

Ms. Alicia Barraza
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, NY 12233-7016

Subject:
Annual Certification Report
Henry Johnson Boulevard Properties
City of Albany, New York
Project No. E401049

Dear Ms. Barraza:

On behalf of the City of Albany Community Development Agency, Arcadis of New York, Inc. (Arcadis) is pleased to submit the annual certification report for the above-referenced site to the New York State Department of Environmental Conservation (NYSDEC). In accordance with the approved Site Management Plan (SMP), semi-annual permanganate distribution monitoring was conducted in June and September 2018, permanganate cylinders were replaced in June 2018, and the site was inspected in September 2018. This report summarizes the results of permanganate monitoring, groundwater samples collected to-date, site conditions, maintenance activities, and the status and effectiveness of institutional controls.

The finished ground surface of the site is either crushed stone or vegetated with grass, trees, or shrubs. The City of Albany Department of General Services (DGS) maintains the surface vegetation at the site. During the June and September 2018 permanganate distribution monitoring events, the site was inspected to verify that the approved remedy has been maintained; and that the conditions at the site are protective of public health and the environment. During the previous year, there were no known changes to the surface cover and no excavations that disturbed subsurface materials. The site inspection form and site photographs are provided in Attachment 1.

The environmental easement for the site was executed by the NYSDEC on December 29, 2015, and filed with the Albany County Clerk on February 18, 2016. The environmental easement requires that (1) Institutional and Engineering Controls be maintained and monitored; (2) future exposure to remaining contamination be

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ENVIRONMENT

Date:
January 2, 2019

Contact:
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518-250-7300

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Stefan.Bagnato@arcadis.com

Our ref:
04279009.0000

Imagine the result

prevented by controlling disturbances of the subsurface contamination; and, (3) the use and development of the site be limited to commercial and industrial uses only, as permitted by zoning. The Certificate of Completion for the site was executed by the NYSDEC on March 30, 2016.

A summary of water levels measured and permanganate presence in each monitoring well is provided in Table 1, which has been previously submitted to NYSDEC. Sustained release potassium permanganate cylinders originally placed in monitoring wells IW-1, MW-10R, and MW-22R in May 2015 to address residual chlorinated volatile organic compounds (CVOCs) groundwater impacts at the site are replaced annually and were replaced in June 2018. Groundwater samples were last collected from site monitoring wells in June 2017, the results of which are summarized in Figure 1, which has been previously submitted to NYSDEC. As shown in Figure 1, residual CVOc impacts in site groundwater remain at the site. Per the SMP, the next groundwater sampling event will be prior to November 2020. As previously discussed with the NYSDEC, ACDA may choose to sample more frequently.

Review of the permanganate distribution data and groundwater sampling analytical results from previous years indicates that the concentrations of CVOCs in the site monitoring well network appear to be stable or decreasing with time. Collectively, the results from the 2018 monitoring and inspection indicate that the remedy for the site remains effective, down-gradient receptors have not been adversely affected, and institutional controls for the site are in place.

If you have any questions concerning this matter, please call me at (518) 250-7334.

Sincerely,

Arcadis of New York, Inc.

