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Mr. Jacky Luo
Project Manager
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7010

Re: August 2022 Biological Monitoring Sampling Results
Bloody Brook, Onondaga County, New York

Dear Mr. Luo:

According to the February 2018 Bloody Brook Site Management ~~RMP~~ (SMP), updated in July 2022 (pending New York State Department of Environmental Conservation [NYSDEC] approval), biological monitoring is required to document cadmium concentrations in aquatic biota following completion of the remedial activities on the site. In July 2014, biota samples were collected from

remediation activities in the West Branch of Bloody Brook (WBBB) and Bloody Brook from below the confluence of the West and Middle Branches of Bloody Brook (collectively referred to as WBBB). Samples were collected from three general locations in WBBB, including an upper location (between Ontario Place and Cranberry Drive), a middle location (downstream from Floradale Road),

years following completion of construction activities from the same locations that were sampled during the 2014 baseline sampling to support an evaluation of the effectiveness of the site remedial

collectively with the 2014, 2018, and 2020 results and are provided in Table 1, enclosed with this letter.

Whole body crayfish samples were analyzed by Eurofins for total cadmium by USEPA SW846 Method 6020, and the data underwent full third party data validation. Analytical results for the 2014 baseline sampling and the 2018, 2020, and 2022 post-remediation monitoring are summarized in Table 1.

From the lower location, upstream from Onondaga Lake Parkway, the average concentration decreased between 2014 and 2020, with average baseline concentrations of 0.97 milligrams per kilogram-wet weight (mg/kg-ww) in 2014, and average 2018 and 2020 post-remediation

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Table 1
Analytical Data for Baseline (July 2014), First Year (August 2018), Second Year (2020), and Third Year (2022) Biota Monitoring
Bloody Brook
Onondaga County, New York

Sample Location	Sample Location	2014 Cadmium (mg/kg-ww)	2018 Cadmium (mg/kg-ww)	2020 Cadmium (mg/kg-ww)	2022 Cadmium (mg/kg-ww)
Upper Channel - between Ontario Place and Cranberry Drive	CR-1-01	3.1	0.53	1.2	0.80
	CR-1-02	3.6	0.56	2.3	1.7
	CR-1-03	3.2	1.3	0.84	1.5
	CR-1-04	2.5	0.76		0.83
	CR-1-05	4.4			0.94
	Average	3.4	0.79	1.4	1.2
Middle Channel - downstream from Floradale Road	CR-2-01	4.3	Not sampled	0.47	2.0
	CR-2-02	3.5	Not sampled	0.37	0.26
	CR-2-03	5.2	Not sampled	0.82	0.43
	CR-2-04	3.6	Not sampled	0.36	0.79
	CR-2-05	3.5	Not sampled		0.50
	Average	4.0	No samples	0.51	0.80
Lower Channel-upstream from Onondaga Lake Parkway	CR-3-01	0.97	0.059 J	0.085 J	0.084
	CR-3-02	0.76	0.13	0.088	0.11
	CR-3-03	1.3	0.12	0.069 J	0.094
	CR-3-04	1.5	0.22	0.043 J	0.11
	CR-3-05	0.33	0.18	0.067	0.10
	Average	0.97	0.14	0.070	0.10

Notes:

1. Biota samples were whole body crayfish.
2. Results are reported in wet weight.
3. No crayfish were located in the "middle" sample from 2018.
4. J - estimated value; detected above the method detection limit but below the reporting limit.