NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 8 6274 East Avon-Lima Road, Avon, NY 14414-9516 P: (585) 226-5353 | F: (585) 226-8139 www.dec.ny.gov

November 12, 2020

BakerHostetler Christopher H. Marraro, Esq. Washington Square 1050 Connecticut Avenue, N.W., Suite 1100 Washington, DC 20036-5304

Re: Corrective Measures Plan, November 6, 2020 711 North Road (Cooper Vision), Scottsville

Monroe County, Site No.: V00175

Dear Mr. Marraro;

The New York State Departments of Environmental Conservation and Health (collectively "the Departments") have completed their review of the Corrective Measures Plan (the Work Plan) dated November 6, 2020 and prepared by Haley & Aldrich of New York for the CooperVision site - Site No. V00175. In accordance with 6 NYCRR 375-1.6, the Work Plan is hereby approved.

Based on the schedule in the Work Plan, field work is expected to begin by the end of November. Please notify me at least 7 days in advance of the start of field activities and if there are any delays in the schedule.

Thank you for your cooperation in this matter and please contact me at frank.sowers@dec.ny.gov if you have any questions.

Sincerely,

Frank Sowers Project Manager

ec:

David Pratt Vince Dick
Santa McKenna Mark Ramsdell
Dusty Tinsley Justin Deming
James Mazurowski Julia Kenney
Denis Conley Bob Ooyama



HALEY & ALDRICH OF NEW YORK 200 Town Centre Drive Suite 2 Rochester, NY 14623 585.459.9000

6 November 2020 File No. 129375-005

New York State Department of Environmental Conservation 6274 East Avon-Lima Road Rochester, NY 14414

Attention: Mr. Frank Sowers, P.E

Subject: Corrective Measures Plan

CooperVision Facility Site #V00175-8

711 North Street Scottsville, New York

Dear Mr. Sowers:

This letter serves as the Corrective Measures Plan (CMP) requested in your letter dated 10 September 2020. This CMP has been prepared to address the issues relating to the Site Management Plan (SMP) identified by the New York State Department of Environmental Conservation (NYSDEC). Upon acceptance, implementation of the CMP, and approval from NYSDEC of the results, the 2019 Periodic Review Report (PRR) and Institutional Control/Engineering Control Certification (Certification) will be revised for the CooperVision Facility Site.

PRR Clarifications

<u>Comment:</u> In the 2019 PRR, conclusions included in Section 3.1.3 regarding the groundwater quality monitoring results for MW-202 appear to be inconsistent with statements made in a 13 August 2020 email to the Department concerning the presence of the bioamendment emulsified vegetable oil (EVO) within MW-202. The following information is provided to clarify the statements.

Response: Bioamendments can be comprised of various organic carbon substrates such as lactic acid, polylactate solutions as well as EVO. These substrates are designed to undergo degradation within the subsurface to promote biological growth of indigenous microorganisms to metabolize the groundwater contaminants present. Total organic carbon (TOC) and metabolic acids such as propanoic, butanoic and acetic acid which are produced during the breakdown of the bioamendment are used as indicator parameters of this process. During the review of 2019 groundwater monitoring data for MW-202, it was noted that the concentration of TOC and the metabolic acids were detected at concentrations above the laboratory reporting limit and that these data indicated that the carbon substrate had migrated to this area of the Site. The intent of this statement was to convey that the effects of the EVO injected upgradient of MW-202 had been observed not that the EVO had been detected in the sample collected. The presence of EVO which is a carbon-rich substrate within a well would be indicated by an observed TOC concentration generally 1 to 2 orders of magnitude above background levels which for the

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CooperVision site is approximately 1.0 milligram per liter (or 1.0 parts per million). The statement shared with the Department via e-mail on 13 August 2020 clarified this observation by graphically presenting the indicator parameter data for MW-202 since the EVO injection was conducted. These data indicate that detectable levels of metabolic acids and an observed reduction in the concentration of oxidized minerals (sulfate and nitrate) support that the effects of the EVO were observed at MW-202 during the reporting period but since the TOC concentration has not increased significantly above background (as was observed in the BAP wells following the injection) that EVO had not migrated to the MW-202 well location. The PRR will be revised to clarify Haley & Aldrich's interpretation of the groundwater conditions in the area of MW-202.