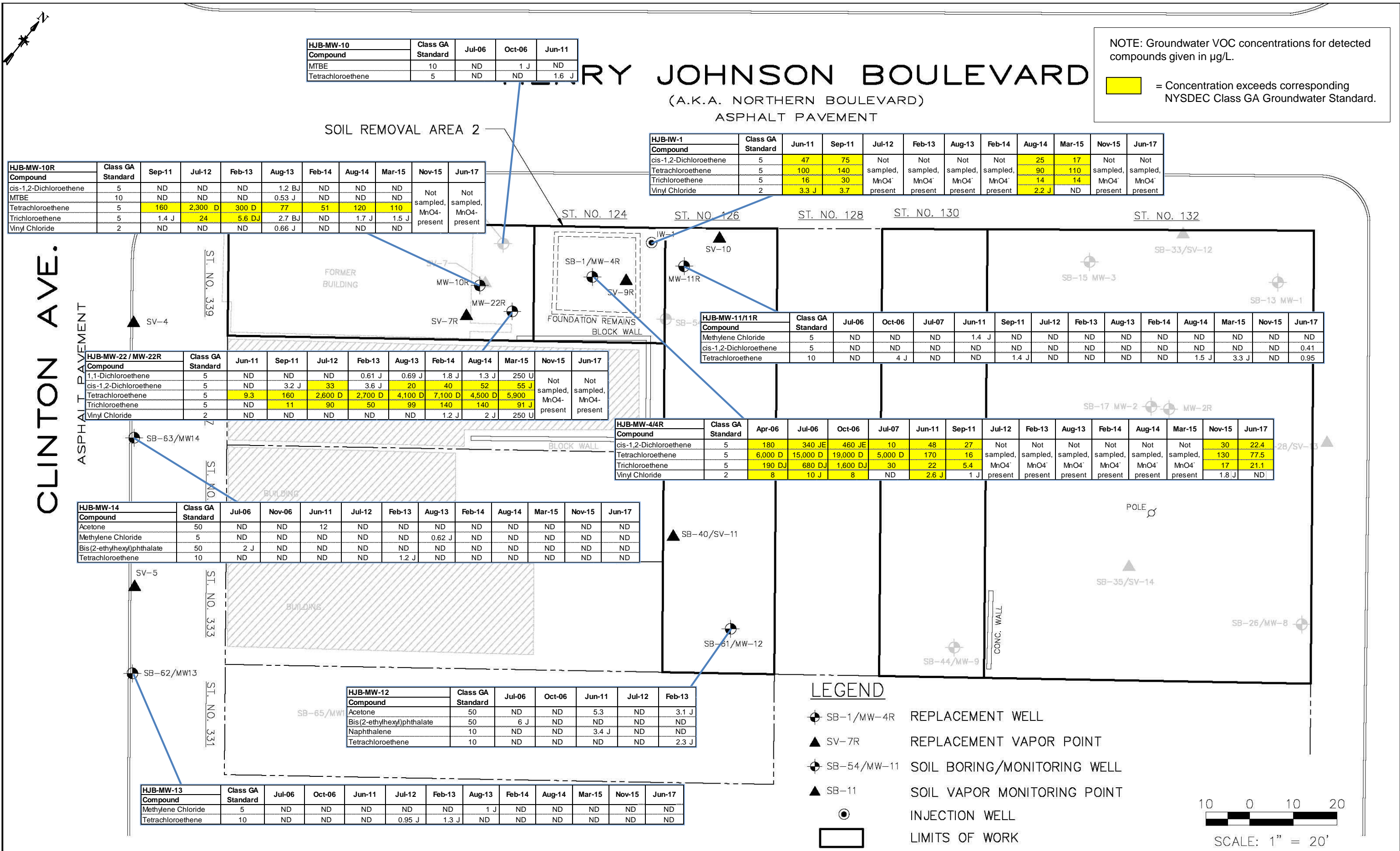


Stefan Bagnato, P.G
Senior Geologist

Copies:

Luis Perez, ACDA (w/enclosures)

Mike Komoroske, NYSDEC (w/enclosures)



HJB-MW-10 Compound	Class GA Standard	Jul-06	Oct-06	Jun-11
MTBE	10	ND	1 J	ND
Tetrachloroethene	5	ND	ND	1.6 J

HJB-IW-1 Compound	Class GA Standard	Jun-11	Sep-11	Jul-12	Feb-13	Aug-13	Feb-14	Aug-14	Mar-15	Nov-15	Jun-17
cis-1,2-Dichloroethene	5	47	75	Not sampled	Not sampled	Not sampled	Not sampled	25	17	Not sampled	Not sampled
Tetrachloroethene	5	100	140	MnO4 ⁻ present	MnO4 ⁻ present	MnO4 ⁻ present	MnO4 ⁻ present	90	110	MnO4 ⁻ present	MnO4 ⁻ present
Trichloroethene	5	16	30					14	14		
Vinyl Chloride	2	3.3 J	3.7					2.2 J	ND		

HJB-MW-10R Compound	Class GA Standard	Sep-11	Jul-12	Feb-13	Aug-13	Feb-14	Aug-14	Mar-15	Nov-15	Jun-17
cis-1,2-Dichloroethene	5	ND	ND	ND	1.2 BJ	ND	ND	ND	Not sampled, MnO4 ⁻ present	Not sampled, MnO4 ⁻ present
MTBE	10	ND	ND	0.53 J	ND	ND	ND	ND		
Tetrachloroethene	5	160	2,300 D	300 D	77	51	120	110		
Trichloroethene	5	1.4 J	24	5.6 DJ	2.7 BJ	ND	1.7 J	1.5 J		
Vinyl Chloride	2	ND	ND	ND	0.66 J	ND	ND	ND		

