December 10, 2019 Reference No. 081618

Mr. Steven Scharf
New York State Department of Environmental Conservation
Division of Solid & Hazardous Materials
Bureau of Solid Waste and Corrective Action
625 Broadway
Albany, New York
12233-7015

Dear Mr. Scharf:

Re: November 2019 Progress Report
Order on Consent and Administrative Settlement Index #A1-0799-12-10
Operable Unit 5, RUCO Polymer Corp., Hicksville, NY (Site #130004)

GHD, on behalf of Covestro and Glenn Springs Holdings, Inc. (GSH), has prepared this submittal that provides the monthly progress report for November 2019 for the former RUCO Polymer Corp. (RUCO) Site in Hicksville, New York. This submittal covers Operable Unit 5 (OU-5) activity. The OU-5 Order on Consent became effective on September 30, 2013 and the Record of Decision was received on March 31, 2017.

Actions performed during the Reporting Period

1. Submitted the October 2019 progress report for OU-5 to the New York Department of Environmental Conservation (NYSDEC) on November 8, 2019.
2. Continued operation and maintenance phase of the remedy, which involves monitoring of the sub-slab depressurization (SSD) systems per the Remedial Design dated January 16, 2018.
3. Completed validation of analytical results from the October SSD system sampling.

Actions anticipated to be performed in the Next Month

1. Continue operation and maintenance phase of the remedy, which involves monitoring of the SSD systems per the Remedial Design dated January 16, 2018. Complete the next quarterly monitoring event which will include the field measurement of flow rate, vacuum, and vapors and collection of samples for analysis.
2. Complete 2019 annual sample of soil vapor probes VP-41, VP-42R, and VP-46.

Approved Modifications to Work Plans/Schedule

1. Evaluate the full-scale system to confirm that multi-stack system emissions are within and below the updated NYSDEC Division of Air Resources (DAR) 6 NYCRR Part 200 Series Emission Guideline Values per NYSDEC April 10, 2019 letter.
2. Overall schedule for upcoming milestones per the RD are as follows:

GHD
455 Phillip Street Waterloo Ontario N2L 3X2 Canada
T 519 884 0510 **F** 519 884 0525 **W** www.ghd.com

a. Operate all SSD systems for one year. Testing of the full-scale system will include calculations confirming the above for the full-scale multi-stack system.

b. Submit the Final Engineering Report.

Analytical and Testing Results

1. Validated analytical results for samples collected from the six SSD systems on October 8, 2019 are attached in Table 1. A comparison of the most recent trichloroethylene (TCE) and tetrachloroethylene (PCE) concentrations for the SSD systems to previous monitoring event concentrations is presented in Table 2. The current concentrations of PCE in the six SSD systems range from 1.9 J to 4.6 J µg/m^3. Concentrations of TCE were not detected in the six SSD systems during the most current sampling event. The highest concentrations in the SSD systems were observed in SSD-5. The PCE and TCE concentrations have decreased significantly in SSD-5 from 4,800 to 3.2 J µg/m^3 and 65 µg/m^3 to not detected, respectively.

Unresolved Delays

1. None during this reporting period.

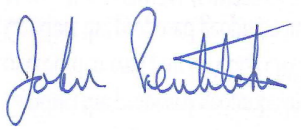
Citizen Participation Plan

1. None during this reporting period.

Should you have any questions on the above, please do not hesitate to contact the undersigned at 519-340-4313 or email john.pentilchuk@GHD.com.

Yours truly,

GHD



John Pentilchuk

JP/kf/87

cc: Renata Ockerby (NYSDOH)
Dena Putnick, Esq. (NYSDEC)
Jackie Kondrk (USEPA)
Robin Putnam (Nassau County DOH)
Joseph Simone (Simone Development Company, LLC)
Dina Gupta, Esq. (Simone Development Company, LLC)
Sean Heneghan (Simone Development Company, LLC)
John Unice, Esq. (Covestro)
Tim Troutman (Covestro)

Paul Bluestein (GSH)
Andrea Whitley (GSH)

Table 1

Analytical Results Summary
SSD System Sampling
Glenn Springs Holdings, Inc.
Hicksville, New York
October 2019