Corrective Measures

COMPLETED ACTION: SUB-SLAB DEPRESSURIZATION SYSTEM EVALUATION

Comment: In the 2019 PRR, it was noted that sub-slab vacuum levels at select locations did not meet design criteria of 0.002 inches of water column. While maintenance and vacuum cleaning of the test points was completed and resolved the problems at T-8, T-12 and T-18, cleaning and subsequent moving of T-1 did not correct the lack of vacuum issue at T-1. Additional evaluation has been completed at these locations and additional maintenance at T-1 was recently performed and is further discussed below. This information and data have been previously submitted to you via email on 28 September 2020.

Response: Haley & Aldrich subcontracted Mitigation Tech to evaluate the sub-slab depressurization system at Suction Pit 1 on 22 September 2020. Please refer to Figure 2. Mitigation Tech inspected the suction pit and found that the integrity of the floor penetration had been compromised. Mitigation Tech increased the suction pit cavity volume and improved the seal between the pipe and the floor slab for optimal system performance. The existing Radonaway GP-501 fan was removed and replaced with a Radonaway HS-5000 unit to increase vacuum at the suction pit. Following these improvements, vacuum at test points T-1, T-12 and T-18 improved and were above the design criteria of 0.002 inches of water column. See Table 1 for updated Vacuum readings.

The next round of SSD system inspections and sub-slab vacuum measurements will be made during the upcoming ground water sampling event to be conducted in October 2020. *Updated data attached*.

PROPOSED ACTION: DOWNGRADIENT OF MW-202 GROUNDWATER EVALUATION

Comment: Remedial amendment injections were implemented hydraulically upgradient of MW-202 to create a bioremediation barrier and mitigate off-site migration of impacted groundwater. The Department has expressed concerns about the detection of site contaminants of concern (COC) observed at MW-202 (located down-gradient of the source area).

Response: To further evaluate the effectiveness of the remedial action, CooperVision will collect groundwater samples at three locations downgradient of MW-202 (see Figure 1) to evaluate the groundwater quality. Haley & Aldrich will subcontract a driller to advance three soil borings using direct-push methods collect a groundwater sample at the elevation of MW-202's screened interval (between 563.15 and 552.95 MSL). A Haley & Aldrich geologist will screen soils visually and with a photoionization detector (PID) and a groundwater sample will be collected from each boring location for laboratory



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analysis using hydro-punch sampling methods within the 10-foot screened interval. The groundwater sample will be analyzed by EPA 8260C for 1,1,1-TCA, 1,1-DCA, 1,1-DCE, TCE, chloroethane and vinyl chloride.

Following completion of the soil boring program, the groundwater sample results will be shared with NYSDEC and a recommended location of the one-inch micro-well will be requested for approval. The microwell construction will be consistent with MW-202's 10 foot well screen, 12-foot sand pack and grout to ground surface with a flush mount surface completion. The well screen depths will correspond with the well screen elevation for MW-202. The microwell will be developed and allowed to equilibrate for two weeks and an additional sample will be collected for the analysis of the same parameters listed above.

PROPOSED ACTION: DOWNGRADIENT OF MW-202 SOIL VAPOR EVALUATION

The soil vapor program will be conducted in accordance with the NYSDOH 2006 <u>Guidance for Evaluating Soil Vapor Intrusion in the State of New York</u> (NYSDOH Guidance). A soil vapor sample will be collected from the existing soil vapor sample points, SV-6S and SV-6D, located across Briarwood Lane and hydraulically downgradient of MW-202. *Initial inspection of these soil vapor locations indicates moisture is present, but we anticipate that a representative soil vapor sample can be collected from each location.* As requested, an additional pair of soil vapor points (SV-2015/201D) shall be installed as shown on attached Figure 1. At the time of collection, a tracer gas test will be completed to evaluate the surface seals of the existing and the new SV points.

The soil vapor samples will be collected using a 2.7-liter passivated SUMMA® canister and analyzed in accordance with EPA Method TO-15 for 1,1,1-TCA, 1,1-DCA, 1,1-DCE, *TCE*, chloroethane and vinyl chloride. The soil vapor sample will be collected at a sampling rate of less than 100 mL per minute and handled as recommended by the NYSDOH Guidance.