HJB-MW-11/11R Compound	Class GA Standard	Jul-06	Oct-06	Jul-07	Jun-11	Sep-11	Jul-12	Feb-13	Aug-13	Feb-14	Aug-14	Mar-15	Nov-15	Jun-17
Methylene Chloride	5	ND	ND	ND	1.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41
Tetrachloroethene	10	ND	4 J	ND	ND	1.4 J	ND	ND	ND	ND	1.5 J	3.3 J	ND	0.95

HJB-MW-4/4R Compound	Class GA Standard	Apr-06	Jul-06	Oct-06	Jul-07	Jun-11	Sep-11	Jul-12	Feb-13	Aug-13	Feb-14	Aug-14	Mar-15	Nov-15	Jun-17
cis-1,2-Dichloroethene	5	180	340 JE	460 JE	10	48	27	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled	30	22.4
Tetrachloroethene	5	6,000 D	15,000 D	19,000 D	5,000 D	170	16	MnO4 ⁻ present	MnO4 ⁻ present	MnO4 ⁻ present	MnO4 ⁻ present	MnO4 ⁻ present	MnO4 ⁻ present	130	77.5
Trichloroethene	5	190 DJ	680 DJ	1,600 DJ	30	22	5.4							17	21.1
Vinyl Chloride	2	8	10 J	8	ND	2.6 J	1 J							1.8 J	ND

HJB-MW-22 / MW-22R Compound	Class GA Standard	Jun-11	Sep-11	Jul-12	Feb-13	Aug-13	Feb-14	Aug-14	Mar-15	Nov-15	Jun-17
1,1-Dichloroethene	5	ND	ND	ND	0.61 J	0.69 J	1.8 J	1.3 J	250 U	Not sampled, MnO4 ⁻ present	Not sampled, MnO4 ⁻ present
cis-1,2-Dichloroethene	5	ND	3.2 J	33	3.6 J	20	40	52	55 J		
Tetrachloroethene	5	9.3	160	2,600 D	2,700 D	4,100 D	7,100 D	4,500 D	5,900		
Trichloroethene	5	ND	11	90	50	99	140	140	91 J		
Vinyl Chloride	2	ND	ND	ND	ND	ND	1.2 J	2 J	250 U		

HJB-MW-14 Compound	Class GA Standard	Jul-06	Nov-06	Jun-11	Jul-12	Feb-13	Aug-13	Feb-14	Aug-14	Mar-15	Nov-15	Jun-17
Acetone	50	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	ND	ND	0.62 J	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	50	2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	10	ND	ND	ND	ND	1.2 J	ND	ND	ND	ND	ND	ND

HJB-MW-12 Compound	Class GA Standard	Jul-06	Oct-06	Jun-11	Jul-12	Feb-13
Acetone	50	ND	ND	5.3	ND	3.1 J
Bis(2-ethylhexyl)phthalate	50	6 J	ND	ND	ND	ND
Naphthalene	10	ND	ND	3.4 J	ND	ND
Tetrachloroethene	10	ND	ND	ND	ND	2.3 J

HJB-MW-13 Compound	Class GA Standard	Jul-06	Oct-06	Jun-11	Jul-12	Feb-13	Aug-13	Feb-14	Aug-14	Mar-15	Nov-15	Jun-17
Methylene Chloride	5	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND
Tetrachloroethene	10	ND	ND	ND	0.95 J	1.3 J	ND	ND	ND	ND	ND	ND

LEGEND

- ⊕ SB-1/MW-4R REPLACEMENT WELL
- ▲ SV-7R REPLACEMENT VAPOR POINT
- ⊕ SB-54/MW-11 SOIL BORING/MONITORING WELL
- ▲ SB-11 SOIL VAPOR MONITORING POINT
- INJECTION WELL
- ▭ LIMITS OF WORK



SCALE: 1" = 20'

Table 1
Summary of Post-Injection Monitoring
Henry Johnson Boulevard Properties
Albany, New York

