October 10, 2013

To:    Harry Warner, NYSDEC, Region 7 (1 bound)
       Holly Sammon, Onondaga County Public Library (1 bound)
       Samuel Sage, Atlantic States Legal Foundation (1 bound)
       Cara Burton, Solvay Public Library (1 bound)
       Mary Ann Coogan, Camillus Town Hall (1 bound)
       Moon Library, SUNY ESF (1 bound)
       Diane Carlton, NYSDEC, Region 7 (1 PDF)
       Joseph J. Heath, Esq., Onondaga Nation (1 bound)
       Chris Fitch, Communications (cov ltr – email)

Re:    Letter of Transmittal – Onondaga Lake Repository Addition

The below document has been approved by the New York State Department of Environmental Conservation (NYSDEC) and is enclosed for your document holdings:

  • Onondaga Lake SCA/SCA WTP SWPPP Modification dated September 2013

Sincerely,

[Signature]
John P. McAuliffe, P.E.
Program Director, Syracuse

Enc.

cc: Tim Larson - NYSDEC
September 24, 2013

Mr. John P. McAuliffe, P.E.
Program Director, Syracuse
Honeywell
301 Plainfield Road, Suite 330
Syracuse, NY 13212

Re: Onondaga Lake SCA/SCA WTP SWPPP Modification Request,
Dated September 12, 2013

Dear Mr. McAuliffe:

We have received and reviewed your Onondaga Lake SCA/SCA WTP SWPPP Modification Request, which was the subject of your September 12, 2013 letter to my attention, and find that the modification request is acceptable and therefore approved. This approval addresses the fact the West Basin is not necessary for SCA SWPPP purposes but it does not approve the West Basin for use to store treated water from the SCA WTP during a Metro shutdown of the SCA WTP. A proposed operations plan for the use of the West Basin during a Metro shutdown of the SCA WTP must be submitted for review and must be approved prior to use of the West Basin for temporary storage of treated water from the SCA WTP. Please see that copies of approved SWPPP modification, along with this approval letter, are transmitted to the document repositories selected for this site.

Sincerely,

Timothy J. Larson, P.E.
Project Manager

ec: B. Israel, Esq. - Arnold & Porter
R. Nunes - USEPA, NYC
M. Sergott - NYSDOH, Albnay
J. Heath, Esq.
T. Joyal, Esq.
J. Shenandoah
B. White - O’Brien & Gere
J. Gregg – NYSDEC
J. Davis - NYSDOL, Albany
J. Deming – NYSDOH, Albnay
F. Kirschner
C. Waterman
A. Lowry
M. McDonald – Honeywell
September 12, 2013

Mr. Tim Larson, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, NY 12233-7013

RE: Honeywell SCA/SCA WTP SWPPP
FILE: 1163/45613

Dear Mr. Larson:

Periodic temporary shutdowns by the Metropolitan Syracuse Wastewater Treatment Plant (Metro) in accordance with the Wet Weather Operating Plan have necessitated temporary stoppage of dredging and Sediment Consolidation Area (SCA) Water Treatment Plant (WTP) operations until the shutdown is complete and the Metro system capacity restored. These interruptions impact productivity, continuity, and efficiency of the dredging project. In response, Honeywell proposes to increase up-time of the WTP and dredging operations during Metro shutdowns through utilization of the existing west basin for temporary storage of WTP effluent. This modification would improve the ability to maintain overall project schedule and meet the goals and objectives of the Onondaga Lake remediation project.

Honeywell requests that the New York State Department of Environmental Conservation (NYSDEC) approve the proposed modification. Facilities will be constructed consistent with the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities.

PROJECT STATUS

The construction and operation activities described in the 2011 Stormwater Pollution Prevention Plan (SWPPP)\(^1\) have progressed such that Phase 1 and Phase 2 of the SCA have been constructed and received dredge spoils. As indicated on Figure 1, fill operations were conducted to maintain a perimeter channel between the sediment-filled geotextile tubes and the SCA berm to allow for equipment access. This perimeter channel will be maintained as profiled on Figure 2 throughout operations and provides approximately 4.2 million gallons (MG) of temporary stormwater storage capacity (see Attachment 1).

