



May 20, 2020

Mr. Dean Starook
Groundwater Remediation Specialist
Commonwealth of Virginia
Department of Environmental Quality
Piedmont Regional Office
4949-A Cox Rd.
Glen Allen, Virginia 23060

**Re: Shoosmith Sanitary Landfill, Permit No. 587
Table 3.1 Column B Constituent Detection Notification
Second Quarter 2020 Groundwater Monitoring Event
Project No. 2200698.00/Phase 01**

Dear Mr. Starook:

On behalf of Shoosmith Bros., Inc., and in accordance with 9VAC20-81-250.B.3.c.(1), LaBella Associates, D.P.C., P.C. (LaBella) is hereby notifying the Virginia Department of Environmental Quality (DEQ) of detections of Virginia Solid Waste Management Regulations (VSWMR) Table 3.1 Column B constituents at the Shoosmith Sanitary Landfill during the second quarter 2020 compliance monitoring event. The complete laboratory data packages for the second quarter 2020 monitoring event were received on May 8 and 19, 2020.

The Column B constituents detected during the second quarter 2020 monitoring event are listed on the attached Analysis Detects Report, provided by Air Water and Soil Laboratories, Inc. (AWS). **As shown, there were no new Column B constituents detected during the second quarter 2020 groundwater monitoring event.** Including the results from the second quarter 2020 groundwater monitoring events, the current list of Table 3.1 Column B detected constituents includes: cyanide; tin; bis(2-ethylhexyl)phthalate; di-n-butylphthalate; dichlorodifluoromethane; heptachlor; endosulfan I; kepone; sulfide; naphthalene; mercury; 1,3 dichlorobenzene; total cresols; and m,p-cresols.

Please note that the analytical data provided by the laboratory has not undergone data validation. Data validation will be completed 30 days from the receipt of the laboratory data package.



Please contact me at rsmith@labellapc.com or at (804) 355-4520 if you have any questions or comments.

Respectfully,
LaBella Associates

Ryan Smith
Technical Consultant

Attachment: AWS Analysis Detects Reports

cc: Bruce Coble, Shoosmith Bros., Inc.
Shawn Weimer, DEQ-PRO
Geoff Christe, DEQ - CO

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Analysis Detects Report

Client Name: LaBella Associates, D.P.C.
 Client Site ID: Shoosmith SLF - 2nd Quarter
 Submitted To: Ryan Smith

Date Issued: 5/19/2020 1:54:10PM

Laboratory Sample ID: 20D1182-01 Client Sample ID: MW-3R

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	01	SW6010C	94.8		5.0	10.0	1	ug/L
1,4-Dichlorobenzene	01	SW8260D	0.50	J	0.40	1.00	1	ug/L

Laboratory Sample ID: 20D1182-02 Client Sample ID: MW-5R2

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	02	SW6010C	107		5.0	10.0	1	ug/L
Cobalt	02	SW6010C	6.0		3.0	4.0	1	ug/L
Nickel	02	SW6010C	10.6		7.0	10.0	1	ug/L
1,4-Dichlorobenzene	02	SW8260D	2.75		0.40	1.00	1	ug/L
Benzene	02	SW8260D	0.53	J	0.40	1.00	1	ug/L
cis-1,2-Dichloroethylene	02	SW8260D	2.17		0.40	1.00	1	ug/L

Laboratory Sample ID: 20D1182-03 Client Sample ID: MW-8R2

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	03	SW6010C	216		5.0	10.0	1	ug/L
1,1-Dichloroethane	03	SW8260D	0.64	J	0.60	1.00	1	ug/L
cis-1,2-Dichloroethylene	03	SW8260D	1.32		0.40	1.00	1	ug/L

Analysis Detects Report

Client Name: LaBella Associates, D.P.C.
Client Site ID: Shoosmith SLF - 2nd Quarter
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Date Issued: 5/19/2020 1:54:10PM

Laboratory Sample ID: 20D1182-04 **Client Sample ID: MW-13R**

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	04	SW6010C	130		5.0	10.0	1	ug/L
Cobalt	04	SW6010C	8.4		3.0	4.0	1	ug/L
Copper	04	SW6010C	8.6	J	8.0	10.0	1	ug/L
Nickel	04	SW6010C	11.7		7.0	10.0	1	ug/L

Laboratory Sample ID: 20D1182-05 **Client Sample ID: MW-17R**

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	05	SW6010C	180		5.0	10.0	1	ug/L
1,1-Dichloroethane	05	SW8260D	1.27		0.60	1.00	1	ug/L
1,4-Dichlorobenzene	05	SW8260D	0.94	J	0.40	1.00	1	ug/L
Benzene	05	SW8260D	0.77	J	0.40	1.00	1	ug/L
cis-1,2-Dichloroethylene	05	SW8260D	4.74		0.40	1.00	1	ug/L
Tetrachloroethylene (PCE)	05	SW8260D	0.41	J	0.40	1.00	1	ug/L
Trichloroethylene	05	SW8260D	0.41	J	0.40	1.00	1	ug/L

