pollutant compounds including metals, pesticides, and polychlorinated biphenyls (PCBs). The laboratory reports are included in Attachment 1 to this letter, and the results are summarized in Table 1. Table 2 provides a summary of the field observations and data collected during sampling.

The sediment sampling summarized in Table 2 indicates that the thickness of impounded sediment in Area L-1 ranges from 1.5 feet to almost three feet, and consists of a thin layer of dark organic material, primarily dead and decomposed vegetation, underlain by a gray to tan mottled silt with clay. These materials were not firm and likely do not demonstrate significant compressive strength. It is possible based upon the relatively shallow depth of sampler refusal and the observation that the sampler encountered rock at those depths, that a rock-filled timber crib exists upstream of the dam, as is common with older mill dams. It is likely that upstream of L-1 toward the middle of the impoundment that accumulated sediment is thicker.

The sediment in area L-2 ranged in thickness from 0.05 feet to nearly 6 feet, and contained significantly more sand (mostly fine) than the L-1 area. These materials likely provide higher compressive strength than those in L-1. Sediment in the L-3 area ranged in thickness from 1.1 feet to 2.3 feet based upon sampler refusal, and are described as a silty clay with some fine sand. The sediment in this area does not appear to have significant compressive strength.

The results of the chemical analyses of the composite sediment samples are presented in Table 1. The results are compared to the National Oceanic and Atmospheric Administration (NOAA) Threshold Effects Level (TEL) and Probable Effects Level (PEL) for freshwater sediments. This is the industry-standard comparison for potential sediment release impacts to freshwater streams under the Pennsylvania Department of Environmental Protection Agency (PADEP) Dam Safety program. The TEL is a risk-based concentration at which certain index species may be impacted due to long-term exposure, and the PEL is the concentration at which impacts due to long-term exposure are expected. The PEL generally represents an action level requiring mitigation for sediment releases from dam removal projects. No result from the samples collected at Hershey Mill Dam exceeded the PEL for any of the analyzed compounds. The TEL for several metals was exceeded (arsenic, copper, lead, nickel, and zinc) in all of the three samples, except in the case of lead, for which the TEL was exceeded in two of the three samples. The concentrations of these metals were generally consistent among the three sample locations, and within naturally-occurring background concentration for these metals.

It is URS' opinion that the sediment results do not indicate any potential impact by contaminants that would require special handling of sediment if it were removed from the impoundment, and the concentration of all compounds analyzed from all sediments at the Site are less than the concentration limits for use as clean fill in Pennsylvania (PADEP Clean Fill Standards).

Please contact me if you have any questions about this letter report.

