Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.

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February 4, 2015

Mr. Michael P. McLean, P.E. NYS Dept. of Environmental Conservation Region 5 Office 1115 NYS Route 86, PO Box 296 Ray Brook, New York 12977-0296

Re: 2014 Annual Site Management Plan Surface Cover Report Former Independent Leather Tannery Site (#B-00158) City of Gloversville, Fulton County C.T. Male Project No. 10.1125

Dear Mike:

C.T. Male Associates Engineering, Surveying, Architecture & Landscape Architecture, D.P.C. (C.T. Male Associates) completed a site visit on November 26, 2014 to observe the site's surface cover at the Former Independent Leather Tannery Site in Gloversville, New York in accordance with NYSDEC approved Site Management Plan dated January 13, 2009. This letter serves as the 2014 Annual Report. The last annual report was completed in December 2013.

Per the Site Management Plan groundwater sampling and analysis is required every two years and was last completed in August 2014. Results of the last groundwater sampling event were provided to NYSDEC under separate cover in a letter dated November 9, 2014. The next groundwater sampling event is anticipated to be performed on or about August 2016.

Background

The remedial action for the Former Independent Leather Tannery site included placement of a surface cover system across the site in 2006/2007, mainly consisting of imported soil (and vegetated) with isolated areas of gravel covered access drives. The Cayadutta Creek traverses the Former Independent Leather Tannery site generally in a north-south direction, where the creek is confined on both banks by varying 6 to 9 feet high retaining walls constructed of laid up stone/mortar or poured in-place concrete. The creek walls are acting as a component to the remedy in that they are limiting direct contact with the existing site soils. Dilapidated portions of the retaining walls were repaired as part of a CERCLA emergency response action completed by EPA in 2001/2002, and also by the City of Gloversville in 2008.

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In October 2008, at the time of the final completion of the City's creek wall repair, the annual surface cover evaluation for 2008 was performed. The site's surface vegetation was stable with a mixture of grass and weeds, and no unvegetated areas were observed other than the disturbance resulting from the creek wall repair work by the City. The creek wall repair location was noted as an area to check as part of the annual surface cover site visit for 2009.

In March 2010, the annual surface cover site visit was performed for the 2009 annual report. The creek wall failure in 2008 temporarily breached a portion of the surface cover system by exposing a localized area of the existing soils, but based on the March 16, 2010 site visit this particular area was no longer a concern as the vegetative cover was well established. In addition, minor areas of stressed vegetative cover and two (2) animal burrows were noted. These conditions were recommended to be addressed, but deemed non-critical because the cover thickness did not appear to be jeopardized and the demarcation fabric was not exposed.

In November 2010, the annual surface cover site visit was performed for the 2010 annual report. The creek wall appeared to be stable with no obvious visual failure points. There also were two (2) animal burrows similar in location those observed in March 2010; minor areas of stressed or heavy moss vegetative cover, but stable with no on-going erosion; and tire tracks/ruts that were void of grass.

In October 2011, the annual surface cover site visit was performed for the 2011 annual report. It was observed that a portion of the creek wall had failed from natural deterioration, but the exposed soil was minimal, was not entering the creek at the time of the site visit, and the elevation of exposed soil was above the normal water level of the creek. There were minimal erosion areas and animal burrows noted, but for the most part the site's surface cover was not eroding and areas of concern previous noted showed signs of improvement.

In October 2012, the annual surface cover site visit was performed for the 2012 annual report. The portion of the creek retaining wall that had failed in 2011 had been repaired. There were minimal erosion areas and animal borrows noted, but for the most part the site's surface cover was not eroding and no cause for action was identified other than filling in the animal burrows.

In December 2013, the annual surface cover site visit was performed for the 2013 annual report. The portion of the creek retaining wall that was repaired in September had failed again. The animal borrows previously noted did not appear to get larger. For the

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most part the site's surface cover was not eroding and no cause for action was identified other than filling in the animal burrows.

Annual Monitoring of the Surface Cover System

On November 26, 2014, the ±3.7 acre site was traversed on foot to observe the condition of the site's surface cover system (i.e., barrier to contact with existing soil). A minimal amount of snow was accumulating on the ground surface at the time of the site walk, but did not limit the surface observations. The surface vegetation was stable with a mixture of grass and weeds. There were no unvegetated areas, erosion or other surface disturbances observed except for the following. Photos taken during the site visit are attached to this letter, and the areas discussed are shown on Figure 1.

- Three (3) animal burrows were noted on site along the eastern property line along the bike path at the very edge of the surface cover system limits, one more than observed during last year's site visit. The burrows are in similar location as identified during March and November 2010, October 2011, October 2012 and December 2013.
- Two (2) potential erosion holes or animal burrows were observed on the east side of the creek along the existing retaining wall to the creek close to monitoring well B-3. These holes were noticed during last year's site visit and are suspected to be getting larger than last year. It is presumed the holes are the result of the wall beginning to pull away from the vegetation or washout from stormwater.
- Three (3) animal burrows were noted near the base of two (2) separate maple trees on the west side of the creek utility pole NM41A 333. These burrows existed on-site during last two annual site visits, but are no larger than last year.
- Two (2) ruts in the surface cover were noted in the southwest corner of the site along the sidewalk and likely caused by a vehicle.
- A section of the creek retaining wall (west side), which was repaired in September 2012 and again failed in 2013 remains unrepaired. The rectangular concrete blocks used for the repair are caved partially into the creek. The length of wall failure is estimated to be on the order of 40 linear feet. The cause of the wall failure is undetermined, but assumed to be natural water flow undermining the foundation blocks. The exposed

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soil created by the wall failure is minimal, if any, and did not appear to be entering the creek at the time of the site visit. The elevation of the exposed soil is near the middle of the remaining wall and above the typical average water level in the creek.

Conclusions - Surface Cover System

The surface cover system continues to be well established at the project site. Based on the November 26, 2014 site visit, areas that could be improved and repaired were identified. This includes placing gravel in the animal burrows (soil placement has not worked), filling in vehicle caused ruts, and repairing the portion of the creek retaining wall that has collapsed.

Summary

Based on our site observations, to the best of our knowledge, information and belief, the institutional and engineering controls to be put in place with the pending environmental easement pursuant to the Site Management Plan, are still in place, have not been materially altered and are still effective in achieving their objectives with minor exception; the animal burrows and the portion of the creek wall that has failed. The condition of the site was observed by C.T. Male on November 26, 2014, and the remedy and protective cover appear to have been maintained throughout the year except as noted. Based on these observations the conditions of the site remain protective of human health and the environment, but actions are necessary to make repairs to the surface cover (i.e., fill animal burrows and vehicle ruts), and creek retaining wall damage to mitigate the potential for soil washout into the creek.

The condition of the site, specifically the thickness of the surface cover system and vegetative cover, is required to be monitored and maintained throughout the balance of 2015 in accordance with the NYSDEC approved Site Management Plan by the City of Gloversville. The next annual Site Management Plan site visit and report should be completed in the fall of 2015. The next groundwater sampling event should be completed in August 2016.

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If you have any questions, please contact me at (518) 786-7548.

Sincerely,

C.T. MALE ASSOCIATES

Jeffrey A. Marx, P.E. Project Engineer

Reviewed and Approved By:

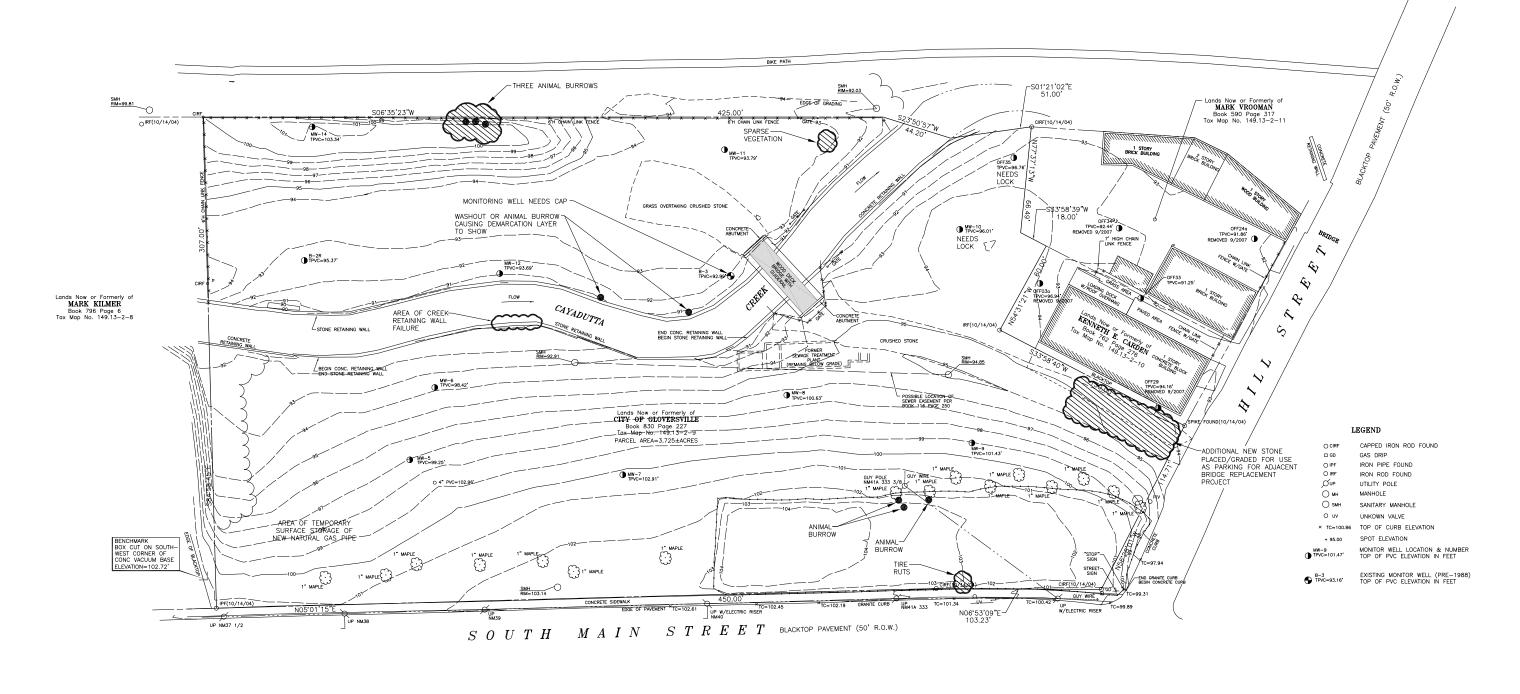
Kirk Moline Project Manager

Att Figure Pictures

c: Kevin Jones, City of Gloversville Ian Ushe, Department of Health

Figure 1 Surface Cover Condition Observations





NOTE:

1.) THE LOCATIONS AND FEATURES DEPICTED ON THIS MAP ARE APPROXIMATE AND DO NOT REPRESENT AN ACTUAL FIELD SURVEY.

AP REFERENCE:
) TOPOGRAPHIC SURVEY, 321 SOUTH MAIN STREET,
ITY OF GLOVERSVILLE, COUNTY OF FULTON, NY, DATEG
UGUST 25, 2006, DWG. NO. 06—0631, PREPARED BY
T. MALE ASSOCIATES, P.C.,

30 0 15 30 60 1 inch = 30 ft.

DATE		REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.	ADDITION TO THIS DOCUMENT IS A	
	\triangle					VIOLATION OF THE NEW YORK STATE EDUCATION LAW.	
						© 2015	
	<u> </u>					C.T. MALE ASSOCIATES	
	<u> </u>					DESIGNED:	
	<u>A</u>					DRAFTED : J.MARX	CITY O
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	<u>&</u>					SCALE : AS SHOWN	
	A					DATE : JAN. 26, 2015	

FIGURE 1
SURFACE COVER CONDITION OBSERVATIONS

FORMER INDEPENDENT LEATHER TANNERY
ANNUAL SITE MANAGEMENT PLAN MONITORING
RSVILLE
FULTON COUNTY, NY

OF GLOVERSVILLE

C.T. MALE ASSOCIATES

ering, Surveying, Architecture & Landscape Architecture, D.P.C.

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SHEET 1 OF 1 DWG. NO: 15-131 Attachment No. 1 Site Visit Pictures

2014 PHOTO LOG

NUMBER DESCRIPTION

Picture #087: East side of the site where sparse vegetation exists.

Picture #144: East side of the site looking north.

Picture #632: East side of the site where a former washout area existed.

Picture #957: Animal burrow along eastern property line.

Picture #300: Looking west across the site at the creek wall failure.

Picture #794: Looking southwest across the site.

Picture #008: Creek retaining wall repaired in 2010.

Picture #133: Creek retaining wall repaired in 2012 which has failed (looking

south).

Picture #847: Creek retaining wall repaired in 2012 which has failed (looking

north).

Picture #426: Washout or animal burrow along creek wall (east side of the site).

Picture #830: 2nd area of washout or animal burrow along creek wall (east side of

the site).

Picture #497: Monitoring well B-3 missing a cap.

Picture #100: Top view of creek wall failure on west side of the site.

Picture #371: Northwest portion of the site showing typical monitoring well,

surface cover and temporary gas line piping storage.

Picture #761: Vehicle ruts along western property line near the south end.

Picture #254: Animal burrow at the base of the maple tree on west side of site.

Picture #030: Monitoring well MW-10 missing a lock.

Picture #400: Monitoring well OFF35 missing a lock.

Picture #947: Area of additional gravel placement/grading.





IMG_20141126_114314_087.jpg 11/26/2014

IMG_20141126_114318_144.jpg 11/26/2014





IMG_20141126_114338_632.jpg 11/26/2014

IMG_20141126_114421_957.jpg 11/26/2014





IMG_20141126_114503_300.jpg 11/26/2014

IMG_20141126_114505_794.jpg 11/26/2014





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IMG_20141126_114727_133.jpg 11/26/2014









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