C.T. MALE ASSOCIATES, P.C.

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



January 13, 2012

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: 2011 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, P.C. (C.T. Male) has completed a site visit 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 2011 Annual Report.

Per the site's Site Management Plan groundwater sampling and analysis is required every two years and was completed in July 2010. The results of that groundwater sampling event were provided under separate cover in a letter dated September 22, 2010. The next groundwater sampling event is anticipated to be completed on or about July 2012.

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 sides 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.



January 13, 2012 Mr. Michael P. McLean, P.E. Page - 2

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. 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 continued to be sound 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.

Annual Monitoring of the Surface Cover System

On October 19, 2011, 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 surface vegetation was stable with a mixture of grass, weeds and moss. 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.

• There were three (3) animal burrows on site along the eastern property line along the bike path at the very edge of the surface cover system limits. The burrows appear to be in a similar location as identified during the March and November 2010 surface cover observations. The burrows were partially beneath the chain-link fence along the site's property line. There were obvious soil piles of surface cover material adjacent to the burrow holes.

January 13, 2012 Mr. Michael P. McLean, P.E. Page - 3

- There were three (3) relative small areas of poor vegetative growth in the north-eastern portion of the site. The areas were stable with no on-going erosion, but vegetative growth was scarce. This condition appears to be slightly improved from last year in that there were less than the four areas identified in November 2010 and the third area is smaller in plan size than previously noted. Otherwise, there was little to no change in the level of vegetative cover.
- There was a relatively large area of heavy moss growth on the western side of the site, as shown on the attached Figure 1. The moss growth appears to be inhibiting the growth of grass, but the surface is still stable with no on-going erosion. This moss growth appears to be similar to what was observed in March and November 2010.
- The tire tracks/ruts on the west side of the site that were void of grass at the surface in November 2010 were again vegetated.
- There was a small area of sparse vegetation located in the extreme southwest corner of the site. This was apparent on the side slope along Hill Street. Although the vegetation was limited, there were no signs of on-going erosion.
- There was a thin strip of grass disturbance less than 6 inches in width, extending along two separate north-south oriented paths from the middle of the west side of the property to the northern property line, parallel to and not far from South Main Street. The disturbance appeared to be the result of a motorized dirt bike.
- There is a section of the creek retaining wall that has failed. The stone/grout portion of the wall caved partially into the creek. The length of wall failure is estimated to be on the order of eight (8) linear feet. The cause of the wall failure is unknown, but assumed to be the natural conditions deteriorating the wall over time. The exposed soil created by the wall failure is minimal 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 top of the remaining wall, and well above the normal water level in the creek.

January 13, 2012 Mr. Michael P. McLean, P.E. Page - 4

• There is evidence of stone washout on the east side of the bridge over the creek at is foundation. This location is the same location that has washed out previously and was repaired.

Conclusions - Surface Cover System

The surface cover system continues to be well established at the project site. Based on the October 19, 2011 site visit, areas that could be improved and repaired were noted. This includes placing soil into the animal burrows, repairing the disturbance from the dirt bike, placing stone near the bridge's apron, and seeding areas of sparse vegetation in the Spring of 2012.

The area of heavy moss growth on the west side of the site is not jeopardizing the integrity of the surface cover system, the City of Gloversville has been cautioned that this may have a negative impact on the level of grass growth and should be monitored closely. The City should evaluate methods to improve grass growth in this area.

The creek retaining wall minor failure is at this point, but if left in its current condition will likely jeopardize the stability of the adjacent portions of the wall and possibly cause further failure. The exposed soil is stable and much higher in elevation than the normal and high water level of the creek, such that washout shouldn't be an issue at this time.

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 SMP, are still in place, have not been materially altered and are still effective in achieving their objectives. The condition of the site was observed by C.T. Male during site observation on October 19, 2011, and the remedy and protective cover appear to have been maintained throughout the year. Based on these observations; the conditions of the site remain protective of human health and the environment, but actions are necessary in Spring 2012 to make repairs to the surface cover (fill animal burrows, repair damaged vegetation, place additional stone at bridge apron, and repair creek retaining wall).

The City of Gloversville shall understand that the condition of the site, specifically the thickness of the surface cover system and vegetative cover, must be monitored and maintained throughout 2012 in accordance with the NYSDEC approved Site

January 13, 2012 Mr. Michael P. McLean, P.E. Page - 5

Management Plan. The next annual site management plan site visit and report will be completed in the fall of 2012.

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: James Frank, City of Gloversville Deanna Ripstein, NYSDOH

Figure 1 Surface Cover Condition Observations



C.T. MALE ASSOCIATES, P.C.

Attachment No. 1 Site Visit Pictures

PHOTO LOG

NUMBER	DESCRIPTION
Picture #01:	Surface cover on the west side of the creek looking south.
Picture #02:	Surface cover (heavy moss) on the western side of the creek looking north across the site.
Picture #03:	Surface cover along South Main Street on the west side of the site.
Picture #04:	Sparse vegetation at the southwest extreme corner of the site.
Picture #05:	Sparse vegetative cover on the west side of the site adjacent to South Main Street.
Picture #06:	Stripped vegetation along the western property line (south end).
Picture #07:	Surface cover on the north end of the site.
Picture #08:	Surface cover in the middle portion of the site on the west side of the creek.
Picture #09:	Stripped vegetation along the western property line (south end).
Picture #10:	Surface cover middle portion of the site, west side, looking south.
Picture #11:	Creek traversing the site, middle section, looking south.
Picture #12:	Creek traversing the site, northern portion, looking north.
Picture #13:	Creek traversing the site, southern portion, looking south.
Picture #14:	Stone washout at the east side of the site at the bridge's apron.
Picture #15:	Surface cover on the east side of the side, south end.
Picture #16:	Surface cover (stone) on the east side of the site, looking north.
Picture #17:	Failed portion of the creek retaining wall.
Picture #18:	Sparse vegetation on the east side of the site.
Picture #19:	Animal burrow along eastern property line.
Picture #20:	Animal burrow along eastern property line.
Picture #21:	Sparse vegetation on the east side of the site along the northern property line.
Picture #22:	Possible washout along the creek retaining wall on the east side of the site.





Picture #01.jpg Picture #02.jpg





Picture #03.jpg Picture #04.jpg





Picture #05.jpg





Picture #07.jpg Picture #08.jpg





Picture #09.jpg Picture #10.jpg





Picture #11.jpg Picture #12.jpg





Picture #13.jpg Picture #14.jpg





Picture #15.jpg Picture #16.jpg





Picture #17.jpg Picture #18.jpg





Picture #19.jpg Picture #20.jpg





Picture #21.jpg Picture #22.jpg