The 2011 SWPPP included the use of the east and west basins for stormwater detention during a 100-year, 24-hour storm event, managing runoff from the following lined areas:

- 25-acre Phase 1 SCA
- 22-acre Phase 2 SCA
- 4.0-acre east basin

\(^1\) The SWPPP was approved by the NYSDEC on April 29, 2011.
2.3-acre west basin

16-acre lined Phase 3 SCA (if conditions indicated that the additional area was needed)

Based on current operations, Phase 3 of the SCA will not be needed and is not scheduled for construction. To this end, management of stormwater runoff from this 16-acre area will not be required.

PROPOSED PROJECT MODIFICATION AND SUPPORT DATA

Honeywell proposes to utilize the west basin, dedicated to stormwater detention in the 2011 SWPPP, for temporary storage of treated WTP effluent during Metro shutdowns. The data presented herein represents current conditions within the SCA and demonstrates that there is sufficient storage capacity for stormwater and geotube effluent without utilizing the west basin. The following data are summarized in Tables in this section:

1) the contributing volume of stormwater associated with the 100-year 24-hr storm event and geotube effluent that requires detention within the SCA facilities – Table 1

2) the storage capacity that is available within the system to store stormwater and geotube effluent excluding the west basin – Table 2

CONTRIBUTING VOLUME REQUIRING STORAGE

The stormwater runoff volumes\(^2\) for the project areas that are hydrologically connected to the SCA and associated basins are summarized in Table 1. These volumes were included in the 2011 SWPPP and remain representative of current site conditions.

Table 1. Contributing Volume Requiring Storage

<table>
<thead>
<tr>
<th>Contributing Area</th>
<th>Gallons</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1 and 2 SCA stormwater runoff volume</td>
<td>6,636,507(^1)</td>
<td>5.2 inches of rainfall over 47 acres</td>
</tr>
<tr>
<td>Geotube effluent</td>
<td>1,687,500(^2)</td>
<td>Assumes 3 days for tubes to dewater</td>
</tr>
<tr>
<td>West Basin stormwater runoff volume</td>
<td>324,765(^1)</td>
<td>5.2 inches of rainfall over 2.3 acres</td>
</tr>
<tr>
<td>East Basin stormwater runoff volume</td>
<td>564,770(^1)</td>
<td>5.2 inches of rainfall over 4 acres</td>
</tr>
<tr>
<td>TOTAL VOLUME</td>
<td>9,213,542 gal</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Presented in Appendix I of the 2011 SWPPP

\(^2\) Presented in Section 2.12 of Appendix L of the 2011 SWPPP

\(^2\) Calculated using Hydraflow Hydrograph Extension for AutoCAD Civil 3D 2008 software which utilizes U.S. Department of Agriculture Natural Resource Conservation Service (USDA NRCS) TR-55 and TR-20 methodologies
STORAGE VOLUME AVAILABLE – CURRENT CONDITIONS

Appendix L of the 2011 SWPPP includes calculations that demonstrate the capacity of project facilities to temporarily store the runoff volumes associated with the 100-year 24-hr storm event. The storage volume capacity calculations from Appendix L have been modified to reflect current conditions (approximately 100% of their water storage capacities) and exclude the west basin. These conditions are summarized in Table 2.

Table 2. Storage Volume Available – Current Conditions

<table>
<thead>
<tr>
<th>Area</th>
<th>Gallons</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1 &amp; 2 Gravel Layer</td>
<td>4,650,000</td>
<td>40% pore space within 12-inches of gravel</td>
</tr>
<tr>
<td>SCA Perimeter Channel</td>
<td>4,225,903</td>
<td>See Figure 2 for typical cross section</td>
</tr>
<tr>
<td>East Basin</td>
<td>1,809,732</td>
<td>East Basin operates at 53% capacity</td>
</tr>
<tr>
<td>Total Storage Volume</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available</td>
<td>10,685,635 gal</td>
<td></td>
</tr>
<tr>
<td>SURPLUS CAPACITY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVAILABLE</td>
<td>1,472,093 gal</td>
<td></td>
</tr>
</tbody>
</table>

1 The volume presented in Section 2.13 of Appendix L of the 2011 SWPPP was based on a 24-inch gravel layer. That volume has been reduced by one-half since a 12-inch gravel layer was installed.

