



January 5, 2017

Maria Bebenek
Manager, Clean Water Program
DEP, SCRO
909 Elmerton Avenue
Harrisburg, Pa 17110

RE: Monthly Report, Site-Specific Study Plan, **December 2016**

Dear Ms. Bebenek;

In accordance with Section 3.e of the August 21, 2015 Consent Order and Agreement, the following is the December 2016 monthly report for the Site-Specific Methylmercury Water Quality Criterion Stream Study Plan (the Plan).

Activities Accomplished:

- Water quality samples were collected on December 8, 2016. Samples were collected at stream stations RR-01 (identified in figure 3-1 of the Plan), Rambo-Down (located in the mixed zone below NPDES-01), EC-02 (identified in figure 3-2 of Plan) and Ebaughs-Down (located in the mixed zone below NPDES-02). Samples were also collected from the discharges from the remediation systems at NPDES-01 and NPDES-02.
- The NPDES-01 and NPDES-02 samples were sent to Geochemical Testing.
- Stream samples RR-01, Rambo-Down, EC-02 and Ebaughs-Down were sent to Brooks Applied Laboratory.

Results Received:

- Attached are the analytical results as reported by Brooks Applied Laboratory for stream samples collected on November 9, 2016. Included are results from RR-01, Rambo-Down, EC-02 and Ebaughs-Down.
- Attached are the analytical results as reported by Geochemical Testing from the December 8, 2016 samples for NPDES-01 and NPDES-02.
- Stream discharge measurements were taken on December 8, 2016 in the area where stream samples are collected at RR-01 and EC-02. The following are the results.
 - RR-01:
 - Measurement 1: 2.244 ft³/sec
 - Measurement 2: 2.272 ft³/sec
 - Average: 2.258 ft³/sec

- EC-02:
 - Measurement 1: 2.585 ft³/sec
 - Measurement 2: 2.519 ft³/sec
 - Average: 2.552 ft³/sec

Feel free to contact me if you have any questions or comments on the information provided in this monthly report.

Respectfully,



Richard A. Hazenstab, P.G.
Coordinator
Operations and Environmental Programs

cc: D. Vollero; D. Jasitt; J. Beuschlein; J. Collins

Attached: Brooks Applied Laboratory analysis for stream samples
Geochemical Testing analysis for NPDES-01
Geochemical Testing analysis for NPDES-02



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
<i>Ebaughs Down</i>										
1646035-07	Hg	Water	TR	302		0.10	0.40	ng/L	B162912	1601329
1646035-08	MeHg	Water	D	≤ 0.020	U	0.020	0.049	ng/L	B162916	1601358
<i>EC-02</i>										
1646035-05	Hg	Water	TR	0.92		0.10	0.40	ng/L	B162912	1601338
1646035-06	MeHg	Water	D	≤ 0.020	U	0.020	0.050	ng/L	B162916	1601358
<i>Equipment Blank</i>										
1646035-09	Hg	Water	TR	1.85		0.10	0.40	ng/L	B162912	1601329
1646035-10	MeHg	Water	TR	≤ 0.020	U	0.020	0.050	ng/L	B162916	1601358
<i>Rambo Down</i>										
1646035-03	Hg	Water	TR	281		0.51	2.02	ng/L	B162912	1601329
1646035-04	MeHg	Water	D	0.084		0.019	0.049	ng/L	B162916	1601358
<i>RR-01</i>										
1646035-01	Hg	Water	TR	0.57		0.10	0.40	ng/L	B162912	1601338
1646035-02	MeHg	Water	D	≤ 0.020	U	0.020	0.049	ng/L	B162916	1601358

Laboratory Results

Geochemical Testing

Date: 21-Dec-16

CLIENT:	YORK COUNTY SWRA	Client Sample ID:	NPDES-1
Lab Order:	G1612526	Sampled By:	York County SW
Project:	York 600 M	Collection Date:	12/8/2016 12:05:00 PM
Lab ID:	G1612526-001	Received Date:	12/9/2016 10:34:40 AM
Matrix:	AQUEOUS		

