

January 26, 2015

Gary Priscott NYS Department of Environmental Conservation Region 7 Division of Environmental Remediation 1679 Route 11 Kirkwood, New York 13795

File: 1307.002.002

Re: Ithaca Falls Overlook Brownfield Cleanup Project Amendment to June 2014 Quality Assurance Project Plan

Dear Mr. Priscott:

Barton & Loguidice, D.P.C. received comments from the public and U.S. Environmental Protection Agency (USEPA) to the December 17, 2014 amendment to the June 2014 Quality Assurance Project Plan (QAPP) for the Ithaca Falls Overlook Brownfield Cleanup Project. The QAPP includes sampling and analytical requirements to document the effectiveness of the remedial construction. The remedial construction is underway and a changed condition has been identified that required modification to the June 2014 QAPP. The following updates the December 17, 2014 QAPP Amendment to address the public and USEPA comments.

The June 2014 QAPP identified 10 perimeter clearance soil samples to be analyzed for target analyte list (TAL) metals via EPA 6010 B (refer to Figure 3 of the June 2014 QAPP). The number and location of samples was based on the assumption that soils would be removed to rock. Portions of the western slope of the island and the island top will have native soils remaining following the remedial excavation. These native soils are intermixed with fractured shale that overlies the consolidated bedrock of the island. Removal to rock is not necessary in all areas to eliminate lead contaminated soil in order to meet the lead Site Cleanup Objective of 400 ppm. There is an identifiable visual distinction between industrial soils and native unconsolidated material (soil and weathered rock). The limits of the remedial excavation are based on the presence of native soils and will be confirmed with sampling of the remnant soil. In some areas native soils are not present below industrial soils. In these areas the industrial soils will be removed to bedrock eliminating the availability of remnant soils to be sampled.

In some areas, a layer of native soil has been observed below the industrial soils that have been removed from the western island slope and island top. These native soils are visually distinctive from the industrial soils that have been removed from the island top and western slope. The native soils are intermixed with fractured shale. In contrast, in some areas the industrial soils are

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underlain directly by consolidated bedrock (without the presence of native soils). If there is remnant soil following the remedial construction it will be sampled. Samples will not be collected if removals occur to consolidated bedrock (as opposed to fractured shale with intermixed native soil). In areas where bedrock is not encountered, a 10' by 5' grid network is proposed to assess remaining native soils/fractured shale following remedial construction. One composite sample will be collected from each grid as depicted on the attached revised Figures 3-A/B. Each composite sample will consist of five subsamples. The actual number of composite samples collected will be based on the final dimensions of the remedial excavation and determination of the presence of consolidated bedrock. Based on the assumed configuration as presented on Figures 3-A/B, approximately 43 composite samples would be collected from the western slope and 88 samples from the island top. Each sample will be analyzed for total lead. It should be noted that some grids depicted on Figures 3-A/B may be excavated to bedrock precluding the opportunity for sample collection. Areas that are excavated to consolidated bedrock will also be manually swept and vacuumed with a heavy duty pneumatic vacuum truck to eliminate remnant material.

Additional lead impacted soils have been encountered on the northern portion of the island. The June 2014 QAPP included removal of lead impacted soil on the island to an existing chain link fence on the north side of the island. A thin layer of soil is present north of the fence that was tested for lead and was subsequently removed. Five additional samples are proposed to be collected within the Fall Creek gorge to verify off-site conditions north of the island. These samples will consist of composite soil samples each consisting of five sub-samples. The samples collected from the gorge will be analyzed for TAL metals (6010 B) and volatile organic compounds (VOCs) via EPA 8260. Additional sampling will be proposed as needed based on these initial Fall Creek gorge screening samples.

It is proposed that Figures 3-A/B replace the existing Figure 3 of the June 2014 QAPP to represent post-excavation clearance soil sampling locations. It should be noted that additional samples utilized for waste characterization/internal site assessment will be collected as part of the remedial construction project that are not depicted on Figures 3-A/B. All sample results and locations will be presented as part of the Construction Completion Report. All revised samples presented herein will be collected in accordance with the procedures outlined in the June 2014 QAPP. The following post-excavation clearance samples are proposed. Samples will only be collected in areas where bedrock is not encountered (i.e., native soil remains intermixed with fractured shale).



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| Revised Post-Excavation Clearance Soil Sampling |                      |                   |                    |  |  |  |
|---|----------------------|-------------------|--------------------|--|--|--|
| Location  | Number of<br>Samples | Type of<br>Sample | Analysis           |  |  |  |
| Western Island Slope                            | 43*                  | Composite         | Total Lead         |  |  |  |
| Island Top                                      | 88*                  | Composite         | Total Lead         |  |  |  |
| Downgradient Perimeter of Western Island Slope  | 4                    | Grab              | TAL Metals         |  |  |  |
| Up gradient Island Perimeter (East of Island)   | 2                    | Grab              | TAL Metals         |  |  |  |
| Downgradient Western Raceway                    | 2                    | Grab              | TAL Metals         |  |  |  |
| Up gradient Eastern Raceway                     | 2                    | Grab              | TAL Metals         |  |  |  |
| Fall Creek Gorge                                | 5                    | Composite         | TAL Metals<br>VOCs |  |  |  |

<u>Notes</u>

All samples to be collected from 0-2 inches below grade.