Date	Depth to Water (feet BTOC)							Notes
	IW-1	MW-4R	MW-11R	MW-22R	MW-10R	MW-13	MW-14	
11/16/11 8:00 AM Baseline	6.51	5.17	6.80	7.17	6.45	-	-	
11/16/11 2:00 PM	- (> 100 mg/L)	0.82 (> 100 mg/L)	6.71	7.20	6.3	8.31	9.55	
11/17/11 3:00 PM	5.53 (> 100 mg/L)	4.16 (> 100 mg/L)	6.76	7.01	5.83	8.45	9.57	
11/22/11 11:00 AM	5.89 (> 100 mg/L)	4.51 (> 100 mg/L)	6.77	7.25	5.97	8.74	9.66	
11/30/11 2:30 PM	5.99 (> 100 mg/L)	4.62 (> 100 mg/L)	6.79	7.04	5.77	8.20	9.51	
12/8/11 3:00 PM	6.01 (> 100 mg/L)	4.65 (> 100 mg/L)	6.79	7.15	5.72	8.10	9.59	
12/16/11 8:00 AM	6.06 (> 100 mg/L)	4.70 (> 100 mg/L)	6.76	7.06	5.87	8.49	9.55	
1/4/12 3:00 PM	5.90 (> 100 mg/L)	4.55 (> 100 mg/L)	6.79	7.00	5.72	8.49	9.68	
1/19/12 2:30 PM	6.06 (> 100 mg/L)	4.69 (> 100 mg/L)	6.78	7.27	6.24	8.61	9.80	
2/1/12 8:00 AM	5.98 (> 100 mg/L)	4.61 (> 100 mg/L)	6.80	7.24	6.03	8.44	9.53	
2/15/12 3:00 PM	6.26 (near 100 mg/L)	4.88 (> 100 mg/L)	6.80	7.46	6.14	8.68	9.87	
3/2/12 8:00 AM	6.43 (~50- >100 mg/L)	5.08 (> 100 mg/L)	6.80	7.23	6.02	8.61	9.79	
3/15/12 8:00 AM	5.92 (near 100 mg/L)	4.53 (> 100 mg/L)	6.80	6.26	5.99	8.53	9.85	
3/29/12 11:00 AM	6.08 (near 100 mg/L)	4.72 (> 100 mg/L)	6.82	6.51	6.25	8.66	9.80	
4/17/12 3:00 PM	6.48 (> 100 mg/L)	5.11 (> 100 mg/L)	6.88	6.94	6.70	8.84	10.06	
5/17/12 8:00 AM	5.67 (> 100 mg/L)	4.31 (> 100 mg/L)	6.72	5.69	5.42	8.31	9.62	
7/3/12 2:30 PM	6.87 (> 100 mg/L)	5.49 (> 100 mg/L)	7.12	7.65	7.38	9.22	10.06	
12/3/12 8:00 AM	8.18 (> 100 mg/L)	6.81 (> 100 mg/L)	7.06	9.42	7.49	9.50	10.03	
1/9/13 2:00 PM	6.68 (> 100 mg/L)	5.35 (> 100 mg/L)	6.83	7.24	6.93	NM	NM	
2/13/13 8:30 AM	6.39 (> 100 mg/L)	5.01 (> 100 mg/L)	6.84	6.88	6.57	8.14	9.63	

Table 1
Summary of Post-Injection Monitoring
Henry Johnson Boulevard Properties
Albany, New York