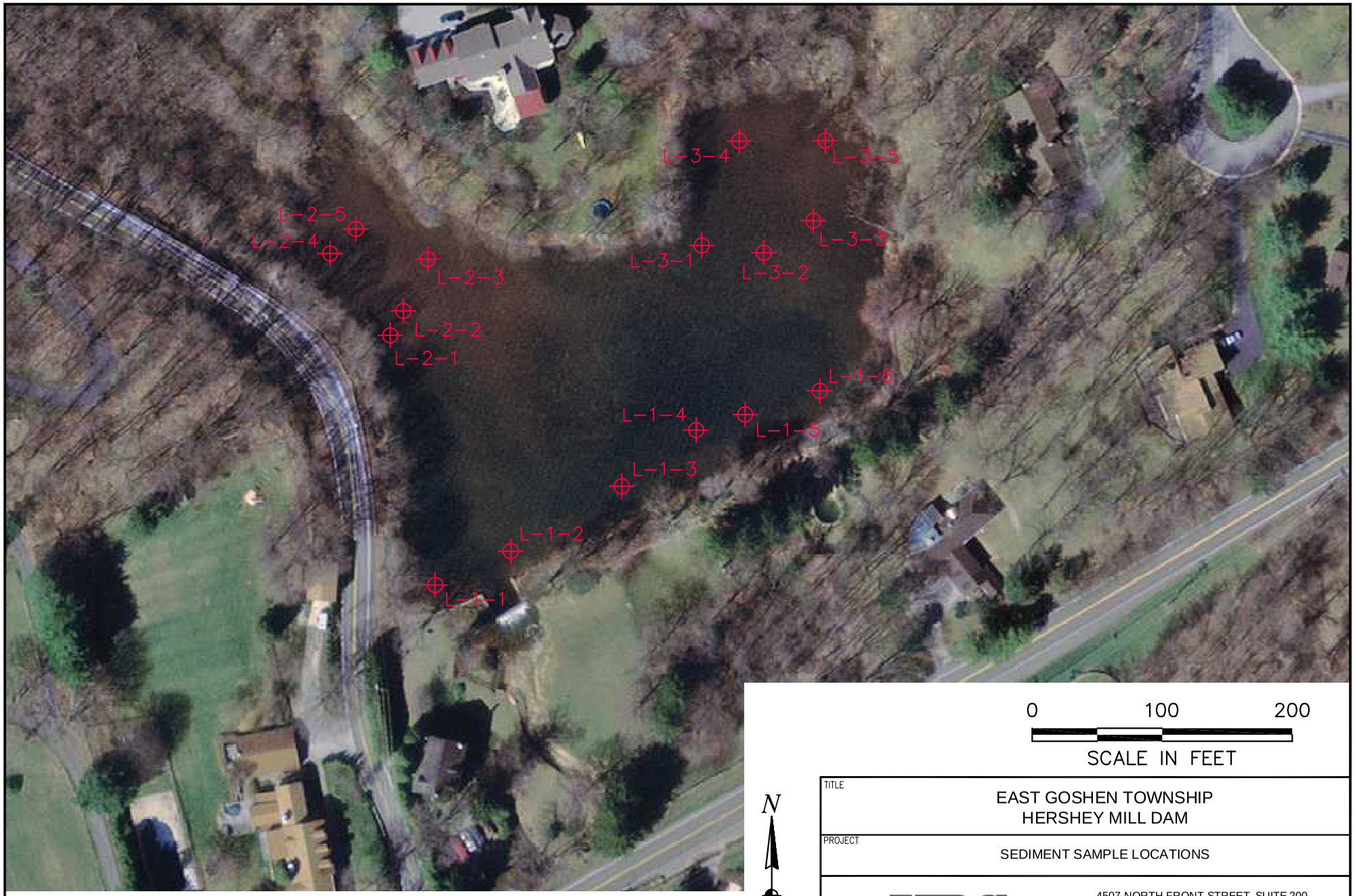
Sincerely,

URS Corporation

Mark D. Pennell

Mark D. Pennell, Vice President

4507 North Front Street, Suite 200
Harrisburg, PA 17110
Tel: 717.635.7901
Fax: 717.635.7902
cellular telephone: 717-253-6405
mark_pennell@URSCorp.com



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SCALE IN FEET

N

LEGEND

L-1-1 SEDIMENT SAMPLE LOCATIONS

TITLE	EAST GOSHEN TOWNSHIP HERSHEY MILL DAM
PROJECT	SEDIMENT SAMPLE LOCATIONS

URS

4507 NORTH FRONT STREET, SUITE 200
HARRISBURG, PENNSYLVANIA 17110
(717) 635-7901 FAX (717) 635-7902
www.urscorp.com

SCALE	1" = 100'	DWN. BY	JAK	JOB NO.	20497916
DATE	11/24/08	APPR. BY	MDP	FIG. NO.	1

Table 1

Summary of Composite Sediment Sample Results

Hershey Mill Dam (D15-125)