Location ID:		SSD-1	SSD-2	SSD-3	SSD-4	SSD-5	SSD-6
Sample Name:		SV10819CM006	SV10819CM005	SV10819CM004	SV10819CM003	SV10819CM002	SV10819CM001
Sample Date:		10/08/2019	10/08/2019	10/08/2019	10/08/2019	10/08/2019	10/08/2019
Parameters	**Unit**						
Volatile Organic Compounds							
1,1,1-Trichloroethane	µg/m3	4.9 U	4.7 U	4.6 U	5.2 U	5.2 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/m3	6.1 U	5.9 U	5.8 U	6.6 U	6.6 U	6.3 U
1,1,2-Trichloroethane	µg/m3	4.9 U	4.7 U	4.6 U	5.2 U	5.2 U	5.0 U
1,1-Dichloroethane	µg/m3	3.6 U	3.5 U	3.4 U	3.9 U	3.9 U	3.7 U
1,1-Dichloroethene	µg/m3	3.5 U	3.4 U	3.3 U	3.8 U	3.8 U	3.6 U
1,2,4-Trichlorobenzene	µg/m3	26 U	25 U	25 U	28 U	28 U	27 U
1,2,4-Trimethylbenzene	µg/m3	4.4 U	4.2 U	4.1 U	4.7 U	4.7 U	4.5 U
1,2-Dibromoethane (Ethylene dibromide)	µg/m3	6.9 U	6.6 U	6.4 U	7.3 U	7.3 U	7.0 U
1,2-Dichlorobenzene	µg/m3	5.4 U	5.1 U	5.0 U	5.7 U	5.7 U	5.5 U
1,2-Dichloroethane	µg/m3	3.6 U	3.5 U	3.4 U	3.9 U	3.9 U	3.7 U
1,2-Dichloropropane	µg/m3	4.1 U	4.0 U	3.9 U	4.4 U	4.4 U	4.2 U
1,2-Dichlorotetrafluoroethane (CFC 114)	µg/m3	6.2 U	6.0 U	5.9 U	6.7 U	6.7 U	6.4 U
1,3,5-Trimethylbenzene	µg/m3	4.4 U	4.2 U	4.1 U	4.7 U	4.7 U	4.5 U
1,3-Butadiene	µg/m3	2.0 U	1.9 U	1.8 U	2.1 U	2.1 U	2.0 U
1,3-Dichlorobenzene	µg/m3	5.4 U	5.1 U	5.0 U	5.7 U	5.7 U	5.5 U
1,4-Dichlorobenzene	µg/m3	5.4 U	5.1 U	5.0 U	5.7 U	5.7 U	5.5 U
1,4-Dioxane	µg/m3	13 U	12 U	12 U	14 U	14 U	13 U
2,2,4-Trimethylpentane	µg/m3	4.2 U	4.0 U	3.9 U	4.5 U	4.5 U	4.3 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/m3	10 U	10 U	9.9 U	11 U	11 U	11 U
2-Hexanone	µg/m3	15 U	14 U	14 U	16 U	16 U	15 U
4-Ethyl toluene	µg/m3	4.4 U	4.2 U	4.1 U	4.7 U	4.7 U	4.5 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/m3	3.7 U	3.5 U	3.4 U	3.9 U	3.9 U	3.7 U
Acetone	µg/m3	48 J	99 J	110 J	76 J	86 J	73 J
Allyl chloride	µg/m3	11 U	11 U	10 U	12 U	12 U	11 U
Benzene	µg/m3	2.5 J	3.1	2.7 U	2.4 J	0.96 J	13
Benzyl chloride	µg/m3	4.6 U	4.4 U	4.3 U	4.9 U	4.9 U	4.7 U
Bromodichloromethane	µg/m3	6.0 U	5.7 U	5.6 U	6.4 U	6.4 U	6.1 U
Bromoform	µg/m3	9.2 U	8.8 U	8.7 U	9.9 U	9.9 U	9.4 U
Bromomethane (Methyl bromide)	µg/m3	35 U	33 U	33 U	37 U	37 U	36 U
Carbon disulfide	µg/m3	11 U	11 U	3.6 J	12 U	12 U	11 U
Carbon tetrachloride	µg/m3	5.6 U	5.4 U	5.3 U	6.0 U	6.0 U	5.8 U
Chlorobenzene	µg/m3	4.1 U	3.9 U	3.9 U	4.4 U	4.4 U	4.2 U
Chloroethane	µg/m3	9.4 U	9.0 U	8.9 U	10 U	10 U	9.6 U
Chloroform (Trichloromethane)	µg/m3	4.4 U	4.2 U	4.1 U	4.7 U	4.7 U	1.8 J
Chloromethane (Methyl chloride)	µg/m3	18 U	18 U	17 U	20 U	20 U	19 U
cis-1,2-Dichloroethene	µg/m3	3.5 U	3.4 U	3.3 U	3.8 U	3.8 U	3.6 U
cis-1,3-Dichloropropene	µg/m3	4.1 U	3.9 U	3.8 U	4.3 U	4.3 U	4.2 U

