



January 25, 2016

Reference No. 017948

Mr. David Szymanski
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, NY 14203-2999

Dear Mr. Szymanski:

**Re: Periodic Review Report
Ellison Bronze Site (Formerly Dowcraft), Falconer, New York
Site No. 907018**

Pursuant to the New York State Department of Environmental Conservation (NYSDEC) letter dated September 18, 2009, this letter provides the 2013 – 2015 Site Management Periodic Review Report for the Ellison Bronze Site (formerly Dowcraft) located at 125 West Main Street in Falconer, New York (Site).

1. Introduction

The Ellison Bronze Site is an operating foundry producing brass doors and hardware. Historically, some of the foundry wastes were deposited at the back of the property. These wastes included metal filings, and being a brass foundry, resulted in some lead wastes that exceeded New York State criteria. The extent of the waste was delineated and the chosen remediation method was in-place stabilization using cement. The in-place stabilization is described in Section 2.

The remediation has been proven effective through the testing that was performed at the time the stabilization was performed in 1995 and with subsequent groundwater sampling that has proven that no lead leaches from the stabilized waste.

Ellison Bronze maintains the Site in accordance with the requirements of the NYSDEC-approved post-remedy plan and performs corrective measures on an as-needed basis. As noted in the NYSDEC's February 3, 2010 email (from David Szymanski to Jim Kay), Periodic Review Reports are now required to be submitted every 3 years, consistent with the frequency of the groundwater monitoring events (i.e., once every 3 years).

All of the activities performed at the Site have been completed in accordance with the terms specified in the Order on Consent that was signed by Ellison Bronze and the NYSDEC on June 13, 1995 and as amended by subsequent correspondence from the NYSDEC dated June 13, 2001, December 15, 2006, and February 3, 2010.

2. Site Overview

The Ellison Bronze Site is located in the developed area of Falconer at 125 West Main Street. The Site is bounded to the northwest by West Main Street; to the northeast by Moon Brook; to the southeast by the Chadakoin River; and to the southwest by adjacent commercial and residential properties. The waste materials identified at the Site occupied an area approximately 60 feet by 130 feet in the southeast corner of the property along Moon Brook and the Chadakoin River.

The Site was remediated in 1995. The remedy consisted of the excavation and stabilization of approximately 1,400 cubic yards of lead-contaminated foundry waste and 60 cubic yards of copper-contaminated stream sediment. The extent of impacted materials was identified in the investigations performed at the Site in the immediately preceding years. The results of the Site studies showed that there were no other impacts to the Site or the waterways other than the identified materials. Based on the investigations, there was no impact to the soils beneath the foundry waste and there was no impact on groundwater quality.

The impacted materials were stabilized with Portland cement in a mixer in small batches. Each batch was tested using aggressive Toxicity Characteristic Leaching Procedure (TCLP) methods to confirm that the stabilized material would not leach any deleterious material. All data from the stabilized material were reviewed and approved by the NYSDEC prior to backfilling. Samples were also collected from the base and sidewalls of the excavation to confirm that all lead-impacted waste and copper-impacted sediment had been removed.

Following backfilling of the stabilized materials, the area was repaved to match previous conditions and to further eliminate the potential for contact with the stabilized materials.

The banks along Moon Brook and Chadakoin River were stabilized with large stone, concrete barriers, and topsoil/vegetation as appropriate to match the topographic conditions along each portion of the waterway.

There have been no releases from the stabilized material since completion of the remediation in 1995 and thus the remedy has met the cleanup goals and closure requirements.

There have been no changes to the remedy since 1995 other than routine maintenance activities.

3. Evaluate Remedy Performance, Effectiveness, and Protectiveness

As evidenced by the groundwater data collected at the Site, there have been no releases of lead from the stabilized waste. Consequently, the remedy is performing as designed and is effective and protective of human health and the environment.

