



**CONESTOGA-ROVERS
& ASSOCIATES**

651 Colby Drive, Waterloo, Ontario, Canada N2V 1C2
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January 30, 2013

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 2010 - 2012 Site Management Periodic Review Report for the Ellison Bronze Site (formerly Dowcraft) located at 125 West Main Street in Falconer, New York (Site).

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 remediated by stabilizing the waste with cement.

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.



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 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.



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.

MONITORING PLAN COMPLIANCE

Commencing in November of 1996, and continuing through December of 2012, 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 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 and 2012.

Groundwater sampling was performed on December 17, 2012 in accordance with the Long-Term Monitoring Plan contained in the *Soil/Sediment Stabilization Summary Report, Dowcraft Corporation, Ellison Bronze Site, Falconer, New York*. Three monitoring wells were sampled (ESI-1R, ESI-2, and ESI-3).

Purging was continued until sediment-free water was obtained. Sediment-free water was determined by both visual observation and the use of a field turbidimeter. Turbidity values of less than 5 NTU were obtained at all three sampling locations.

Each well was sampled for lead, barium, manganese, and iron. The samples were placed in a cooler with ice and shipped to the TestAmerica Laboratory in Pittsburgh PA on December 17, 2012 following appropriate chain-of custody procedures. Table 1 presents the 2012 analytical results for the groundwater samples.

The 2012 analytical results for each parameter were below New York State Class GA Groundwater Standards at all locations with the exception of manganese at location ESI-2. Based on historic results, manganese was typically only found at higher concentrations at ESI-1R. It is therefore suspected that there has been an error in either the sampling or analysis of the samples for these two wells and that the data have been switched between the two wells. However, a confirmation from both the sampler and laboratory was not able to identify any error. The results from the next sample round in 2015 will be carefully reviewed to confirm the actual conditions. Given that the parameter is manganese and the concentration is only 5 mg/L, there is no environmental threat.



The reported level of manganese, however, is similar to those detected during all previous sampling events (1996 through 2009) and is less than those reported at the same location during the Remedial Investigation in 1992. 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 2015, followed by the preparation of the next Periodic Review Report.

OPERATION & 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*, semi-annual inspections are made of the paved areas, grass area, stream banks, and on-Site monitoring wells. Copies of the semi-annual inspection reports are attached. The reports show that all of the inspected Site features are in good to satisfactory condition. Consequently, no repairs or maintenance were required in 2012, other than the repair to one monitoring well cap. The well cover of ESI-3 has been destroyed and a temporary cover was installed in December. Once the spring weather arrives, a permanent repair of this well cover will be made.

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 2012 are similar to those of the previous 16 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.

As required, a completed copy of the Site Management Periodic Review Report Notice - Institutional and Engineering Controls Certificate Form is attached.



**CONESTOGA-ROVERS
& ASSOCIATES**

January 30, 2013

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Reference No. 017948

Should there be any questions, please do not hesitate to contact me at 519-884-0510 or Mark Graves of Ellison Bronze at 716-665-6522.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

James K. Kay, P.Eng.

JKK/lp/7
Encl.

cc: Mark Graves
Dave Tyran

TABLE 1

ANALYTICAL RESULTS SUMMARY
 GROUNDWATER SAMPLING
 ELLISON BRONZE
 FALCONER, NEW YORK
 DECEMBER 2012

Location: ESI-1R ESI-1R ESI-2 ESI-3
 Sample ID: WG-17948 121712-003 WG-17948 121712-004 WG-17948 121712-002 WG-17948 121712-001
 Date: 12/17/2012 12/17/2012 12/17/2012 12/17/2012

Duplicate

Parameter	Units	ESI-1R	ESI-1R	ESI-2	ESI-3
<u>Metals</u>					
Barium	ug/L	91 J	90 J	350	200
Iron	ug/L	100 U	100 U	200	100 U
Lead	ug/L	3.0 U	1.4 J	3.0 U	3.0 U
Manganese	ug/L	84	81	5000	15 U

Field Parameters

Turbidity, field	NTU	1.85	1.85	2.59	2.84
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Note:

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 (mg/L)	ESI-IR										
	1996	1997	1998	1999	2000	2002	2004	2006	2009	2012	
Total Lead	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)	0.00197/0.00242J	ND (0.003)	ND (0.003)	ND (0.003)/0.001J	
Total Barium	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	
Total Iron	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)	
Total Manganese	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	

Note:

It is suspected that the manganese concentrations for ESI-1R and ESI-2 have been inadvertently switched for the 2012 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 (mg/L)	ESL-2									
	1996	1997	1998	1999	2000	2002	2004	2006	2009	2012
Total Lead	0.025	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)
Total Barium	1.0	0.159	0.144	0.156	0.153	0.184	0.173	0.159J	0.078J	0.3500
Total Iron	0.3	ND (0.06)	ND (0.06)	0.062	ND (0.050)	ND (0.020)	ND (0.20)	0.032J	0.025J	0.2000
Total Manganese	0.3	0.086	0.02	0.058	0.030	0.0808	0.033	0.069	0.074	5

Note:

It is suspected that the manganese concentrations for ESL-1R and ESL-2 have been inadvertently switched for the 2012 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 (mg/L)	ESI-3									
	1996	1997	1998	1999	2000	2002	2004	2006	2009	2012
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)	ND (0.003)
Total Barium	1.0	0.17	0.136	0.086	0.077	0.0799	0.189J	0.247	0.352/0.348	0.2
Total Iron	0.3	0.06	ND (0.06)	0.079	0.074	ND(0.200)	ND (0.20)	ND (0.20)	0.037J/0.037J	ND (0.10)
Total Manganese	0.3	0.007	ND (0.01)	0.005	ND (0.010)	0.0033J	ND (0.010)	0.005J	0.007J/0.007J	ND (0.015)

Note:

It is suspected that the manganese concentrations for ESI-1R and ESI-2 have been inadvertently switched for the 2012 sample round

ATTACHMENT 1

TABLE C.1

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

Date: 3-25-2010
Inspection Personnel: Wilbur H. Ashie

<u>Inspection Item</u>	<u>Condition</u>		
	<u>Good</u>	<u>Satisfactory</u>	<u>Poor-Repairs Required</u>
A. Paved Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B. Grassed Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C. Stream Banks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Monitoring Wells	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

TABLE C.1

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

Date: 10-13-10

Inspection Personnel: William HASKO

<u>Inspection Item</u>	<u>Condition</u>		
	<u>Good</u>	<u>Satisfactory</u>	<u>Poor-Repairs Required</u>
A. Paved Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/> → Some Repair	<input type="checkbox"/>
B. Grassed Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C. Stream Banks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D. Monitoring Wells	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comments:

TABLE C.1

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

Date: 4-6-2011

Inspection Personnel: Walter Hark

<u>Inspection Item</u>	<u>Condition</u>		
	<u>Good</u>	<u>Satisfactory</u>	<u>Poor-Repairs Required</u>
A. Paved Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B. Grassed Areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C. Stream Banks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Monitoring Wells	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

TABLE C.1

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

Date: 10-31-2011

Inspection Personnel: Francis Dexter

<u>Inspection Item</u>	<u>Condition</u>		
	<u>Good</u>	<u>Satisfactory</u>	<u>Poor-Repairs Required</u>
A. Paved Areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Grassed Areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Stream Banks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D. Monitoring Wells	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comments:

TABLE C.1

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

Date: 3-28-2012

Inspection Personnel: Francis Dexter

<u>Inspection Item</u>	<u>Condition</u>		
	<u>Good</u>	<u>Satisfactory</u>	<u>Poor-Repairs Required</u>
A. Paved Areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Grassed Areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Stream Banks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Monitoring Wells	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

TABLE C.1

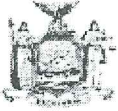
SEMI-ANNUAL INSPECTION CHECKLIST
LONG-TERM MONITORING PLAN
ELLISON BRONZE SITE
FALCONER, NEW YORK

Date: 11-2-2012

Inspection Personnel: Francis Dexter

<u>Inspection Item</u>	<u>Condition</u>		
	<i>Good</i>	<i>Satisfactory</i>	<i>Poor-Repairs Required</i>
A. Paved Areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Grassed Areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Stream Banks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Monitoring Wells	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comments:



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, 2009 to December 31, 2012		
		YES NO
1. Is the information above correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Box 2
		YES NO
6. Is the current site use consistent with the use(s) listed below? Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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

Box 4

Description of Engineering Controls

Parcel

Engineering Control

105-18-19.3

Cover System

Engineering Control Details for Site No. 907018

Parcel: 105-18-19.3

- 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.)

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;

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 MARK GRAVES 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

1/28/13
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 285 DELAWARE AVE, BUFFALO NY
CRA INFRASTRUCTURE & ENGINEERING
print name print business address

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



Robert G. Adams
Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

1/30/13
Date