Each composite sample to consist of five sub-samples.

\*Some grids along the western island slope and island top depicted on Figures 3-A/B may be removed to bedrock. Areas removed to bedrock will not be sampled. The actual number of samples collected along the western island slope and island top will be dependent upon final dimensions of the excavation activities and presence of remaining soil on the slope.

Please let me know if you have any questions or comments regarding these revisions to the June 2014 QAPP.

Very truly yours,

BARTON & LOGUIDICE, D.P.C.

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David R. Hanny, CPESC, CPSWQ, LEED AP Senior Managing Environmental Scientist

DRH/akg Attachments

cc: Nels Bohn, City of Ithaca Benny Hom, USEPA (email) Adly Michael, USEPA (email)



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|   | LEGEND   | PROPERTY LINE   | NO ALTERATION PERMITTED<br>HEREON EXCEPT AS PROVIDED<br>UNDER SECTION 7209<br>SUBDIVISION 2 OF THE NEW<br>YORK STATE EDUCATION LAW. |                        |                     |             |  |
|---|--|---|---|------------------------|---------------------|-------------|--|
|   | x x  | EXISTING CONTOUR<br>EXISTING CHAIN LINK FENCE   |   | COMPLETED CONSTRUCTION |                     |             |  |
|   |  | EXISTING RETAINING WALL<br>LOCATION OF STEEL PIN  | Significant Co<br>Changes Ar  |                        | Construc<br>Are Sho | ction<br>wn |  |
|   |  | EXISTING MONITORING WELL  | Ву  |                        | Date                |             |  |
|   |  | ACCESS RUAD   | Ck'd  |                        | Date                |             |  |
|   |  | PROPOSED LIMITS OF SOIL REMOVAL (RACEWAY)   |   | REV                    | ISIONS              |             |  |
|   |  | PROPOSED LIMITS OF SOIL REMOVAL (ISLAND)  |   |                        |                     |             |  |
|   |  | SOIL REMOVAL AREAS ASSUMED TO BE ABOVE RCRA<br>TCLP VALUES FOR LEAD. ALL SOILS WITHIN THIS<br>SHADED AREA ARE TO BE STOCKPILED SEPARATELY.  |   |                        |                     |             |  |
|   |  | SOIL REMOVAL AREAS ASSUMED TO BE BELOW<br>RCRA TCLP VALUES FOR LEAD.  |   |                        |                     | ЯХ          |  |
|   |  | BUFFER AREA TO BE CLEANED OF ANY DEBRIS<br>CAUSED FROM EROSION OR CONSTRUCTION ACTIVITIES   | E C T   |                        |                     | EW YOI      |  |
|   | <del>\</del>                                   | POST-EXCAVATION PERIMETER SUBSURFACE<br>SOIL (0-2") LOCATION GRAB SAMPLES ARE TO<br>BE ANALYZED FOR TOTAL METALS, EPA 6010B.<br>(10 LOCATIONS)  |   | -                      | AN                  | ΟυΝΤΥ, Ν    |  |
| * | <b></b>  | POST-EXCAVATION PERIMETER SURFACE SOIL<br>(0-2") LOCATION. COMPOSITE SAMPLES ARE TO<br>BE ANALYZED FOR VOCS VIA EPA 8260 AND<br>TOTAL METALS, EPA 6010B. (3 LOCATIONS<br>FROM FALL CREEK GORGE)   |   |                        | ION PL              | TOMPKINS C  |  |
|   |  | POST-EXCAVATION WESTERN SLOPE SURFACE<br>SAMPLES (0-2"). ONE COMPOSITE SAMPLE WILL<br>BE COLLECTED FROM EACH GRID. EACH<br>COMPOSITE SAMPLE TO BE DERIVED FROM FIVE<br>(5) SUB-SAMPLES WITHIN EACH GRID. EACH<br>COMPOSITE SAMPLE TO BE ANALYZED FOR<br>TOTAL LEAD. ACTUAL NUMBER OF COMPOSITE<br>SAMPLES WILL BE BASED ON FINAL DIMENSIONS<br>OF WESTERN SLOPE REMOVAL (ESTIMATED QTY<br>47) | CITY OF ITHACA  |                        | AL EXCAVAT          |             |  |
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|   | OVERBURDEN DEP                                 | THS:  | U<br>-  | L<br>L                 | Ш<br>М              |             |  |
|   |  | SOIL (OVERBURDEN SOIL DEPTH 0-0.25 FEET)  |   | ζ<br>-                 | КП                  | ACA         |  |
|   |  | SOIL REMOVAL AREAS WITH ESTIMATED<br>OVERBURDEN SOIL DEPTH OF 0-0.5 FEET  |   |                        |                     | TH/         |  |