4. Monitoring Plan Compliance

Commencing in November 1996, and continuing through December 2015, groundwater samples have been collected from the three on-Site wells in accordance with the long-term monitoring plan. As agreed in a letter dated June 13, 2001, the NYSDEC has approved a reduction in the groundwater monitoring program frequency in that samples from the three wells need only be collected once every 2 years. A subsequent letter from the NYSDEC dated December 15, 2006 has approved a further reduction in the groundwater sampling frequency to once every 3 years. Consequently, groundwater sampling events were conducted in 2009, 2012, and 2015.

Groundwater sampling was most recently performed on November 30, 2015 in accordance with the Long-Term Monitoring Plan contained in the *Soil/Sediment Stabilization Summary Report, Dowcraft Corporation, Ellison Bronze Site, Falconer, New York*. Two monitoring wells were sampled (ESI-1R and ESI-2). A third monitoring well, ESI-3, had been covered by a concrete apron for a new loading bay and is no longer accessible.

Purging was continued until sediment-free water was obtained. The presence of sediment-free water was determined by both visual observation and the use of a field turbidimeter. Turbidity values of less than 5 nephelometric turbidity units (NTU) were obtained at both sampling locations.

Each well was sampled for lead, barium, manganese, and iron. The samples were placed in a cooler with ice and shipped to TestAmerica Laboratories, Inc. in Pittsburgh, Pennsylvania on November 30, 2015 following appropriate chain of custody procedures. Table 1 presents the 2015 analytical results for the groundwater samples.

The 2015 analytical results for each parameter were below New York State Class GA Groundwater Standards at monitoring well ESI-1R. The results at monitoring well ESI-2 were below New York State Class GA Groundwater Standards for lead and barium. However, the results at ESI-2 for iron and manganese were above the groundwater standards. The concentration of iron in the 2015 sample from ESI-2 (1.6 milligrams per liter [mg/L]) was higher than the historical data at that location.

Based on historic results, manganese had typically been found at higher concentrations only at ESI-1R. In the 2012 Periodic Review Report (submitted on January 30, 2013), it was observed that manganese was detected at a higher concentration at ESI-2 in the 2012 sampling event. It was suspected that there was an error in either the sampling or analysis of the samples for the two wells (ESI-1R and ESI-2) and that the data may have been switched between the two wells, due to the historical data indicating that manganese had higher concentrations in ESI-1R. A review of the procedures followed by the sampler was not able to identify any error in the 2012 data. However, the 2015 manganese results are consistent with the 2012 manganese results, with higher concentrations observed in ESI-2. The results from the next sample round in 2018 will be carefully reviewed to confirm the actual conditions.

The reported level of manganese at ESI-2, however, is similar to those detected at ESI-1 during previous sampling events (1996 through 2009) and is less than those reported at the same location during the Remedial Investigation in 1992. Given that the parameter is manganese and the concentration is only 3.5 mg/L, there is no environmental threat. A historical summary for all sampling

rounds is provided in Table 2. In accordance with the current schedule, the next sampling event will occur late in the year 2018, followed by the preparation of the next Periodic Review Report.

5. Operation and Maintenance Plan Compliance

In accordance with the Long-Term Monitoring Plan contained in the *Soil/Sediment Stabilization Summary Report, Dowcraft Corporation, Ellison Bronze Site, Falconer, New York*, semiannual inspections are made of the paved areas, grass area, stream banks, and on-Site monitoring wells. Copies of the semiannual inspection reports are attached. The reports show that in the April 2013 inspection, the roadway and parking lot on the west side of the building needed repairs. The October 2013 inspection and both 2014 inspections indicated that the paved areas were in good to satisfactory condition. Also, the April 2015 inspection indicated that holes were present in the blacktop and needed repairs. The September 2015 inspection indicated that the paved areas were in satisfactory condition. Aside from repairs to paved areas, no additional maintenance was required from 2013 through 2015.

In April 2014, a building permit was issued to the Site by the village of Falconer, New York, for the construction of an addition to the main building. The permit is attached in this report, in accordance with Box #1, Question #4 of the Site Management Periodic Review Report Notice – Institutional and Engineering Controls Certificate Form that was issued for the Site.

5.1 Overall Conclusions and Recommendations

All of the required work was completed and is reported herein. The remedy has effectively isolated and secured the waste material and there is no risk to human health or the environment.