2 Supporting calculations provided in Attachment 1

3 The east basin operating volume is maintained at or below 100 inches which equates to the 1.8 MG storage volume capacity.

These calculations indicate that there is a surplus of water storage capacity within the existing system excluding the west basin. The operating water elevation within the east basin will be maintained at or below a water depth of 100 inches to provide the required storage capacity.

SUMMARY

Honeywell requests that the NYSDEC approve of storage of WTP effluent in the west basin during temporary Metro shutdowns on or before September 20, 2013 to allow for timely implementation. The information contained herein illustrates that there is a surplus of water storage capacity within the system excluding the west basin. Therefore, the west basin capacity is not required for stormwater and geotube effluent storage and could be utilized for storage of WTP effluent.

Please contact me with any questions. Your continued cooperation on this project is appreciated.

Sincerely,

[Signature]

John P. McAuliffe, P.E.
Program Director, Syracuse
Cc:  Robert Edwards  NYSDEC, Albany
    Robert Nunes  USEPA
    Mark Sergott  NYSDOH
    Geoffrey Laccetti  NYSDOH
    Ellen Hahn  NYSDEC, Region 7
    Sandy Lizlovs  NYSDEC, Region 7
    Richard Mustico  NYSDEC, Albany
    Mary Jane Peachey  NYSDEC, Region 7
    Joseph J. Heath, Esq  Onondaga Nation
    Thane Joyal, Esq  Syracuse
    Fred Kirschner  AESE, Inc.
    Jeanne Shenandoah  Onondaga Nation
    Curtis Waterman  HETF
    Alma Lowry  Syracuse
    Brian D. Israel, Esq  Arnold & Porter
    Argie Cirillo, Esq  USEPA
    Margaret A. Sheen, Esq  NYSDEC, Region 7
demaximis
    Bob Rule  Honeywell
    Larry Somer  Parsons
    Paul Blue  Parsons
    Tom Abrams  O'Brien & Gere
    Kyle Buelow  O'Brien & Gere
    Paul Schultz  O'Brien & Gere
    Brian White  O'Brien & Gere
SCA SOUTH TO NORTH PROFILE

SCA SOUTH TO NORTH PROFILE

NORTH BERM -1 PROFILE

NORTH BERM -2 PROFILE

SOUTH BERM

EDGE OF FIRST ROW OF BAGS

PERIMETER CHANNEL
AVAILABLE STORAGE AREA

NORTH BERM

EDGE OF FIRST ROW OF BAGS

PERIMETER CHANNEL
AVAILABLE STORAGE AREA

NORTH BERM
Surface Report

Client: Honeywell
Project Description: Onondaga Lake Sediment Management Design

Report Date: 9/9/2013 PM

Linear Units: US Survey Foot Area Units: Square Foot Volume Units: Cubic Yard

Surface: SCA Perimeter Channel
Description: SCA Perimeter Channel Volume Tin Surface
Area 2D: 149679.685 Area 3D: 150766.329
Elevation Max: 8.247 Elevation Min: -0.720
Number of Points: 746 Number of Triangles: 1160

Volume Surface: SCA Perimeter Channel
Description: SCA Perimeter Channel Volume Tin Surface
Volume Cut: 3.534 Volume Fill: 20923.504 Volume Total: 20919.970
Compare Surface: Moat-1 Base Surface: Composite

Remarks:
1. Composite Surface was developed from SCA gravel drainage layer, Low Permeability Soil Layer and North Berm As-Built data.
2. Moat-1 Surface is the Perimeter Channel located between the SCA Berms and the first row of bags at water elevation level 433.0 feet.
3. Perimeter Storage capacity is based on computer generated earthworks volume calculations.
4. The Volume Fill listed above was used to determine channel capacity, Cut Volume was not considered in the final calculation.
5. Calculations are based on Tin Surface volume calculations generated by Autodesk Civil 3D, 2012 version.

Volume in Gallons:
1. Conversion factor - 1 cubic yard of water equals 201.974 gallons of water (Gallons U.S. Liquid).
2. Total Fill Volume - 20923 cubic yards of water is equal to 4,225,903 gallons of water.