Municipality/Organization: Tewksbury Hospital

EPA NPDES Permit Number: MAR42005

MassDEP Transmittal Number: W-035389


NPDES PII Small MS4 General Permit
Annual Report
(Due: May 1, 2016)

Part I. General Information

Contact Person: Stephen Dorrance
Title: Facilities Director, Hospital Bureau
Massachusetts Department of Public Health

Telephone #: (978) 851-7321
Email: Stephen.Dorrance@massmail.state.ma.us

Mailing Address: 365 East Street, Tewksbury, MA 01876

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: ______________________________

Printed Name: Stephen Dorrance

Title: Facilities Director, Hospital Bureau

Date: 4/7/16
Part II. Self-Assessment

The facility of Tewksbury Hospital has completed the required self assessment and has determined that it is in compliance with all permit conditions. Please note that this is a State-owned and operated campus facility and not a municipality.
### Part III. Summary of Minimum Control Measures

#### 1. Public Education and Outreach

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Identify all groups using facility for targeting info and notices</td>
<td>Facilities management and human resources</td>
<td>List of groups with contact information</td>
<td>This list was completed in 2004 and will be revised on a yearly basis. Copies of the list are kept on site. The contact information has been used to distribute information on the Tewksbury Hospital Storm-water program and other environmental items.</td>
<td>This list will be updated yearly and will be used as needed.</td>
</tr>
<tr>
<td></td>
<td>Integrate education and good housekeeping into orientation and yearly training</td>
<td>Facilities management and human resources</td>
<td>All new staff to get storm-water materials with required training; records to be kept with other training record in personnel file</td>
<td>Initial training of all maintenance and grounds-keeping staff has been conducted using a video presentation and handouts. Records with the name and date of training for these staff are being kept in the facilities management office and by the compliance officer.</td>
<td>Springtime “refreshers” will be conducted each year and records kept to record attendees.</td>
</tr>
<tr>
<td></td>
<td>Brochure development and distribution</td>
<td>Facilities management and Human Resources</td>
<td>An educational brochure designed and distributed to staff and visiting groups.</td>
<td>Tewksbury Hospital has used a brochure developed by EPA and the Weather Channel to distribute to staff and others at the hospital, including the various programs described in B1-2 above. The brochures contain contact information to enable people to contact the facilities department as well as access the EPA website on storm-water.</td>
<td>These brochures will be made available to staff, patients and visitors at the hospital</td>
</tr>
</tbody>
</table>

**1a. Additions**

**none**
## 2. Public Involvement and Participation

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Compile list of existing related activities on campus each year</td>
<td>Facilities management and human resources</td>
<td>List of activities with organization name and contact</td>
<td>Tewksbury Hospital is undergoing some significant reorganization, and the completion of this list was delayed until permit year 2. (See also BMP B1-2 as these items are related). This list was completed in summer of 2004</td>
<td>This list will be updated in January of each year afterward.</td>
</tr>
<tr>
<td></td>
<td>Coordinate with town of Tewksbury</td>
<td>Compliance Officer and Facilities Management</td>
<td>Telephone meetings between Compliance Officer and Engineering Staff at the Town office</td>
<td>Tewksbury has allowed us to read their storm-water management plan. They have no current need for face-to-face coordination with Tewksbury Hospital. As Tewksbury Hospital is a small portion of the town’s land and much of the hospital’s land is open space, they may not feel we have a significant enough impact to make coordination necessary.</td>
<td>DPH will continue to approach the town regarding storm-water issues.</td>
</tr>
<tr>
<td></td>
<td>Catch basin map publication</td>
<td>Facilities Department</td>
<td>Distribute map showing location of drainage and catch basins</td>
<td>A map of the catch basins has been developed and is available for facility staff. Locations of all storm drains have been marked using GPS systems.</td>
<td>A more detailed and user-friendly map will be completed when staff time and facility money permit.</td>
</tr>
<tr>
<td></td>
<td>Publicize existing watershed groups</td>
<td>Facilities department and compliance officer</td>
<td>Information on the local watershed groups will be made available in locations around campus for staff and visitors</td>
<td>Information on the Shawsheen River Watershed Association is posted in the main hospital building. This organization has a website to which interested parties are directed.</td>
<td>Additional information will be solicited from the SRWA as needed.</td>
</tr>
</tbody>
</table>

