SPRU EEC-20-001
RCRA ICM REPORT FOR SPRU FACILITY

Attachment 7
NYSDEC Approval of Post-Remediation Stormwater Discharge

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Linn, Jeffrey

From: Mustico, Richard X (DEC) <richard.mustico@dec.ny.gov>
Sent: Tuesday, October 23, 2018 7:06 AM
To: Davis, Hugh
Cc: Winterberger, Lynn (DEC); Hill, Jeffrey T (Jeffrey.hill@nrp.doe.gov); Evans, Daniel (DEC); Duggan, William
Subject: RE: SPRU H2-G2 Discharge Approval
Attachments: H2 Excavation Storm Water August Sample from Frac Tank.pdf

Dr. Davis:

The Department has reviewed the information provided below and attached regarding the Department of Energy's request to discharge storm water, from a cleared excavation, to a storm water catch basin. The information provided adequately addresses the Department's request for information, contained in my October 22, 2018 email to you (also below).

The request to discharge the storm water is approved.

This approval, and the information contained below and attached, should be included as part of the Interim Corrective Measures (ICM) Report, which will document all of the remedial work conducted as part of this ICM.

If you have any questions regarding this email, please feel to contact me.

Thank you,

Rick

Richard A. Mustico, P.E.

Regional Hazardous Waste Remediation Engineer, Division of Environmental Remediation
New York State Department of Environmental Conservation – Region IV
1130 N. Westcott Rd, Schenectady, NY 12306
P: (518) 357-2273 | C: (518) 949-3132 | Richard.Mustico@dec.ny.gov
www.dec.ny.gov | | |

From: Davis, Hugh [mailto:Hugh.Davis@emcbc.doe.gov]
Sent: Monday, October 22, 2018 5:48 PM
To: Mustico, Richard X (DEC) <richard.mustico@dec.ny.gov>
Cc: Winterberger, Lynn (DEC) <lynn.winterberger@dec.ny.gov>; Hill, Jeffrey T (Jeffrey.hill@nrp.doe.gov) <Jeffrey.hill@nrp.doe.gov>; Evans, Daniel (DEC) <daniel.evans@dec.ny.gov>; Duggan, William (William.Duggan@aecom.com) <William.Duggan@aecom.com>
Subject: RE: SPRU H2-G2 Discharge Approval

Mr. Mustico,

Please find responses to your request for additional information regarding our planned discharge of storm water from the remediated Upper Level SWMU (H2 and H2 Tank Farm) excavations.

1) Attached is the water analysis from a sample taken on August 8, 2018, from a tank storing H2 storm water collected after confirmatory sampling of the excavation. These analyses show our VOC contaminants of concern to be non-detectable and less than the discharge limits identified on the NYSDEC-provided table.

2) The discharge rate of the pump we will be using is 350 - 400 gallons per minute. With approximately 200,000 to 250,000 gallons accumulated in the excavation, we expect to discharge for a total of approximately 10 hours.

3) The excavation water will be pumped from the H2 excavation to the KAPL Lower Level and discharged to a storm water collection swale near a collection basin for the KAPL storm water system. The swale has been reinforced with rip rap and geotextile filter fabric to minimize the potential for erosion during the discharge. The approximate coordinates of the storm drain catch basin are 42.82452N, 73.86547W.

4) Sediment control will be accomplished with several methods:
* The pump intake will be set-up in a fixed location (not floating) at least 1 ft above the excavation bottom. It will originally be set up several feet above the bottom and moved as the water level lowers.
* The hose discharge will be directed into rip rap on top of a geotextile filter fabric, with a run of approximately 40 feet from the discharge to the catch basin. This will enable observation of the discharge turbidity and prevent erosion during flow in the swale.
* If necessary to reduce the water level further after intake becomes turbid, a dewatering pit will be constructed with a filter fabric to protect the intake.

5) Discharge is estimated to occur for a total of about 10 hours over a day or two. The deepest parts of the excavation will retain some water and will be filled with large stone. Depending on precipitation and the residual water depth, a second pump-down may be performed for a smaller volume of water.