Table 1

Analytical Results Summary
SSD System Sampling
Glenn Springs Holdings, Inc.
Hicksville, New York
October 2019

Location ID:		SSD-1	SSD-2	SSD-3	SSD-4	SSD-5	SSD-6
Sample Name:		SV10819CM006	SV10819CM005	SV10819CM004	SV10819CM003	SV10819CM002	SV10819CM001
Sample Date:		10/08/2019	10/08/2019	10/08/2019	10/08/2019	10/08/2019	10/08/2019
Parameters	**Unit**						
Volatile Organic Compounds							
Cyclohexane	µg/m3	3.1 U	2.9 U	2.9 U	3.3 U	3.3 U	3.1 U
Dibromochloromethane	µg/m3	7.6 U	7.3 U	7.2 U	8.1 U	8.1 U	7.8 U
Dichlorodifluoromethane (CFC-12)	µg/m3	3.6 J	3.0 J	4.4	2.6 J	3.4 J	3.9 J
Ethanol	µg/m3	180 J	530 J	500 J	450 J	360 J	200 J
Ethylbenzene	µg/m3	3.9 U	3.7 U	3.6 U	4.1 U	4.1 U	4.0 U
Hexachlorobutadiene	µg/m3	38 U	36 U	36 U	41 U	41 U	39 U
Hexane	µg/m3	4.0	3.0 U	2.1 J	2.3 J	3.4 U	2.0 J
Isopropyl alcohol	µg/m3	11	16	14	15	13	12
Isopropyl benzene	µg/m3	4.4 U	4.2 U	4.1 U	4.7 U	4.7 U	4.5 U
m&p-Xylenes	µg/m3	3.9 U	3.7 U	3.6 U	4.1 U	4.1 U	4.0 U
Methyl tert butyl ether (MTBE)	µg/m3	13 U	12 U	12 U	14 U	14 U	13 U
Methylene chloride	µg/m3	31 U	30 U	29 U	33 U	33 U	32 U
N-Heptane	µg/m3	3.7 U	3.5 U	3.4 U	3.9 U	3.9 U	3.7 U
N-Propylbenzene	µg/m3	4.4 U	4.2 U	4.1 U	4.7 U	4.7 U	4.5 U
o-Xylene	µg/m3	3.9 U	3.7 U	3.6 U	4.1 U	4.1 U	4.0 U
Styrene	µg/m3	3.8 U	3.6 U	3.6 U	4.1 U	4.1 U	3.9 U
Tetrachloroethene	µg/m3	2.1 J	1.9 J	2.7 J	4.6 J	3.2 J	3.0 J
Tetrahydrofuran	µg/m3	2.6 U	2.5 U	2.5 U	2.8 U	2.8 U	2.7 U
Toluene	µg/m3	3.4 U	3.2 U	3.2 U	3.6 U	3.6 U	3.4 U
trans-1,2-Dichloroethene	µg/m3	3.5 U	3.4 U	3.3 U	3.8 U	3.8 U	3.6 U
trans-1,3-Dichloropropene	µg/m3	4.1 U	3.9 U	3.8 U	4.3 U	4.3 U	4.2 U
Trichloroethene	µg/m3	4.8 U	4.6 U	4.5 U	5.1 U	5.1 U	4.9 U
Trichlorofluoromethane (CFC-11)	µg/m3	3.1 J	2.3 J	2.8 J	2.0 J	3.2 J	4.8 J
Trifluorotrichloroethane (CFC-113)	µg/m3	6.8 U	6.6 U	6.4 U	7.3 U	7.3 U	7.0 U
Vinyl chloride	µg/m3	2.3 U	2.2 U	2.1 U	2.4 U	2.4 U	2.3 U