Laboratory Sample ID: 20D1182-06 **Client Sample ID: MW-18**

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	06	SW6010C	355		5.0	10.0	1	ug/L
Cobalt	06	SW6010C	9.5		3.0	4.0	1	ug/L
1,4-Dichlorobenzene	06	SW8260D	0.78	J	0.40	1.00	1	ug/L
Benzene	06	SW8260D	0.88	J	0.40	1.00	1	ug/L
cis-1,2-Dichloroethylene	06	SW8260D	0.65	J	0.40	1.00	1	ug/L

Analysis Detects Report

Client Name: LaBella Associates, D.P.C.
 Client Site ID: Shoosmith SLF - 2nd Quarter
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Date Issued: 5/19/2020 1:54:10PM

Laboratory Sample ID: 20D1182-07 Client Sample ID: MW-19R

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Arsenic	07	SW6020A	2.2	J	1.0	5.0	1	ug/L
Barium	07	SW6010C	268		5.0	10.0	1	ug/L
Cadmium	07	SW6010C	3.1	J	2.0	4.0	1	ug/L
Copper	07	SW6010C	36.7		8.0	10.0	1	ug/L
Nickel	07	SW6010C	10.6		7.0	10.0	1	ug/L
Silver	07	SW6010C	8.7	J	5.0	10.0	1	ug/L
Zinc	07	SW6010C	26.1		10.0	10.0	1	ug/L
1,4-Dichlorobenzene	07	SW8260D	1.21		0.40	1.00	1	ug/L
Benzene	07	SW8260D	5.12		0.40	1.00	1	ug/L
cis-1,2-Dichloroethylene	07	SW8260D	0.94	J	0.40	1.00	1	ug/L
o-Xylene	07	SW8260D	0.96	J	0.40	1.00	1	ug/L
Vinyl chloride	07	SW8260D	0.63		0.50	0.50	1	ug/L
Xylenes, Total	07	SW8260D	1.24	J	1.00	3.00	1	ug/L

Laboratory Sample ID: 20D1182-08 Client Sample ID: MW-20

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	08	SW6010C	279		5.0	10.0	1	ug/L

Analysis Detects Report

Client Name: LaBella Associates, D.P.C.
Client Site ID: Shoosmith SLF - 2nd Quarter
Submitted To: Ryan Smith

Date Issued: 5/19/2020 1:54:10PM

Laboratory Sample ID: 20D1182-09 Client Sample ID: MW-23

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	09RE1	SW6010C	45.2		5.0	10.0	1	ug/L
Cadmium	09RE1	SW6010C	3.9	J	2.0	4.0	1	ug/L
Cobalt	09RE1	SW6010C	19.0		3.0	4.0	1	ug/L
Copper	09RE1	SW6010C	344		8.0	10.0	1	ug/L
Nickel	09RE1	SW6010C	63.0		7.0	10.0	1	ug/L
Zinc	09RE1	SW6010C	156		10.0	10.0	1	ug/L

Laboratory Sample ID: 20D1182-10 Client Sample ID: MW-101R2

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	10	SW6010C	186		5.0	10.0	1	ug/L
Nickel	10	SW6010C	68.4		7.0	10.0	1	ug/L
Zinc	10	SW6010C	20.3		10.0	10.0	1	ug/L

Analysis Detects Report

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Date Issued: 5/19/2020 1:54:10PM

Laboratory Sample ID: 20D1182-11 Client Sample ID: MW-102

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	11	SW6010C	66.8		5.0	10.0	1	ug/L
Beryllium	11	SW6010C	3.7	J	2.0	4.0	1	ug/L
Mercury	11	SW7470A	0.42		0.20	0.20	1	ug/L
Nickel	11	SW6010C	16.7		7.0	10.0	1	ug/L
Zinc	11	SW6010C	18.6		10.0	10.0	1	ug/L
1,4-Dichlorobenzene	11	SW8260D	2.13		0.40	1.00	1	ug/L
Benzene	11	SW8260D	2.96		0.40	1.00	1	ug/L
Chloromethane	11	SW8260D	2.31		0.95	1.00	1	ug/L
cis-1,2-Dichloroethylene	11	SW8260D	0.52	J	0.40	1.00	1	ug/L
Tetrachloroethylene (PCE)	11	SW8260D	0.70	J	0.40	1.00	1	ug/L
Vinyl chloride	11	SW8260D	0.52		0.50	0.50	1	ug/L

Analysis Detects Report

Client Name: LaBella Associates, D.P.C.
Client Site ID: Shoosmith SLF - 2nd Quarter
Submitted To: Ryan Smith