West Branch Ridley Creek

East Goshen Township, Chester County, Pennsylvania

Compound	Units	Composite Sample ID			NOAA TEL	NOAA (PEL)
		L-1	L-2	L-3		
METALS						
Mercury	mg/kg	<0.31	<0.24	0.31	0.174	0.486
Antimony	mg/kg	<1.6	<1.2	<0.96		
Arsenic	mg/kg	8.1	8.2	7.3	5.9	17
Beryllium	mg/kg	0.96	0.82	0.96		
Cadmium	mg/kg	<0.62	<0.48	<0.38	0.596	3.53
Chromium	mg/kg	30	25	26	37.3	90
Copper	mg/kg	75	40	30	35.7	197
Lead	mg/kg	47	44	36	35	91.3
Nickel	mg/kg	32	28	23	18	35.9
Selenium	mg/kg	<1.6	1.5	1.1		
Silver	mg/kg	<0.62	<0.48	<0.38		
Thallium	mg/kg	<6.2	<4.8	<3.8		
Zinc	mg/kg	190	150	130	123.1	315
PESTICIDES						
Aldrin	mg/kg	<0.16	<0.12	<0.096		
alpha-BHC	mg/kg	<0.16	<0.12	<0.096		
beta-BHC	mg/kg	<0.16	<0.12	<0.096		
delta-BHc	mg/kg	<0.16	<0.12	<0.096		
gamma-BHC (Lindane)	mg/kg	<0.16	<0.12	<0.096		
Technical Chlordane	mg/kg	<1.6	<1.2	<0.96		
4,4'-DDD	mg/kg	<0.31	<0.24	<0.19		
4,4'-DDE	mg/kg	<0.31	<0.24	<0.19		
4,4'-DDT	mg/kg	<0.31	<0.24	<0.19		
Dieldrin	mg/kg	<0.31	<0.24	<0.19		
Endosulfan I	mg/kg	<0.16	<0.12	<0.096		
Endosulfan II	mg/kg	<0.31	<0.24	<0.19		
Endosulfan sulfate	mg/kg	<0.31	<0.24	<0.19		
Endrin	mg/kg	<0.31	<0.24	<0.19		
Endrin aldehyde	mg/kg	<0.31	<0.24	<0.19		
Heptachlor	mg/kg	<0.16	<0.12	<0.096		
Heptachlor epoxide	mg/kg	<0.16	<0.12	<0.096		
Toxaphene	mg/kg	<3.1	<2.4	<1.9		
POLYCHLORINATED BIPHENYLS IN SOIL						
PCB-1016 (Aroclor 1016)	mg/kg	<3.1	<2.4	<1.9		
PCB-1221 (Aroclor 1221)	mg/kg	<3.1	<2.4	<1.9		
PCB-1232 (Aroclor 1232)	mg/kg	<3.1	<2.4	<1.9		
PCB-1242 (Aroclor 1242)	mg/kg	<3.1	<2.4	<1.9		
PCB-1248 (Aroclor 1248)	mg/kg	<3.1	<2.4	<1.9		
PCB-1254 (Aroclor 1254)	mg/kg	<3.1	<2.4	<1.9		
PCB-1260 (Aroclor 1260)	mg/kg	<3.1	<2.4	<1.9		

*** NOAA = National Oceanic Atmospheric Administration**

TEL = Threshold Effects Level (exceedences highlighted in yellow)

PEL = Probable Effects Level (no exceedences)

Table 2

Summary of Sediment Borings

Hershey Mill Dam (D15-125) West Branch Ridley Creek, East Goshen Township, Chester County, Pennsylvania

Date: 11/3/2008

Weather: Cool (40s), overcast, breezy, some recent precip.

Personnel: Dennis Roman/Aaron Jones

Project: Hershey Mill Dam

Project No: 20497916

Location	Lab sample ID	Depth from water surf. (ft)	Sediment thickness (ft)	x-coord	y-coord	Elevation (ft amsl)	Description
L1-1	**HMD L-1 COMP**	3.2	1.5	40° 00.792	75° 33.473	NM	0'-0.5' Silt, Dark organic over 0.5'-1.5' mottled gray/tan silt, TR clay
L1-2	**HMD L-1 COMP**	3.2	2.7	40° 00.796	75° 33.461	454	Slt, Dark organic over gray/tan wet minimal amounts of clay
L1-3	**HMD L-1 COMP**	3.2	2.8	40° 00.804	75° 33.443	454	Slt, Dark organic over gray/tan wet clay
L1-4	**HMD L-1 COMP**	2.85	2.85	40° 00.811	75° 33.431	454	Slt, Dark organic over gray/tan wet clay
L1-5	**HMD L-1 COMP**	3	2	40° 00.813	75° 33.423	466	Slt, Dark organic over gray/tan wet clay
L1-6	**HMD L-1 COMP**	2.5	2.5	40° 00.816	75° 33.411	458	Slt, Dark organic over gray/tan wet clay
L2-1	**HMD L-2 COMP**	0.4	5.6	40° 00.822	75° 33.479	466	Organic odor, more clay than silt
L2-2	**HMD L-2 COMP**	0.5	1	40° 00.827	75° 33.480	473	Sandy, little Fsand, organic matter
L2-3	**HMD L-2 COMP**	0.8	1.1	40° 00.833	75° 33.474	468	Sandy, little Fsand, organic matter
L2-4	**HMD L-2 COMP**	1.2	0.4	40° 00.833	75° 33.490	465	Sandy, little Fsand, organic matter, clay present
L2-5	**HMD L-2 COMP**	0.6	0.05	40° 00.836	75° 33.486	463	Sandy, little Fsand, organic matter, clay present
L3-1	**HMD L-3 COMP**	1.2	1.4	40° 00.834	75° 33.43	451	Organic odor, more clay than silt
L3-2	**HMD L-3 COMP**	0.9	2.3	40° 00.833	75° 33.420	475	Organic odor, more clay than silt, organic material present
L3-3	**HMD L-3 COMP**	0.7	1.3	40° 00.837	75° 33.412	467	Organic odor, more clay than silt, organic material present
L3-4	**HMD L-3 COMP**	0.3	1.1	40° 00.847	75° 33.424	433	Organic odor, more clay than silt, organic material present
							little F sand
L3-5	**HMD L-3 COMP**	0.3	1.1	40° 00.847	75° 33.410	474	Organic odor, more clay than silt, organic material present
							little F sand