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
PH BY SM 4500 H+B						Analyst: AM	
Lab pH	7.89		H	S.U.	1		SM 4500-H+ B 12/09/16 3:28 PM
TOTAL METALS						Analyst: SLY	
Mercury	17.3	2.0		ng/L	1	EPA 245.7 12/15/16 3:40 PM	EPA 245.7 12/16/16 7:40 AM
INORGANIC METALS						Analyst: RLR	
Antimony	< 2.0	2.0		µg/L	1	EPA 200.2 12/12/16 9:35 AM	EPA 200.8 12/14/16 9:41 AM
Cadmium	< 0.2	0.2		µg/L	1	12/12/16 9:35 AM	12/14/16 9:41 AM
Copper	< 4.0	4.0		µg/L	1	12/12/16 9:35 AM	12/14/16 9:41 AM
Lead	< 1.0	1.0		µg/L	1	12/12/16 9:35 AM	12/14/16 9:41 AM
Silver	< 0.4	0.4		µg/L	1	12/12/16 9:35 AM	12/14/16 9:41 AM
VOLATILE ORGANIC COMPOUNDS						Analyst: SJM	
1,1,1-Trichloroethane	< 0.5	0.5		µg/L	1		EPA 624 12/09/16 10:51 PM
1,1-Dichloroethane	< 0.5	0.5		µg/L	1		12/09/16 10:51 PM
1,1-Dichloroethene	< 0.5	0.5		µg/L	1		12/09/16 10:51 PM
Chloroethane	< 0.5	0.5		µg/L	1		12/09/16 10:51 PM
cis-1,2-Dichloroethene	< 0.5	0.5		µg/L	1		12/09/16 10:51 PM
Dichlorodifluoromethane	< 0.5	0.5		µg/L	1		12/09/16 10:51 PM
Methylene Chloride	< 0.5	0.5		µg/L	1		12/09/16 10:51 PM
Tetrachloroethene	< 0.5	0.5		µg/L	1		12/09/16 10:51 PM
Tetrahydrofuran	< 1.0	1.0		µg/L	1		12/09/16 10:51 PM
Trichloroethene	< 0.5	0.5		µg/L	1		12/09/16 10:51 PM
Trichlorofluoromethane	< 0.5	0.5		µg/L	1		12/09/16 10:51 PM
Vinyl Chloride	< 0.5	0.5		µg/L	1		12/09/16 10:51 PM
Surr: 1,2-Dichloroethane-d4	101	80-120		%REC	1		12/09/16 10:51 PM
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1		12/09/16 10:51 PM
Surr: Toluene-d8	101	80-120		%REC	1		12/09/16 10:51 PM



Laboratory Results

Geochemical Testing

Date: 21-Dec-16

CLIENT:	YORK COUNTY SWRA	Client Sample ID:	NPDES-2
Lab Order:	G1612527	Sampled By:	York County
Project:	York 600 M	Collection Date:	12/8/2016 1:50:00 PM
Lab ID:	G1612527-001	Received Date:	12/9/2016 10:38:39 AM
Matrix:	AQUEOUS		

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
PH BY SM 4500 H+B		Analyst: AM			SM 4500-H+ B		
Lab pH	7.63		H	S.U.	1		12/09/16 3:31 PM
TOTAL METALS		Analyst: SLY			EPA 245.7		EPA 245.7
Mercury	77.2	2.0		ng/L	1	12/15/16 3:40 PM	12/16/16 7:43 AM
INORGANIC METALS		Analyst: RLR			EPA 200.2		EPA 200.8
Antimony	< 2.0	2.0		µg/L	1	12/12/16 10:45 AM	12/14/16 10:03 AM
Cadmium	< 0.2	0.2		µg/L	1	12/12/16 10:45 AM	12/14/16 10:03 AM
Copper	< 4.0	4.0		µg/L	1	12/12/16 10:45 AM	12/14/16 10:03 AM
Lead	< 1.0	1.0		µg/L	1	12/12/16 10:45 AM	12/14/16 10:03 AM
Silver	< 0.4	0.4		µg/L	1	12/12/16 10:45 AM	12/14/16 10:03 AM
VOLATILE ORGANIC COMPOUNDS		Analyst: SJM			EPA 624		
1,1,1-Trichloroethane	< 0.5	0.5		µg/L	1		12/09/16 11:39 PM
1,1-Dichloroethane	< 0.5	0.5		µg/L	1		12/09/16 11:39 PM
1,1-Dichloroethene	< 0.5	0.5		µg/L	1		12/09/16 11:39 PM
Chloroethane	< 0.5	0.5		µg/L	1		12/09/16 11:39 PM
cis-1,2-Dichloroethene	< 0.5	0.5		µg/L	1		12/09/16 11:39 PM
Dichlorodifluoromethane	< 0.5	0.5		µg/L	1		12/09/16 11:39 PM
Methylene Chloride	< 0.5	0.5		µg/L	1		12/09/16 11:39 PM
Tetrachloroethene	< 0.5	0.5		µg/L	1		12/09/16 11:39 PM
Tetrahydrofuran	< 1.0	1.0		µg/L	1		12/09/16 11:39 PM
Trichloroethene	< 0.5	0.5		µg/L	1		12/09/16 11:39 PM
Trichlorofluoromethane	< 0.5	0.5		µg/L	1		12/09/16 11:39 PM
Vinyl Chloride	< 0.5	0.5		µg/L	1		12/09/16 11:39 PM
Surr: 1,2-Dichloroethane-d4	102	80-120		%REC	1		12/09/16 11:39 PM
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1		12/09/16 11:39 PM
Surr: Toluene-d8	101	80-120		%REC	1		12/09/16 11:39 PM