Date	Depth to Water (feet BTOC)							Notes
	IW-1	MW-4R	MW-11R	MW-22R	MW-10R	MW-13	MW-14	
4/3/13 11:00 AM	6.27 (> 100 mg/L)	4.90 (> 100 mg/L)	6.81	6.15	5.88	8.49	9.76	
6/11/13 1:00 PM	5.48 (> 100 mg/L)	4.09 (> 100 mg/L)	6.73	4.89	4.45	8.25	9.59	
8/27/13 8:00 AM	7.70 (> 100 mg/L)	6.63 (> 100 mg/L)	12.29	9.66	7.66	9.36	9.55	
12/4/13 2:30 PM	7.24 (> 100 mg/L)	5.90 (> 100 mg/L)	6.97	7.47	7.18	9.13	9.93	
2/11/14 7:30 AM	7.09 (> 100 mg/L)	5.71 (> 100 mg/L)	7.06	8.16	7.86	8.86	9.90	
6/25/14 8:00 AM	6.40 (~ 10 mg/L)	5.03 (~ 75 mg/L)	6.97	6.65	6.32	8.88	9.63	
8/22/14 8:00 AM	7.28	5.90 (~ 75 mg/L)	7.31	7.93	7.55	9.20	9.54	
12/22/14 8:00 AM	5.98	4.62 (~50 mg/L)	6.88	5.33	5.78	8.45	9.32	
3/5/15 11:00 AM	7.73	6.36 (~50 mg/L)	7.90	9.96	9.75	8.83	9.92	
6/11/15 8:30 AM	5.84	4.47	6.93	5.23	4.72	8.51	9.56	
7/22/15 9:00 AM	6.82 (~50 mg/L)	5.44	7.10	>100 mg/L	6.65 (>100 mg/L)	8.48	9.40	Water level was below MnO4 cylinders at MW 22R. DTW > 6.78'.
11/5/15 8:45 AM	6.16 (~25 mg/L)	4.76	6.96	6.99 (~25 mg/L)	6.50 (~50 mg/L)	8.56	9.39	
6/10/16 8:30 AM	6.88	5.50	7.14	7.00 (~1.0 mg/L)	6.59 (~0.5 mg/L)	8.36	9.48	
10/6/16 9:00 AM	8.25 (~100 mg/L)	6.90	10.79	6.79 (~100 mg/L)	6.71 (>100 mg/L)	8.98	9.61	
6/13/17 8:30 AM	6.29 (>100 mg/L)	4.92	7.09	6.50 (~100 mg/L)	5.69 (>100 mg/L)	8.81	9.63	
10/17/17 8:30 AM	8.36 (>100 mg/L)	7.01	10.559	11.18 (~100 mg/L)	10.02 (>100 mg/L)	9.25	9.73	
6/7/18 8:30 AM	7.01 (>100 mg/L)	5.65	7.19	8.06 (~100 mg/L)	7.19 (>100 mg/L)	9.01	9.85	
9/24/18 8:55 AM	6.56 (>100 mg/L)	5.19	7.23	8.40 (~100 mg/L)	6.63 (>100 mg/L)	8.77	9.45	

Notes:

BTOC - below top of casing.

NM - Not measured.

- Permanganate present in well (estimated concentration given).

SITE INSPECTION FORM
Henry Johnson Boulevard Properties
Albany New York

Date: June 7^m 2018

Weather: 70°F overcast

Inspector: Abbey Thomas + Emmanuel Sasser

- | | <u>No</u> | <u>Yes</u> |
|---|-----------|------------|
| 1) Is there a change in site/property use since last inspection? | <u>✓</u> | _____ |
| 2) Is there a change in site/property vegetation since last inspection? | <u>✓</u> | _____ |
| 3) Is there evidence of excavation since last inspection? | <u>✓</u> | _____ |
| 4) Is there any damage to monitoring wells or vapor points since last inspection? | <u>✓</u> | _____ |

Comments: *(Required for each Yes answer)*

Additional Comments/Concerns/Recommendations/Sketches:

See photos for additional information.

Signed: 

Date: 6-7-2018

SITE INSPECTION FORM

Henry Johnson Boulevard Properties
Albany New York

Date: 9/24/18

Weather: Partly Cloudy 53°F


Inspector: ES

- | | <u>No</u> | <u>Yes</u> |
|---|-----------|------------|
| 1) Is there a change in site/property use since last inspection? | <u>✓</u> | <u> </u> |
| 2) Is there a change in site/property vegetation since last inspection? | <u>✓</u> | <u> </u> |
| 3) Is there evidence of excavation since last inspection? | <u>✓</u> | <u> </u> |
| 4) Is there any damage to monitoring wells or vapor points since last inspection? | <u>✓</u> | <u> </u> |

Comments: *(Required for each Yes answer)*

Additional Comments/Concerns/Recommendations/Sketches:

- See Site Photos

Signed: 

Date: 9/24/18

Project Photographs

HENRY JOHNSON BOULEVARD ERP
ALBANY COMMUNITY DEVELOPMENT AGENCY



Photo: 1

Date:
6/7/2018

Description:
Westward view of site

Location:
Albany, NY

Photo: 2

Date:
6/7/2018

Description:
Northwestward view of site

Location:
Albany, NY



Project Photographs

HENRY JOHNSON BOULEVARD ERP
ALBANY COMMUNITY DEVELOPMENT AGENCY



Photo: 3

Date:

9/24/2018

Description:

Westward view of site

Location:

Albany, NY

Photo: 4

Date:

9/24/2018

Description:

Eastward view of site

Location:

Albany, NY



Project Photographs

HENRY JOHNSON BOULEVARD ERP
ALBANY COMMUNITY DEVELOPMENT AGENCY



Photo: 5

Date:
9/24/2018

Description:
Southeastward view of site

Location:
Albany, NY