Notes: Elevation measurements taken with GPS in the field are only accurate to within 2 meters

November 14, 2008

Mr. Dennis Roman
URS Corporation
4507 N. Front Street, Suite 200
Harrisburg, PA 17110

Dear Mr. Roman:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on November 5, 2008. The results reported in this project meet the requirements as specified in Chapter 5 of the NELAC Standards. Any deviations or discrepancies from the NELAC standards are documented in the case narrative(s) of this report. Parameters printed in italics represent Non-NELAC accredited parameters. Please reference Pace project number 08-8246 when inquiring about this report.

Client Site: Hershey Mill Dam
Client Ref.: Priority Pollutant Analysis

Pace Sample Identification	Client Sample Identification
0811-0667	HMD L-1 COMP
0811-0668	HMD L-2 COMP
0811-0669	HMD L-3 COMP

General Comments: Cooler temperature 4.2 °C upon receipt. Ice was present.

Please call me if you have any questions regarding the information contained within this report.

Sincerely,

Raelyn E. Sylvester
Project Manager

REC: rec

Enclosures

Mr. Dennis Roman
URS Corporation
4507 N. Front Street, Suite 200
Harrisburg, PA 17110

Client Site: Hershey Mill Dam
Client Ref.: Priority Pollutant Analysis

Lab Project ID: **08-8246**
Lab Sample ID: **0811-0667**
Client Sample ID: HMD L-1 COMP
Sample Matrix: Solid

Date Sampled: 11/03/2008
Date Received: 11/05/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	32	N/A	%	DAB	11/05/2008	N/A	N/A

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Mercury, Total, CVAAS								
Mercury	7471(1)	<0.31	0.31	mg/kg	CS0	11/11/2008	0078779-1	<0.10
Trace Metals, Total, ICP								
Antimony	6010B(1)	<1.6	1.6	mg/kg	CS0	11/12/2008	0078929-1	<0.50
Arsenic	6010B(1)	8.1	1.6	mg/kg	CS0	11/12/2008	0078929-1	<0.50
Beryllium	6010B(1)	0.96	0.62	mg/kg	CS0	11/12/2008	0078929-1	<0.20
Cadmium	6010B(1)	<0.62	0.62	mg/kg	CS0	11/12/2008	0078929-1	<0.20
Chromium	6010B(1)	30	1.6	mg/kg	CS0	11/12/2008	0078929-1	<0.50
Copper	6010B(1)	75	3.1	mg/kg	CS0	11/12/2008	0078929-1	<1.0
Lead	6010B(1)	47	1.6	mg/kg	CS0	11/12/2008	0078929-1	<0.50
Nickel	6010B(1)	32	6.2	mg/kg	CS0	11/12/2008	0078929-1	<2.0
Selenium	6010B(1)	<1.6	1.6	mg/kg	CS0	11/12/2008	0078929-1	<0.50
Silver	6010B(1)	<0.62	0.62	mg/kg	CS0	11/12/2008	0078929-1	<0.20
Thallium	6010B(1)	<6.2	6.2	mg/kg	CS0	11/12/2008	0078929-1	<2.0
Zinc	6010B(1)	190	3.1	mg/kg	CS0	11/12/2008	0078929-1	<1.0

Pesticides/PCB

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Polychlorinated Biphenyls, ECD								
Aroclor-1016	8082(1)	<3.1	3.1	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Aroclor-1221	8082(1)	<3.1	3.1	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Aroclor-1232	8082(1)	<3.1	3.1	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Aroclor-1242	8082(1)	<3.1	3.1	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Aroclor-1248	8082(1)	<3.1	3.1	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Aroclor-1254	8082(1)	<3.1	3.1	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Aroclor-1260	8082(1)	<3.1	3.1	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Pesticides, ECD								

(Continued)

Lab Sample ID: **0811-0667**
Client Sample ID: HMD L-1 COMP

Pesticides/PCB (Cont.)