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit

Table 2

TCE and PCE Concentration Comparison Over Time
SSD System Sampling
Glenn Springs Holdings, Inc.
Hicksville, New York

Location [3]:		SSD-1	SSD-1	SSD-1	SSD-2	SSD-2	SSD-2
Sample Name:		SV6419VW005	SV61119CM006	SV10819CM006	SV6419VW004	SV61119CM007	SV10819CM005
Sample Date:		06/04/2019 [1]	06/11/2019 [2]	10/08/2019	06/04/2019 [1]	06/11/2019 [2]	10/08/2019
Parameters	**Unit**						
Volatile Organic Compounds							
Tetrachloroethene	µg/m3	5.3 U	11	2.1 J	5.0 U	19	1.9 J
Trichloroethene	µg/m3	4.2 U	2.6 J	4.8 U	4.0 U	2.2 J	4.6 U

Notes:

(1) - Samples collected immediately prior to start up
(2) - Samples collected one week after startup
(3) - SSD-1 is the southernmost system, SSD-6 is the northernmost system, and SSD-5 is the Phase I system installed in 2018
J - Estimated concentration
U - Not detected at the associated reporting limit

Table 2

TCE and PCE Concentration Comparison Over Time
SSD System Sampling
Glenn Springs Holdings, Inc.
Hicksville, New York

	Location [3]:	SSD-3	SSD-3	SSD-3	SSD-4	SSD-4	SSD-4
	Sample Name:	SV6419VW003	SV61119CM008	SV10819CM004	SV6419VW002	SV61119CM009	SV10819CM003
	Sample Date:	06/04/2019 [1]	06/11/2019 [2]	10/08/2019	06/04/2019 [1]	06/11/2019 [2]	10/08/2019
Parameters	**Unit**						
Volatile Organic Compounds							
Tetrachloroethene	µg/m3	5.2 U	31	2.7 J	3.5 J	24	4.6 J
Trichloroethene	µg/m3	4.1 U	3.1 J	4.5 U	0.81 J	4.5	5.1 U

Notes:

(1) - Samples collected immediately prior to start up
(2) - Samples collected one week after startup
(3) - SSD-1 is the southernmost system, SSD-6 is the northernmos
J - Estimated concentration
U - Not detected at the associated reporting limit

Table 2

TCE and PCE Concentration Comparison Over Time
SSD System Sampling
Glenn Springs Holdings, Inc.
Hicksville, New York

Location [3]:		**SSD-5**	**SSD-5**	**SSD-5**	**SSD-5**	**SSD-5**
Sample Name:		**SSDS-1**	**SSDS-2**	**SSD-Leg (Enterprise)**	**SV61119CM010**	**SV10819CM002**
Sample Date:		**07/11/2018 [1]**	**07/18/2018 [2]**	**10/23/2018**	**06/11/2019**	**10/08/2019**
Parameters	**Unit**					
Volatile Organic Compounds						
Tetrachloroethene	µg/m3	280	380	4800	13	3.2 J
Trichloroethene	µg/m3	8.1	14	65	6.6	5.1 U

Notes:

(1) - Samples collected immediately prior to start up
(2) - Samples collected one week after startup
(3) - SSD-1 is the southernmost system, SSD-6 is the northernmos
J - Estimated concentration
U - Not detected at the associated reporting limit

Table 2

TCE and PCE Concentration Comparison Over Time
SSD System Sampling
Glenn Springs Holdings, Inc.
Hicksville, New York

	Location [3]:	SSD-6	SSD-6	SSD-6
	Sample Name:	SV6419VW001	SV61119CM011	SV10819CM001
	Sample Date:	06/04/2019 [1]	06/11/2019 [2]	10/08/2019
Parameters	**Unit**			
Volatile Organic Compounds				
Tetrachloroethene	µg/m3	5.2 U	19	3.0 J
Trichloroethene	µg/m3	1.7 J	5.6	4.9 U

Notes:

(1) - Samples collected immediately prior to start up
(2) - Samples collected one week after startup
(3) - SSD-1 is the southernmost system, SSD-6 is the northernmos
J - Estimated concentration
U - Not detected at the associated reporting limit