|   | [[]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]        | SOIL REMOVAL AREAS WITH ESTIMATED<br>OVERBURDEN SOIL DEPTH OF 0-5 FEET  | Π⊥Ι   | -                      |                     | СІТҮ ОF     |  |
|   | NOTE:<br>IF ISLAND SOILS F<br>A SIMILAR GRID P | REMAIN, THE ISLAND SURFACE SHALL BE SAMPLED ON<br>ATTERN TO THE WESTERN SLOPE.  |   | arton                  | oguidice, D.P.C.    |             |  |
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|           |  | EXISTING CONTOUR  | SUBDIVISION 2 OF THE NEW<br>YORK STATE EDUCATION LAW. |                      | W<br>AW.                               |                 |
|           | x x  | EXISTING CHAIN LINK FENCE<br>EXISTING RETAINING WALL  |   |                      | TION                                   |                 |
|           |  | LOCATION OF STEEL PIN   | Signif<br>Cha   | icant<br>Inges       | Construc<br>Are Shov                   | tion<br>vn      |
|           | $\oplus$ MW-4                                  | EXISTING MONITORING WELL  | Ву  |                      | Date                                   |                 |
|           |  | ACCESS ROAD   | Ck'd _  |                      | Date                                   |                 |
|           |  | OFF-SITE STAGING AREA   |   | REVI                 | SIONS                                  |                 |
|           |  | PROPOSED LIMITS OF SOIL REMOVAL (RACEWAY)<br>PROPOSED LIMITS OF SOIL REMOVAL (ISLAND)   |   |                      |  |                 |
|           |  | SOIL REMOVAL AREAS ASSUMED TO BE ABOVE RCRA<br>TCLP VALUES FOR LEAD. ALL SOILS WITHIN THIS<br>SHADED AREA ARE TO BE STOCKPILED SEPARATELY.  |   |                      |  |                 |
|           |  | SOIL REMOVAL AREAS ASSUMED TO BE BELOW<br>RCRA TCLP VALUES FOR LEAD.  |   |                      |  | )RK             |
|           |  | BUFFER AREA TO BE CLEANED OF ANY DEBRIS<br>CAUSED FROM EROSION OR CONSTRUCTION ACTIVITIES   | ECT   |                      |  | EW YC           |
|           | $\oplus$                                       | POST-EXCAVATION PERIMETER SUBSURFACE<br>SOIL (0-2") LOCATION GRAB SAMPLES ARE TO<br>BE ANALYZED FOR TOTAL METALS, EPA 6010B.<br>(10 LOCATIONS)  | JP PROJ   |                      | AN                                     | <b>ΟUNTY, N</b> |
| ×         | <b>•</b>                                       | POST-EXCAVATION PERIMETER SURFACE SOIL<br>(0-2") LOCATION. COMPOSITE SAMPLES ARE TO<br>BE ANALYZED FOR VOCS VIA EPA 8260 AND<br>TOTAL METALS, EPA 6010B. (3 LOCATIONS<br>FROM FALL CREEK GORGE)   | LD CLEANUF  |                      | ION PL                                 | TOMPKINS CO     |
|           |  | POST-EXCAVATION WESTERN SLOPE SURFACE<br>SAMPLES (0-2"). ONE COMPOSITE SAMPLE WILL<br>BE COLLECTED FROM EACH GRID. EACH<br>COMPOSITE SAMPLE TO BE DERIVED FROM FIVE<br>(5) SUB-SAMPLES WITHIN EACH GRID. EACH<br>COMPOSITE SAMPLE TO BE ANALYZED FOR<br>TOTAL LEAD. ACTUAL NUMBER OF COMPOSITE<br>SAMPLES WILL BE BASED ON FINAL DIMENSIONS<br>OF WESTERN SLOPE REMOVAL (ESTIMATED QTY<br>47) | CITY OF ITHACA<br>DK EPA BROWNFIE                     |                      | EXCAVATI                               |                 |
|           |  | THS:<br>VERY STEEP GORGE WALLS WITH LIMITED OVERBURDEN<br>SOIL (OVERBURDEN SOIL DEPTH 0-0.25 FEET)<br>SOIL REMOVAL AREAS WITH ESTIMATED<br>OVERBURDEN SOIL DEPTH OF 0-0.5 FEET<br>SOIL REMOVAL AREAS WITH ESTIMATED<br>OVERBURDEN SOIL DEPTH OF 0-5 FEET  | ITHACA FALLS OVERLOO                                  |                      | REMEDIAL                               | CITY OF ITHACA  |
|           | NOTE:<br>IF ISLAND SOILS F<br>A SIMILAR GRID P | REMAIN, THE ISLAND SURFACE SHALL BE SAMPLED ON<br>ATTERN TO THE WESTERN SLOPE.  |   | arton                | oguidice, D.P.C.                       |                 |
| T<br>KING |  |   | Date<br>JA<br>Scale<br>Sheet                          | NUAF<br>1" =<br>Numl | RY 2015<br>= 30'<br>ber<br>3<br>B<br>r | 5               |