Aldrin	8081[1]	<0.16	0.16	mg/kg	SJG	11/11/2008	0078793-1	<0.050
alpha-BHC	8081[1]	<0.16	0.16	mg/kg	SJG	11/11/2008	0078793-1	<0.050
beta-BHC	8081[1]	<0.16	0.16	mg/kg	SJG	11/11/2008	0078793-1	<0.050
delta-BHC	8081[1]	<0.16	0.16	mg/kg	SJG	11/11/2008	0078793-1	<0.050
gamma-BHC	8081[1]	<0.16	0.16	mg/kg	SJG	11/11/2008	0078793-1	<0.050
Technical Chlordane	8081[1]	<1.6	1.6	mg/kg	SJG	11/11/2008	0078793-1	<0.50
4-4'-DDD	8081[1]	<0.31	0.31	mg/kg	SJG	11/11/2008	0078793-1	<0.10
4,4'-DDE	8081[1]	<0.31	0.31	mg/kg	SJG	11/11/2008	0078793-1	<0.10
4,4'-DDT	8081[1]	<0.31	0.31	mg/kg	SJG	11/11/2008	0078793-1	<0.10
Dieldrin	8081[1]	<0.31	0.31	mg/kg	SJG	11/11/2008	0078793-1	<0.10
Endosulfan I	8081[1]	<0.16	0.16	mg/kg	SJG	11/11/2008	0078793-1	<0.050
Endosulfan II	8081[1]	<0.31	0.31	mg/kg	SJG	11/11/2008	0078793-1	<0.10
Endosulfan sulfate	8081[1]	<0.31	0.31	mg/kg	SJG	11/11/2008	0078793-1	<0.10
Endrin	8081[1]	<0.31	0.31	mg/kg	SJG	11/11/2008	0078793-1	<0.10
Endrin aldehyde	8081[1]	<0.31	0.31	mg/kg	SJG	11/11/2008	0078793-1	<0.10
Heptachlor	8081[1]	<0.16	0.16	mg/kg	SJG	11/11/2008	0078793-1	<0.050
Heptachlor Epoxide	8081[1]	<0.16	0.16	mg/kg	SJG	11/11/2008	0078793-1	<0.050
Toxaphene	8081[1]	<3.1	3.1	mg/kg	SJG	11/11/2008	0078793-1	<1.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

Mr. Dennis Roman
URS Corporation
4507 N. Front Street, Suite 200
Harrisburg, PA 17110

Client Site: Hershey Mill Dam
Client Ref.: Priority Pollutant Analysis

Lab Project ID: **08-8246**
Lab Sample ID: **0811-0668**
Client Sample ID: HMD L-2 COMP
Sample Matrix: Solid

Date Sampled: 11/03/2008
Date Received: 11/05/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	42	N/A	%	DAB	11/05/2008	N/A	N/A

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Mercury, Total, CVAAS								
Mercury	7471(1)	<0.24	0.24	mg/kg	CS0	11/11/2008	0078779-1	<0.10
Trace Metals, Total, ICP								
Antimony	6010B(1)	<1.2	1.2	mg/kg	CS0	11/12/2008	0078929-1	<0.50
Arsenic	6010B(1)	8.2	1.2	mg/kg	CS0	11/12/2008	0078929-1	<0.50
Beryllium	6010B(1)	0.82	0.48	mg/kg	CS0	11/12/2008	0078929-1	<0.20
Cadmium	6010B(1)	<0.48	0.48	mg/kg	CS0	11/12/2008	0078929-1	<0.20
Chromium	6010B(1)	25	1.2	mg/kg	CS0	11/12/2008	0078929-1	<0.50
Copper	6010B(1)	40	2.4	mg/kg	CS0	11/12/2008	0078929-1	<1.0
Lead	6010B(1)	44	1.2	mg/kg	CS0	11/12/2008	0078929-1	<0.50
Nickel	6010B(1)	28	4.8	mg/kg	CS0	11/12/2008	0078929-1	<2.0
Selenium	6010B(1)	1.5	1.2	mg/kg	CS0	11/12/2008	0078929-1	<0.50
Silver	6010B(1)	<0.48	0.48	mg/kg	CS0	11/12/2008	0078929-1	<0.20
Thallium	6010B(1)	<4.8	4.8	mg/kg	CS0	11/12/2008	0078929-1	<2.0
Zinc	6010B(1)	150	2.4	mg/kg	CS0	11/12/2008	0078929-1	<1.0