The groundwater concentrations from the samples collected in 2015 are similar to those of the previous 19 years. All of the data show that the lead contaminated materials have been suitably addressed from an environmental perspective and that no leaching of lead has or will occur. Consequently, it is concluded that the remediation of this Site has been successfully completed and that there is no need for continued groundwater monitoring of this Site. However, the Site will continue with groundwater sampling every 3 years in accordance with the NYSDEC-approved groundwater monitoring program frequency.

As required, a completed copy of the Site Management Periodic Review Report Notice – Institutional and Engineering Controls Certificate Form is attached. Also attached is the building permit issued for the Site for additions made to the building within the past 3 years.

Should there be any questions, please do not hesitate to contact me at 716-297-6150 or Matt Kirkpatrick of Ellison Bronze at 716-665-6522.

Sincerely,

GHD

A handwritten signature in black ink, reading "Shaun McEvoy". The signature is fluid and cursive, with a long horizontal stroke extending from the end of the name.

Shaun McEvoy

SM/al/1

Encl.

cc: Matt Kirkpatrick, Ellison Bronze

Table 1

**Analytical Results Summary
Groundwater Sampling
Ellison Bronze
Falconer, New York
November 2015**

Location: Sample ID: Date:			ESI-1R WG-17948 113015-DT-001 11/30/2015	ESI-1R WG-17948 113015-DT-002 11/30/2015 Duplicate	ESI-2 WG-17948 113015-DT-003 11/30/2015
Parameter	Units	Class GA Groundwater Standard (µg/L)			
Metals					
Barium	µg/L	1000	88 J	86 J	500
Iron	µg/L	300	7.9 U	12 J	1600
Lead	µg/L	25	2.0 U	2.0 U	2.1 J
Manganese	µg/L	300	18	20	3500
Field Parameters					
Turbidity, field	NTU		1.06	1.06	4.07

Notes:

- J - Estimated concentration
 U - Not detected at the associated reporting limit
 NTU - Nephelometric Turbidity Unit
 It is suspected that the manganese concentrations for ESI-1R and ESI-2 have been inadvertently switched for this sample round.

Table 2

Historical Analytical Results Summary
Groundwater Sampling
Long-Term Monitoring Program
Dowcraft Corporation, Ellison Bronze Site
Falconer, New York

Class GA Groundwater Standard		ESI-1R										
(mg/L)		1996	1997	1998	1999	2000	2002	2004	2006	2009	2012	2015
Total Lead	0.025	ND (0.005)/ND (0.005)	ND (0.002)/ND (0.002)	ND (0.003)/ND (0.003)	ND (0.002)/ND (0.002)	ND (0.005)/ND (0.005)	ND (0.005)/ND (0.005)	0.00197J/0.00242J	ND (0.003)	ND (0.003)	ND (0.003)/0.001J	ND (0.002)/ND (.002)
Total Barium	1.0	0.17/0.16	0.177/0.174	0.207/0.206	0.232/0.230	0.252/0.259	0.201/0.202	0.151/0.148	0.128J	0.211	0.091J/0.090J	0.088J/0.086J
Total Iron	0.3	0.15/0.14	ND (0.06)/ND (0.06)	0.115/0.153	0.222/0.175	0.132/0.114	0.0998J/0.103J	ND (0.2)/ ND (0.2)	ND (0.10)	0.143	ND (0.1)/ND(0.1)	ND (0.008)/0.012J
Total Manganese	0.3	2.4/2.4	2.45/2.41	1.81/1.81	2.13/2.13	3.08/3.13	2.78/2.78	1.390/1.350	0.339	1.620	0.084/0.081	0.018/0.020