DOE notes that 6 NYCRR Part 380 is not applicable to DOE-Knolls Site as identified in 6 NYCRR Part 380-1.2.

Thank you for consideration of our proposed approach.

Regards, Hugh

Hugh R. Davis, Ph.D.
Deputy Manager
Department of Energy SPRU Field Office
2425 River Road
Niskayuna, NY 12309
(518) 395-4956
(518) 937-7193 (c)
hugh.davis@emcbc.doe.gov

From: Mustico, Richard X (DEC) <richard.mustico@dec.ny.gov>
Sent: Monday, October 22, 2018 2:48 PM
To: Davis, Hugh <Hugh.Davis@emcbc.doe.gov>
Cc: Winterberger, Lynn (DEC) <lynn.winterberger@dec.ny.gov>; Hill, Jeffrey T (Jeffrey.hill@nrp.doe.gov) <Jeffrey.hill@nrp.doe.gov>; Evans, Daniel (DEC) <daniel.evans@dec.ny.gov>; Duggan, William (William.Duggan@aecom.com) <William.Duggan@aecom.com>
Subject: SPRU H2-G2 Discharge Approval

Hugh,

Per your discussions with Lynn Winterberger, please see the attached discharge limits for the proposed storm water discharge to SPDES Outfall 002. Only the discharge limits for the contaminants of concern apply for the chemical/analyte limits. Also, please see the notes, to be complied with as applicable, at the end of the tables. Due to concerns about the effect of this stream on real-time data for the KAPL Outfall 002 discharge, SPRU is required to discontinue their effluent feed for an appropriate time prior to KAPL's collection of samples as required under the KAPL SPDES permit for this outfall.

The attached criteria do not contain discharge limitations for radioactive discharges. Limitations on discharges of radiation or radioactive isotopes are addressed under Part 380 Radiation Control Permits.

The applicable discharge limits and discharge results should be provided back to the Department in order to have a clean package for approval to document this proposed modification for the ICM Report.

In addition, please provide the following:

Discharge rate;

A description of the receiving location, including, if available, the latitude and longitude of the discharge point;

A description of any best management practices required for sediment control, including pump setup and placement; and

Proposed duration of discharge.

We look forward to receiving this information.

Please feel free to call or email either Lynn or me if you have any questions.

Rick

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: August 15, 2018

Company : URS
Address : 2425 River Road (c/o SPRU DP)

Niskayuna, New York 12309
Contact: Mr. Jason Litwiller
Project: SPRU Disposition Project

Client Sample ID: FT6H2
Sample ID: 456830001
Matrix: Water
Collect Date: 08-AUG-18 10:00
Receive Date: 09-AUG-18
Collector: Client