Date Issued: 5/19/2020 1:54:10PM

Laboratory Sample ID: 20D1182-12 Client Sample ID: MW-103D

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Antimony	12	SW6020A	2.76	J	1.00	5.00	1	ug/L
Arsenic	12	SW6020A	1.4	J	1.0	5.0	1	ug/L
Barium	12	SW6010C	149		5.0	10.0	1	ug/L
1,4-Dichlorobenzene	12	SW8260D	0.77	J	0.40	1.00	1	ug/L
Benzene	12	SW8260D	4.57		0.40	1.00	1	ug/L
cis-1,2-Dichloroethylene	12	SW8260D	2.95		0.40	1.00	1	ug/L
Ethylbenzene	12	SW8260D	3.90		0.40	1.00	1	ug/L
m+p-Xylenes	12	SW8260D	5.26		0.60	2.00	1	ug/L
o-Xylene	12	SW8260D	2.76		0.40	1.00	1	ug/L
Toluene	12	SW8260D	8.10		0.50	1.00	1	ug/L
Vinyl chloride	12	SW8260D	1.68		0.50	0.50	1	ug/L
Xylenes, Total	12	SW8260D	8.02		1.00	3.00	1	ug/L

Laboratory Sample ID: 20D1182-13 Client Sample ID: MW-104D

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	13	SW6010C	246		5.0	10.0	1	ug/L
Nickel	13	SW6010C	7.0	J	7.0	10.0	1	ug/L
Benzene	13	SW8260D	1.73		0.40	1.00	1	ug/L
cis-1,2-Dichloroethylene	13	SW8260D	0.66	J	0.40	1.00	1	ug/L

Analysis Detects Report

Client Name: LaBella Associates, D.P.C.
 Client Site ID: Shoosmith SLF - 2nd Quarter
 Submitted To: Ryan Smith

Date Issued: 5/19/2020 1:54:10PM

Laboratory Sample ID: 20D1182-14 **Client Sample ID: MW-107**

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Arsenic	14	SW6020A	7.2		1.0	5.0	1	ug/L
Barium	14	SW6010C	69.1		5.0	10.0	1	ug/L
Cadmium	14	SW6010C	3.3	J	2.0	4.0	1	ug/L
1,4-Dichlorobenzene	14	SW8260D	0.86	J	0.40	1.00	1	ug/L
Acetone	14	SW8260D	8.79	J	7.00	10.0	1	ug/L
Benzene	14	SW8260D	3.46		0.40	1.00	1	ug/L
Chlorobenzene	14	SW8260D	0.46	J	0.40	1.00	1	ug/L
cis-1,2-Dichloroethylene	14	SW8260D	2.80		0.40	1.00	1	ug/L
Vinyl chloride	14	SW8260D	1.91		0.50	0.50	1	ug/L

Laboratory Sample ID: 20D1182-15 **Client Sample ID: MW-114R**

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Arsenic	15	SW6020A	1.2	J	1.0	5.0	1	ug/L
Barium	15	SW6010C	39.9		5.0	10.0	1	ug/L
Chloroform	15	SW8260D	1.10		0.50	0.50	1	ug/L

Laboratory Sample ID: 20D1182-16 **Client Sample ID: MW-115**

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	16	SW6010C	100		5.0	10.0	1	ug/L
Cobalt	16	SW6010C	9.4		3.0	4.0	1	ug/L
Nickel	16	SW6010C	9.6	J	7.0	10.0	1	ug/L
Zinc	16	SW6010C	35.1		10.0	10.0	1	ug/L

Analysis Detects Report

Client Name: LaBella Associates, D.P.C.
Client Site ID: Shoosmith SLF - 2nd Quarter
Submitted To: Ryan Smith

Date Issued: 5/19/2020 1:54:10PM

Laboratory Sample ID: 20D1198-01

Client Sample ID: MW-6

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	01	SW6010C	99.8		5.0	10.0	1	ug/L

Laboratory Sample ID: 20D1198-02

Client Sample ID: MW-7

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	02	SW6010C	47.0		5.0	10.0	1	ug/L

Laboratory Sample ID: 20D1198-03

Client Sample ID: MW-11

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	03	SW6010C	43.7		5.0	10.0	1	ug/L

Laboratory Sample ID: 20D1198-04

Client Sample ID: MW-16R2

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	04	SW6010C	54.5		5.0	10.0	1	ug/L

Laboratory Sample ID: 20D1198-05

Client Sample ID: MW-21

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	05	SW6010C	12.9		5.0	10.0	1	ug/L

Analysis Detects Report

Client Name: LaBella Associates, D.P.C.
Client Site ID: Shoosmith SLF - 2nd Quarter
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Date Issued: 5/19/2020 1:54:10PM

Laboratory Sample ID: 20D1198-06

Client Sample ID: MW-22

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	06	SW6010C	151		5.0	10.0	1	ug/L

Laboratory Sample ID: 20D1198-07

Client Sample ID: MW-108

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	07	SW6010C	29.1		5.0	10.0	1	ug/L

Laboratory Sample ID: 20D1198-08

Client Sample ID: MW-109

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	08	SW6010C	127		5.0	10.0	1	ug/L

Laboratory Sample ID: 20D1198-09

Client Sample ID: MW-110

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	09	SW6010C	102		5.0	10.0	1	ug/L

Note that this report is not the "Certificate of Analysis". This report only lists the target analytes that displayed concentrations that exceeded the detection limit specified for that analyte. For a complete listing of all analytes requested and the results of the analysis see the "Certificate of Analysis".