STORMWATER POLLUTION PREVENTION PLAN

CWTP AT LCP PORTION OF THE GEDDES BROOK IRM

Syracuse, New York

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OCTOBER 2010
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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>cfs</td>
<td>cubic feet per second</td>
</tr>
<tr>
<td>CPESC</td>
<td>Certified Professional in Erosion and Sediment Control</td>
</tr>
<tr>
<td>CWTP</td>
<td>Construction Water Treatment Plant</td>
</tr>
<tr>
<td>cy</td>
<td>cubic yards</td>
</tr>
<tr>
<td>HSG</td>
<td>Hydrologic Soil Group</td>
</tr>
<tr>
<td>IRM</td>
<td>Interim Remedial Measure</td>
</tr>
<tr>
<td>LCP</td>
<td>Linden Chemicals and Plastics</td>
</tr>
<tr>
<td>NYSDEC</td>
<td>New York State Department of Environmental Conservation</td>
</tr>
<tr>
<td>NOI</td>
<td>Notice of Intent</td>
</tr>
<tr>
<td>OU-1</td>
<td>Operable Unit 1</td>
</tr>
<tr>
<td>RCN</td>
<td>Runoff Curve Number</td>
</tr>
<tr>
<td>ROD</td>
<td>Record of Decision</td>
</tr>
<tr>
<td>SCS</td>
<td>Soil Conservation Service</td>
</tr>
<tr>
<td>SWPPP</td>
<td>Stormwater Pollution Prevention Plan</td>
</tr>
<tr>
<td>Tc</td>
<td>Time of Concentration</td>
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SECTION 1

INTRODUCTION

1.1 BACKGROUND AND OBJECTIVES

The Geddes Brook interim remedial measure (IRM) is being performed under the Geddes Brook IRM Order on Consent (Index #D7-0003-01-09). Removal activities are scheduled to begin in the spring of 2011. In order to meet this schedule, a temporary construction water treatment plant at the Linden Chemical and Plastics Operable Unit 1 (LCP OU-1) site, (Construction Water Treatment Plant [CWTP] at LCP), will be constructed and commissioned prior to this.

This report summarizes the plan to minimize impacts to downstream water bodies caused by site disturbance to the portion of the Geddes Brook IRM project site associated with the CWTP.

The approach will meet the following objectives:

• Minimize disturbance of site soils
• Protect the site from erosion and sediment migration during construction
• Minimize impacts to the West Flume and Wetland A, and therefore Upper Geddes Brook

This stormwater pollution prevention plan (SWPPP) summarizes the proposed site work, describes the erosion control methods selected, and includes a hydrologic analysis for the pre- and post-development conditions of the site. This report is prepared in accordance with the New York State Department of Environmental Conservation (NYSDEC) "New York State Standards and Specifications for Erosion and Sediment Control" (2005), and substantive portions of the NYSDEC "SPDES General Permit for Stormwater Discharges from Construction Activities GP-0-10-001."

1.2 GENERAL SITE DESCRIPTION

The site is located as shown in Figure 1.

The CWTP will encompass approximately 1.2 acres. Prior to construction of the work platform for the CWTP, 2.1 acres for the LCP OU-1 site will be remediated as described in Section 1.3. These two areas overlap as indicated on Figure 2 and are referred to here as “the site.” The site is primarily gravel roads (formally laydown for the LCP OU-1 project) with occasional stands of grass and shrubs. The subsurface cut-off wall for the LCP OU-1 containment system forms the NW site-limit; the West Flume forms the NE site-limit and the toe of the existing wooded slope approximately forms the southern site-limit.
1.3 GENERAL PROJECT DESCRIPTION

The following components will be implemented for the CWTP at LCP:

- Removal of approximately 6000 cubic yards (cy) as per the Order on Consent # D7-0001-00-12, Site # 7-34-049, (under a Record of Decision for LCP-OU1)
- Stabilization of the area outside the CWTP footprint
- Construction of the CWTP, including work platform
- Site restoration after operation of the CWTP for up to three years

The location of the proposed removal area and subsequent CWTP work platform are indicated on Figure 2. The Owner is responsible for completing a Notice of Intent (NOI) Form for information only, although filing of the NOI is not required. A copy of the completed NOI is provided as Appendix A.

1.4 SITE OWNER

<table>
<thead>
<tr>
<th>Owner</th>
<th>Owner’s Contact</th>
<th>Owner’s Representative Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honeywell International, Inc.</td>
<td>Al J. Labuz</td>
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<td>Project Manager</td>
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<td>Syracuse, NY 13212</td>
<td>fax: 315-552-9780</td>
<td>fax: 315-451-9570</td>
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<td></td>
<td>email: <a href="mailto:al.labuz@honeywell.com">al.labuz@honeywell.com</a></td>
<td>email: <a href="mailto:shane.blauvelt@parsons.com">shane.blauvelt@parsons.com</a></td>
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Site Location Map

NYS Fairgrounds

STATE FAIR BOULEVARD

FIGURE 1

Onondaga Lake

Site Location Map

Honeywell
LCP
SYRACUSE, NEW YORK

Site Location Map

SYRACUSE

New York Quadrangle

FIGURE 1

Honeywell
LCP
SYRACUSE, NEW YORK

Site Location Map

SYRACUSE

New York Quadrangle

FIGURE 1

Honeywell
LCP
SYRACUSE, NEW YORK

Site Location Map

SYRACUSE

New York Quadrangle

FIGURE 1

Honeywell
LCP
SYRACUSE, NEW YORK

Site Location Map

SYRACUSE

New York Quadrangle

FIGURE 1

Honeywell
LCP
SYRACUSE, NEW YORK

Site Location Map

SYRACUSE

New York Quadrangle
SECTION 2

EXISTING SITE CONDITIONS

2.1 TOPOGRAPHY

The existing site slopes from the south to the north, towards the West Flume. The grade range is approximately 7% to the south of the actual CWTP footprint, and approximately 2% on the remainder of the site, excluding the West Flume and drainage ditch side slopes.