Project: URSC00211
Client ID: URSC013

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
SW846 8260C Volatiles "As Received"												
1,1,1-Trichloroethane	U	ND	0.300	2.00	ug/L		1	JP1	08/10/18	1801	1791478	1
1,1,2,2-Tetrachloroethane	U	ND	0.300	2.00	ug/L		1					
1,1,2-Trichloroethane	U	ND	0.300	2.00	ug/L		1					
1,1-Dichloroethane	U	ND	0.300	2.00	ug/L		1					
1,1-Dichloroethylene	U	ND	0.300	2.00	ug/L		1					
1,2,3-Trichlorobenzene	U	ND	0.300	2.00	ug/L		1					
1,2,4-Trichlorobenzene	U	ND	0.300	2.00	ug/L		1					
1,2-Dibromo-3-chloropropane	U	ND	0.500	2.00	ug/L		1					
1,2-Dibromoethane	U	ND	0.300	2.00	ug/L		1					
1,2-Dichlorobenzene	U	ND	0.300	2.00	ug/L		1					
1,2-Dichloroethane	U	ND	0.300	2.00	ug/L		1					
1,2-Dichloropropane	U	ND	0.300	2.00	ug/L		1					
1,3-Dichlorobenzene	U	ND	0.300	2.00	ug/L		1					
1,4-Dichlorobenzene	U	ND	0.300	2.00	ug/L		1					
1,4-Dioxane	U	ND	15.0	50.0	ug/L		1					
2-Butanone	U	ND	3.00	10.0	ug/L		1					
2-Hexanone	U	ND	3.00	10.0	ug/L		1					
4-Methyl-2-pentanone	U	ND	3.00	10.0	ug/L		1					
Acetone	U	ND	3.00	10.0	ug/L		1					
Benzene	U	ND	0.300	2.00	ug/L		1					
Bromochloromethane	U	ND	0.300	2.00	ug/L		1					
Bromodichloromethane	U	ND	0.300	2.00	ug/L		1					
Bromoform	U	ND	0.300	2.00	ug/L		1					
Bromomethane	U	ND	0.300	2.00	ug/L		1					
Carbon disulfide	U	ND	1.60	10.0	ug/L		1					
Carbon tetrachloride	U	ND	0.300	2.00	ug/L		1					
Chlorobenzene	U	ND	0.300	2.00	ug/L		1					
Chloroethane	U	ND	0.300	2.00	ug/L		1					
Chloroform	U	ND	0.300	2.00	ug/L		1					
Chloromethane	U	ND	0.300	2.00	ug/L		1					
Cyclohexane	U	ND	0.300	2.00	ug/L		1					
Dibromochloromethane	U	ND	0.300	2.00	ug/L		1					
Dichlorodifluoromethane	U	ND	0.300	2.00	ug/L		1					
Ethylbenzene	U	ND	0.300	2.00	ug/L		1					
Isopropylbenzene	U	ND	0.300	2.00	ug/L		1					
Methyl acetate	U	ND	1.50	5.00	ug/L		1					

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Report Date: August 15, 2018

Company : URS
Address : 2425 River Road (c/o SPRU DP)

Niskayuna, New York 12309
Contact: Mr. Jason Litwiller
Project: SPRU Disposition Project

Client Sample ID: FT6H2 Project: URSC00211
Sample ID: 456830001 Client ID: URSC013

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst Date	Time	Batch	Method
Volatile Organics											
SW846 8260C Volatiles "As Received"											
Methylcyclohexane	U	ND	0.300	2.00	ug/L		1				
Methylene chloride	U	ND	1.60	5.00	ug/L		1				
Styrene	U	ND	0.300	2.00	ug/L		1				
Tetrachloroethylene	U	ND	0.300	2.00	ug/L		1				
Toluene	U	ND	0.300	2.00	ug/L		1				
Trichloroethylene	U	ND	0.300	2.00	ug/L		1				
Trichlorofluoromethane	U	ND	0.300	2.00	ug/L		1				
Trichlorotrifluoroethane	U	ND	1.60	5.00	ug/L		1				
Vinyl chloride	U	ND	0.300	2.00	ug/L		1				
cis-1,2-Dichloroethylene	U	ND	0.300	2.00	ug/L		1				
cis-1,3-Dichloropropylene	U	ND	0.300	2.00	ug/L		1				
m,p-Xylenes	U	ND	0.300	4.00	ug/L		1				
o-Xylene	U	ND	0.300	2.00	ug/L		1				
tert-Butyl methyl ether	U	ND	0.300	2.00	ug/L		1				
trans-1,2-Dichloroethylene	U	ND	0.300	2.00	ug/L		1				
trans-1,3-Dichloropropylene	U	ND	0.300	2.00	ug/L		1				

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8260C	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	SW846 8260C Volatiles "As Received"	52.2 ug/L	50.0	104	(71%-134%)
Bromofluorobenzene	SW846 8260C Volatiles "As Received"	51.7 ug/L	50.0	103	(70%-131%)
Toluene-d8	SW846 8260C Volatiles "As Received"	49.0 ug/L	50.0	98	(74%-124%)

Notes:

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit