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

50 Century Hill Drive, Latham, NY 12110 518.786.7400 FAX 518.786.7299 ctmale@ctmale.com



February 29, 2016

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: 2015 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 December 16, 2015 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 2015 Annual Report. The last annual report was completed in December 2014.

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.

In December 2014, the annual surface cover site visit identified continued presence of animal burrows, but negligible difference in size and location. The portion of the creek wall that failed in 2013 was in the same relative condition.

Annual Monitoring of the Surface Cover System

On December 16, 2015, 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). The ground surface at the time of the site walk had no visual observation limitations such as snow. 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, December 2013 and December 2014.
- 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 the last two annual site visits and appear to be getting larger than last year as the orange demarcation fabric has started to be exposed at the creek wall (no restricted underlying soil is exposed). 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 three annual site visits, but do not appear to be larger than previous years. A fourth animal burrow was newly noted this year in close proximity to the other three.
- Two (2) ruts in the surface cover were noted along the site access road near the existing sanitary sewer manhole and likely caused by a vehicle.

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• A section of the creek retaining wall (west side), which was repaired in September 2012 and again failed in 2013 was repaired in 2015. There is an area of disturbed surface cover caused by the reconstruction activities that has been graded and vegetated. However, the vegetation is not yet fully established. In addition, there is a localized hole adjacent to the creek wall from settlement or washout.

Conclusions - Surface Cover System

The surface cover system continues to be well established at the project site. Based on the December 16, 2015 site visit, areas that could be improved and repaired were identified. This includes placing gravel in the animal burrows (soil placement has not worked), improving the vegetation that is not fully established where the creek wall was repaired, and filling in vehicle caused surface ruts to the surface cover.

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 December 16, 2015, 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, poor vegetation and vehicle ruts).

The condition of the site, specifically the thickness of the surface cover system and vegetative cover, is required to be monitored and maintained 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 2016. 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

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Att Figure Pictures

c: Dale Tumbull, Director of Public Works, City of Gloversville Ian Ushe, Department of Health

Figure 1 Surface Cover Condition Observations

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NOTE:

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

0 15 30 60 1 inch = 30 ft.

⚠ © 2013 ∴T. MALE ASSOCIATES C.T. MALE ASSOCIATES ⚠ DESIGNED: DRAFTED: J.MARX CI ∴ CHECKED: K.MOLINE PROJ. NO: 10.1125 SCALE: AS SHOWN △ DATE: FER. 22, 2016

REVISIONS RECORD/DESCRIPTION

SURFACE COVER CONDITION OBSERVATIONS

FORMER INDEPENDENT LEATHER TANNERY ANNUAL SITE MANAGEMENT PLAN MONITORING

C.T. MALE ASSOCIATES
gineering, Surveying, Architecture & Landscape Architecture, D.P.C.

50 CENTURY HILL DRIVE, LATHAM, NY 12110 518.786.7400 * FAX 518.786.7299

SHEET 1 OF 1 DWG. NO: 16-211 Attachment No. 1 Site Visit Pictures





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