Pesticides/PCB

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Polychlorinated Biphenyls, ECD								
Aroclor-1016	8082(1)	<2.4	2.4	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Aroclor-1221	8082(1)	<2.4	2.4	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Aroclor-1232	8082(1)	<2.4	2.4	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Aroclor-1242	8082(1)	<2.4	2.4	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Aroclor-1248	8082(1)	<2.4	2.4	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Aroclor-1254	8082(1)	<2.4	2.4	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Aroclor-1260	8082(1)	<2.4	2.4	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Pesticides, ECD								

(Continued)

Lab Sample ID: **0811-0668**
Client Sample ID: HMD L-2 COMP

Pesticides/PCB (Cont.)

Aldrin	8081[1]	<0.12	0.12	mg/kg	SJG	11/11/2008	0078793-1	<0.050
alpha-BHC	8081[1]	<0.12	0.12	mg/kg	SJG	11/11/2008	0078793-1	<0.050
beta-BHC	8081[1]	<0.12	0.12	mg/kg	SJG	11/11/2008	0078793-1	<0.050
delta-BHC	8081[1]	<0.12	0.12	mg/kg	SJG	11/11/2008	0078793-1	<0.050
gamma-BHC	8081[1]	<0.12	0.12	mg/kg	SJG	11/11/2008	0078793-1	<0.050
Technical Chlordane	8081[1]	<1.2	1.2	mg/kg	SJG	11/11/2008	0078793-1	<0.50
4-4'-DDD	8081[1]	<0.24	0.24	mg/kg	SJG	11/11/2008	0078793-1	<0.10
4,4'-DDE	8081[1]	<0.24	0.24	mg/kg	SJG	11/11/2008	0078793-1	<0.10
4,4'-DDT	8081[1]	<0.24	0.24	mg/kg	SJG	11/11/2008	0078793-1	<0.10
Dieldrin	8081[1]	<0.24	0.24	mg/kg	SJG	11/11/2008	0078793-1	<0.10
Endosulfan I	8081[1]	<0.12	0.12	mg/kg	SJG	11/11/2008	0078793-1	<0.050
Endosulfan II	8081[1]	<0.24	0.24	mg/kg	SJG	11/11/2008	0078793-1	<0.10
Endosulfan sulfate	8081[1]	<0.24	0.24	mg/kg	SJG	11/11/2008	0078793-1	<0.10
Endrin	8081[1]	<0.24	0.24	mg/kg	SJG	11/11/2008	0078793-1	<0.10
Endrin aldehyde	8081[1]	<0.24	0.24	mg/kg	SJG	11/11/2008	0078793-1	<0.10
Heptachlor	8081[1]	<0.12	0.12	mg/kg	SJG	11/11/2008	0078793-1	<0.050
Heptachlor Epoxide	8081[1]	<0.12	0.12	mg/kg	SJG	11/11/2008	0078793-1	<0.050
Toxaphene	8081[1]	<2.4	2.4	mg/kg	SJG	11/11/2008	0078793-1	<1.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

Mr. Dennis Roman
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Client Site: Hershey Mill Dam
Client Ref.: Priority Pollutant Analysis

Lab Project ID: **08-8246**
Lab Sample ID: **0811-0669**
Client Sample ID: HMD L-3 COMP
Sample Matrix: Solid

Date Sampled: 11/03/2008
Date Received: 11/05/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	52	N/A	%	DAB	11/05/2008	N/A	N/A