Schedule

Work is scheduled to begin two weeks after NYSDEC's approval of this CMP but may change based on driller's availability and local weather. *Following implementation of the CMP, a summary report will be provided to NYSDEC with results and recommendations for future action. If warranted a supplemental CMP* or revising and re-submitting the 2019 PRR will be conducted.

We trust that the NYSDEC will find this CMP sufficient to address the issues raised in its 10 September 2020 letter regarding the PRR. Upon the NYSDEC's approval, we will proceed to complete the proposed CMP actions. Should you have any questions or additional concerns regarding this Corrective Measures Plan, please do not hesitate to contact us.



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Sincerely yours,

HALEY & ALDRICH OF NEW YORK

Denis M. Conley Senior Scientist

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Mark N. Ramsdell, P.E Senior Project Manager

Attachments:

Table 1 – *October* 2020 SSD System Monitoring

Figure 1 – Overall Site Plan – *Revised*

Figure 2 – SSDS Plan

c: CooperVision; Attn: Tricia Wittreich, Damaris Santiago Lebron, Bob Ooyama, Myles Ott

Baker Hostetler; Attn: Christopher H. Marraro, Esq. Haley & Aldrich; Attn: Vince Dick, Santa McKenna



Table V **Annual SSD System Monitoring**

Location (Site/Facility Name): Location (Address): Client:

CooperVision
Scottsville, NY
CooperVision

Test Point	10/24/2019 Vacuum Reading (""WC)	4/8/2020 - Vacuum Reading (""WC)	4/23/2020 Vacuum Reading (""WC)	9/10/2020 Vacuum Reading (""WC)	9/22/2020 Vacuum Reading (""WC)	10/29/2020 Vacuum Reading (""WC)
T-1	0.001	0.000	0.000	0.000	0.018	0.045
T-1R	T			0.003	0.057	0.115
T-2	*	*	*	*	*	*
T-3	0.069	0.066	*	0.072	*	0.069
T-4	0.005	0.003	*	0.008	*	0.013
T-5	0.019	0.014	*	0.020	*	0.014
T-6	0.038	0.034	*	0.042	*	0.039
T-7 (doors closed)	0.000	+0.001	*	0.003	*	0.000
T-7 (doors open)	0.003	0.002	*	0.009	*	0.005
T-8	0.023	+0.002	*	0.016	*	0.045
T-9	0.018	0.017	*	0.025	*	0.024
T-10	0.070	0.073	*	0.023	*	0.034
T-11	0.834	+0.003	0.113	0.137	*	0.126
T-12	0.003	0.000	0.000	0.006	0.030	0.071
T-13	0.005	0.005	0.013	0.026	*	0.021
T-14	0.005	0.024	0.024	0.045	*	0.042
T-15	0.035	0.038	*	0.054	*	0.050
T-16	0.021	0.047	*	0.064	*	0.061
T-17	0.017	0.031	*	0.045	*	0.042
T-18	0.005	+0.002	0.000	0.016	0.135	0.308

29-Oct-20 Date:

J Sanger/ Patrick McGowan 129375-005 Performed By: Job Number:

Suction Point	10/24/2019 Vacuum Reading ("WC)	4/8/2020 Vacuum Reading ("WC)	4/23/2020 Vacuum Reading ("WC)	9/10/2020 Vacuum Reading ("WC)	10/29/2020 Vacuum Reading ("WC)
S-1	4.0	4.0	*	4.0	37.0
S-2	2.7	2.8	*	2.7	2.7
S-3	1.1	1.2	*	1.2	1.2
S-4/5	2.2	2.2	*	2.0	2.4
S-6	3.7	0.0	3.2	3.3	3.3
S-7	1.5	1.5	*	1.6	1.5

Recommendation Actions:

Description of Past Year Activities: Suction Pit S-1 had an HS-5000 fan installed.

^{*}T-2 is not a valid test point

[&]quot;+0.006" indicates a positive vacuum reading
Visual Inspection of System:
Test points were in good condition.