Class GA Groundwater Standard		ESI-2										
(mg/L)		1996	1997	1998	1999	2000	2002	2004	2006	2009	2012	2015
Total Lead	0.025	ND (0.005)	0.003	ND (0.003)	ND (0.002)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.003)	ND (0.003)	ND (0.003)	0.0021 J
Total Barium	1.0	0.15	0.159	0.144	0.156	0.153	0.184	0.173	0.159J	0.078J	0.3500	0.5000
Total Iron	0.3	0.09	ND (0.06)	ND (0.06)	0.062	ND (0.050)	ND (0.020)	ND (0.20)	0.032J	0.025J	0.2000	1.6000
Total Manganese	0.3	0.17	0.086	0.02	0.058	0.030	0.0808	0.033	0.069	0.074	5	3.5

Class GA Groundwater Standard		ESI-3										
(mg/L)		1996	1997	1998	1999	2000	2002	2004	2006	2009	2012	2015
Total Lead	0.025	ND (0.005)	0.003	ND (0.003)	ND (0.002)	ND (0.005)	0.00165J	0.00212J	ND (0.003)	(0.003)/ND (0.003)	ND (0.003)	NS
Total Barium	1.0	0.17	0.136	0.113	0.086	0.077	0.0799	0.247	0.189J	0.352/0.348	0.2	NS
Total Iron	0.3	0.06	ND (0.06)	ND (0.06)	0.079	0.074	ND(0.200)	ND (0.20)	ND (0.10)	0.037J/0.037J	ND (0.10)	NS
Total Manganese	0.3	0.007	ND (0.01)	ND (0.01)	0.005	ND (0.010)	0.0033J	ND (0.010)	0.005J	0.007J/0.007J	ND (0.015)	NS

Notes:

J - Estimated concentration

NS - Not sampled

TABLE C.1

SEMI-ANNUAL INSPECTION CHECKLIST
LONG-TERM MONITORING PLAN
ELLISON BRONZE SITE
FALCONER, NEW YORK

Date: April 12, 2013

Inspection Personnel: Doyle & Fran

Inspection Item	Condition		
	Good	Satisfactory	Poor-Repairs Required
A. Paved Areas	☐	☐	☒
B. Grassed Areas	☒	☐	☐
C. Stream Banks	☒	☐	☐
D. Monitoring Wells	☐	☒ making New Cups	☐

Comments:

Roadway & Parking Lot on West
Side of Building needs some
repairs

F.J. Doyle

Doyle Hanks

TABLE C.1

SEMI-ANNUAL INSPECTION CHECKLIST
LONG-TERM MONITORING PLAN
ELLISON BRONZE SITE
FALCONER, NEW YORK

Date:

Oct 4th 2013

Inspection Personnel:

Doyle Haskin
Francis Dexter

Inspection Item	Condition		
	Good	Satisfactory	Poor-Repairs Required
A. Paved Areas	☐	☒	☐
B. Grassed Areas	☒	☐	☐
C. Stream Banks	☒	☐	☐
D. Monitoring Wells	☐	☒	☐

Comments:

Doyle Haskin

F. J. Dexter

TABLE C.1

SEMI-ANNUAL INSPECTION CHECKLIST
LONG-TERM MONITORING PLAN
ELLISON BRONZE SITE
FALCONER, NEW YORK

Date:

3/28/2014

Inspection Personnel:

Michael J. [Signature]

Inspection Item	Condition		
	Good	Satisfactory	Poor-Repairs Required
A. Paved Areas	☒	☐	☐
B. Grassed Areas	☒	☐	☐
C. Stream Banks	☒	☐	☐
D. Monitoring Wells	☒	☐	☐

Comments:

TABLE C.1

SEMI-ANNUAL INSPECTION CHECKLIST
LONG-TERM MONITORING PLAN
ELLISON BRONZE SITE
FALCONER, NEW YORK

Date:

Oct 15, 2014

Inspection Personnel:

T. J. Deft

Inspection Item	Condition		
	Good	Satisfactory	Poor-Repairs Required
A. Paved Areas	☐	☒	☐
B. Grassed Areas	☒	☐	☐
C. Stream Banks	☒	☐	☐
D. Monitoring Wells	☒	☐	☐

Comments:



ELLISON BRONZE INC.
125 West Main Street
Falconer, New York 14733
TEL: 1-716-665-6522
FAX: 1-716-665-5552

TABLE C.1
SEMI-ANNUAL & LONG-TERM MONITORING PLAN

Inspection Date: **Tuesday, April 07, 2015**

Inspection Item	Condition		
	Good	Satisfactory	Poor-Repairs Required
A. Paved Areas	☐	☐	☒
B. Grassed Areas	☒	☐	☐
C. Stream Banks	☐	☒	☐
D. Monitoring Wells	☐	☒	☐

NOTE: If any areas listed above are in poor condition or need repairs. Please note what repairs you think are needed in the comment section listed below.