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Mercury, Total, CVAAS								
Mercury	7471(1)	0.31	0.19	mg/kg	CS0	11/11/2008	0078779-1	<0.10
Trace Metals, Total, ICP								
Antimony	6010B(1)	<0.96	0.96	mg/kg	CS0	11/12/2008	0078929-1	<0.50
Arsenic	6010B(1)	7.3	0.96	mg/kg	CS0	11/12/2008	0078929-1	<0.50
Beryllium	6010B(1)	0.96	0.38	mg/kg	CS0	11/12/2008	0078929-1	<0.20
Cadmium	6010B(1)	<0.38	0.38	mg/kg	CS0	11/12/2008	0078929-1	<0.20
Chromium	6010B(1)	26	0.96	mg/kg	CS0	11/12/2008	0078929-1	<0.50
Copper	6010B(1)	30	1.9	mg/kg	CS0	11/12/2008	0078929-1	<1.0
Lead	6010B(1)	36	0.96	mg/kg	CS0	11/12/2008	0078929-1	<0.50
Nickel	6010B(1)	23	3.8	mg/kg	CS0	11/12/2008	0078929-1	<2.0
Selenium	6010B(1)	1.1	0.96	mg/kg	CS0	11/12/2008	0078929-1	<0.50
Silver	6010B(1)	<0.38	0.38	mg/kg	CS0	11/12/2008	0078929-1	<0.20
Thallium	6010B(1)	<3.8	3.8	mg/kg	CS0	11/12/2008	0078929-1	<2.0
Zinc	6010B(1)	130	1.9	mg/kg	CS0	11/12/2008	0078929-1	<1.0

Pesticides/PCB

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Polychlorinated Biphenyls, ECD								
Aroclor-1016	8082(1)	<1.9	1.9	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Aroclor-1221	8082(1)	<1.9	1.9	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Aroclor-1232	8082(1)	<1.9	1.9	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Aroclor-1242	8082(1)	<1.9	1.9	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Aroclor-1248	8082(1)	<1.9	1.9	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Aroclor-1254	8082(1)	<1.9	1.9	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Aroclor-1260	8082(1)	<1.9	1.9	mg/kg	RDJ	11/07/2008	0078792-1	<1.0
Pesticides, ECD								

(Continued)

Lab Sample ID: **0811-0669**
Client Sample ID: HMD L-3 COMP

Pesticides/PCB (Cont.)

Aldrin	8081[1]	<0.096	0.096	mg/kg	SJG	11/11/2008	0078793-1	<0.050
alpha-BHC	8081[1]	<0.096	0.096	mg/kg	SJG	11/11/2008	0078793-1	<0.050
beta-BHC	8081[1]	<0.096	0.096	mg/kg	SJG	11/11/2008	0078793-1	<0.050
delta-BHC	8081[1]	<0.096	0.096	mg/kg	SJG	11/11/2008	0078793-1	<0.050
gamma-BHC	8081[1]	<0.096	0.096	mg/kg	SJG	11/11/2008	0078793-1	<0.050
Technical Chlordane	8081[1]	<0.96	0.96	mg/kg	SJG	11/11/2008	0078793-1	<0.50
4-4'-DDD	8081[1]	<0.19	0.19	mg/kg	SJG	11/11/2008	0078793-1	<0.10
4,4'-DDE	8081[1]	<0.19	0.19	mg/kg	SJG	11/11/2008	0078793-1	<0.10
4,4'-DDT	8081[1]	<0.19	0.19	mg/kg	SJG	11/11/2008	0078793-1	<0.10
Dieldrin	8081[1]	<0.19	0.19	mg/kg	SJG	11/11/2008	0078793-1	<0.10
Endosulfan I	8081[1]	<0.096	0.096	mg/kg	SJG	11/11/2008	0078793-1	<0.050
Endosulfan II	8081[1]	<0.19	0.19	mg/kg	SJG	11/11/2008	0078793-1	<0.10
Endosulfan sulfate	8081[1]	<0.19	0.19	mg/kg	SJG	11/11/2008	0078793-1	<0.10
Endrin	8081[1]	<0.19	0.19	mg/kg	SJG	11/11/2008	0078793-1	<0.10
Endrin aldehyde	8081[1]	<0.19	0.19	mg/kg	SJG	11/11/2008	0078793-1	<0.10
Heptachlor	8081[1]	<0.096	0.096	mg/kg	SJG	11/11/2008	0078793-1	<0.050
Heptachlor Epoxide	8081[1]	<0.096	0.096	mg/kg	SJG	11/11/2008	0078793-1	<0.050
Toxaphene	8081[1]	<1.9	1.9	mg/kg	SJG	11/11/2008	0078793-1	<1.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.