To the northwest of the site is the LCP OU-1 containment area. The initial removals encroach into this sub-watershed, as the excavation will extend over the drainage ditch and up to the subsurface cut-off wall. The existing slope of this sub-watershed is approximately 2%.

The pre-construction site conditions are indicated on Figure 3.

2.2 SOILS

The USDA Soil Conservation Service Web Site Soil Survey Map for Onondaga County Map depicts the only soil type identified within the project sub-watersheds as “Ub- Urban Land” with a non-rated hydrologic soil group (HSG). These maps are provided in Appendix B. Sampling of the site during 2008 visually indicated silt with trace fine sand. The actual containment area of LCP includes a topsoil as the upper layer of the temporary soil cover, which was placed during the LCP restoration project. For the purposes of the hydrologic analysis, the HSG is assumed to be Type B.

2.3 WATERSHED BOUNDARIES

Runoff from the site currently flows through wooded areas to the NW and into the West Flume via the LCP swale. Runoff to the site flows over the eastern grassed slope of the current LCP containment area and into the LCP swale. The pre-construction project watershed is divided into two sub-areas as depicted on Figure 3.

2.4 DRAINAGE STRUCTURES

The projects site itself does not contain any drainage structures within the area of proposed work. Downstream of the disturbed areas is one 36 in. culvert connecting the drainage swale to the West Flume. This was installed under the former crossover onto the LCP containment area. The inverts of the culvert are at 386.2 ft. and 386.0 ft.
SECTION 3

PROPOSED SITE WORK

3.1 DESIGN OBJECTIVE

The primary purpose of the project is to construct and commission a temporary CWTP for the treatment of construction water produced during the implementation of the Geddes Brook IRM. A remedial excavation is required under the Record of Decision (ROD) for LCP OU-1 as described in Section 1.3. The depth of the excavation will be determined by post-extraction sampling prior to constructing the work platform for the CWTP. The facility will be subsequently removed from the site following the completion of the IRM and the site will be restored with vegetation.

3.2 SITE WORK

Site Preparation

- Installation of temporary runoff control measures
- Clearing of existing vegetation

Construction Phase

- Removal of approximately 6000 cy of soil.
- Installation of the temporary low permeability asphalt work platform over a gravel subgrade.
- Installation of temporary construction facilities including stockpile areas, frac tanks, trailers and staging areas as necessary. Existing gravel roads will be used to access the work areas Repairs or upgrades to existing access roads will be conducted, as required to complete the work.

Restoration Phase (following site operation 2-3 years)

- Removal of temporary facilities
- Site grading
- Site restoration including application of topsoil, seeding and mulch
- Removal of erosion and sediment controls

3.3 EXCAVATION AND GRADING

The proposed excavation and subsequent backfill and grading areas are indicated on Figure 2. The cut and fill sections represent the area of disturbance for remediation activities and installation of the CWTP work platform.

Excavated material will be temporarily staged on site in holding areas away from existing drainage swales. This material will be placed within the LCP containment area during the
Geddes Brook remediation. Approximately 2 ft. of fill material will be placed within the excavation area to the elevation required for construction of the work platform.

Following decommissioning and removal of the CWTP, the entire site will be restored with topsoil and appropriate seed mixes, as per the Geddes Brook IRM.

The final slopes of disturbed areas within the CWTP at LCP site will not exceed currently existing slopes, and the maximum site elevation will not be increased. No new permanent drainage structures are proposed under the referenced project and completion does not include construction of new buildings or impervious ground surfaces.

3.4 DEWATERING AND CONSTRUCTION WATER MANAGEMENT

It is anticipated that the excavation will not have significant groundwater infiltration as the groundwater table is currently at an elevation below the base of the excavation. Any construction water generated will be collected and diverted to the existing groundwater treatment system at the LCP.

3.5 EXCAVATED SOIL MANAGEMENT

Approximately 6000 cy of soil will be generated from excavating the LCP OU-1 removal area and site re-grading activities. This material will be stockpiled in a temporary on-site containment area and will be covered with an impermeable geotextile cover to eliminate contact with stormwater. Any runoff will be diverted to the West Flume. The stockpile cover, as well as the appropriate sediment and erosion control measures will be maintained until this material has been effectively consolidated at the LCP OU-1 containment area during the Geddes Brook project.

3.6 SITE CONDITIONS DURING IRM

During CWTP operation, the area within the site but surrounding the facility itself will be stabilized with either topsoil, mulch and seed as per the specifications for the Geddes Brook IRM or in the case of delivery roads, geotextile and gravel.

3.7 SITE RESTORATION

Following completion of the consolidation of materials at the LCP containment area and decommissioning of the CWTP, the work platform area and surrounding access roads will receive topsoil, mulch and seed as per the specifications for the Geddes Brook IRM, in order to establish a vegetative cover and minimize erosion.

3.8 GENERAL CONSTRUCTION SCHEDULE

The proposed construction will begin in October 2010 and start-up and commissioning of the CWTP is expected in March 2011. Restoration of the site is anticipated to occur in 2014.