Additional Comments: Holes in Black Top

Wm. Askas (4-7-15)
Inspection Person's Signature





ELLISON BRONZE INC.
125 West Main Street
Falconer, New York 14733
TEL: 1-716-665-6522
FAX: 1-716-665-5552

TABLE C.1
SEMI-ANNUAL & LONG-TERM MONITORING PLAN

Inspection Date: **Monday, September 28, 2015**

Inspection Item	Condition		
	Good	Satisfactory	Poor-Repairs Required
A. Paved Areas	☐	☒	☐
B. Grassed Areas	☒	☐	☐
C. Stream Banks	☐	☒	☐
D. Monitoring Wells	☐	☒	☐

NOTE: If any areas listed above are in poor condition or need repairs. Please note what repairs you think are needed in the comment section listed below.

Additional Comments: _____

William Haskins
Inspection Person's Signature



PERMIT GRANTED

For Additions and Alterations to this Building

Date 4-16-14

VILLAGE OF FALCONER

Permit No. A-4-14

By Frank J. [Signature]

No. ELLISON BRONZE St.

This Card Must Be Placed On Building During Construction Work



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site Details		Box 1
Site No.	907018	
Site Name Ellison Bronze Company		
Site Address: 125 West Main Street		Zip Code: 14733
City/Town: Falconer		
County: Chautauqua		
Site Acreage: 2.6		
Reporting Period: December 31, 2012 to December 31, 2015		
		YES NO
1. Is the information above correct?	☒	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☒	☐
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☒

Box 2	
	YES NO
6. Is the current site use consistent with the use(s) listed below? Industrial	☒ ☐
7. Are all ICs/ECs in place and functioning as designed?	☒ ☐
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.	
A Corrective Measures Work Plan must be submitted along with this form to address these issues.	
Signature of Owner, Remedial Party or Designated Representative	Date

SITE NO. 907018

Box 3

Description of Institutional Controls

Parcel

Owner

Institutional Control

105-18-19.3

Ellison Bronze Company

Monitoring Plan

- Deed Restriction per Order On Consent (6/13/1995)
- Record of Decision (3/1996): Semi-Annual Inspection and Annual Groundwater Sampling. (Modified to annual inspection and tri-annual groundwater sampling with DEC R9 concurrence.)

Box 4

Description of Engineering Controls

Parcel

Engineering Control

105-18-19.3

Cover System

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were ~~prepared under the direction of, and reviewed by, the party making the certification;~~ ^{RCA}

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

☒ ☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

☒ ☐

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 907018

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Matthew Kirkpatrick at 125 West Main Street, Falconer, NY
print name print business address

am certifying as Ellison Bronze, INC (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.


Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

01-19-2016
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

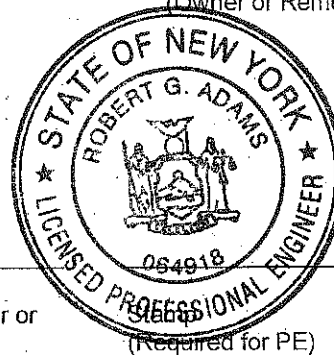
I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I ROBERT G. ADAMS at GHD CONSULTING SERVICES INC.
print name 285 DELAWARE AVE, BUFFALO NY 14202
print business address

am certifying as a Professional Engineer for the REMEDIAL PARTY
(Owner or Remedial Party)

Robert G. Adams

Signature of Professional Engineer, for the Owner or
Remedial Party, Rendering Certification



01-25-16

Date

(Required for PE)