### 2a. Additions

As a part of B2-3 above, GPS equipment was used to map the locations of storm drains, outfalls and other areas of interest and incorporated in a computerized storm sewer system map. This information will be used in the future when needed.
## 3. Illicit Discharge Detection and Elimination

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Compile maps and other info on existing stormwater system</td>
<td>Facilities Management</td>
<td>Maps in both large format and standard handout size</td>
<td>A map of the catch basins has been developed and is available for facility staff (this is the same BMP as B2-3 above)</td>
<td>See above under B2-3.</td>
</tr>
<tr>
<td></td>
<td>Develop written SOP and work practices for stormwater management</td>
<td>Facilities management and Human Resources</td>
<td>One or more written SOPs</td>
<td>This SOP was completed and made a part of the facility management handbook at the facility. The policy includes information for grounds-keeping, facility maintenance and vehicle maintenance staff. It includes information on recordkeeping and when an individual storm-water permit for construction may be needed.</td>
<td>This SOP is a part of the facility’s operating procedures and will be used from now on. The policy will only be rewritten if needed based on changes in facility operations.</td>
</tr>
<tr>
<td></td>
<td>Survey of campus buildings for illegal connections</td>
<td>Facilities management</td>
<td>All buildings surveyed</td>
<td>Locations where there are potential interconnections have been identified. TH is working on finding a funding source to investigate these locations in detail and make any repairs needed.</td>
<td>This item is ongoing when money is available.</td>
</tr>
</tbody>
</table>

### 3a. Additions

Tewksbury Hospital has contracted with a company (Flow Assessment Services LLC) to do an Inflow and Infiltration study at the Campus. This study is currently in progress.

In 2013 Tewksbury Hospital contracted with Stantec Consulting Services Inc. to do a new Inflow and Infiltration study on the Tewksbury Hospital Campus. This study was completed in June of 2013 and Tewksbury Hospital in now in the process of requesting funds from DCAMM to complete repairs recommended in the study.

2015 – Tewksbury Hospital continues to look for funding to upgrade these systems.
4. Construction Site Stormwater Runoff Control

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Work with DCAM to develop contract language for new construction</td>
<td>Compliance Officer</td>
<td>Review and revision to existing SOPS and new contract language as needed to ensure storm-water procedures are followed during construction</td>
<td>Any large projects requiring storm-water controls at Tewksbury Hospital are typically carried out under DCAM project management. Compliance officer has reviewed current DCAM standards and has requested information on ongoing changes from DCAM.</td>
<td>Coordination with DCAM will continue throughout all permit years. This will also include potential work associated with hazardous waste site cleanup activities at the facility.</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Develop/Implement training for employees who oversee construction</td>
<td>Human Resources and facilities management</td>
<td>Portion of training program for relevant staff.</td>
<td>General training of facility management employees, including those who oversee construction, on storm-water principles. A list of trained employees is kept in the facility director’s office. (see also Bl-3 as these are the same group of employees)</td>
<td>Springtime “refreshers” will be conducted each year and records kept to record attendees. Storm-water issues will be a part of any kickoff meetings for relevant construction projects.</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4a. Additions

*(none)*
5. Post-Construction Stormwater Management in New Development and Redevelopment

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Codify maintenance of storm drains</td>
<td>Compliance</td>
<td>Written SOPs or other methods (such as automated</td>
<td>Storm drains are a part of the regular facility maintenance procedures.</td>
<td>The facility waste disposal contract and includes regular storm drain cleaning and maintenance in the scope of the contract.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Officer and</td>
<td>maintenance system use)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Facilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>management</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5a. Additions

In addition to regular maintenance, Tewksbury Hospital commissions an outside contractor to clean the storm drains at the conclusion of the winter season.
### 6. Pollution Prevention and Good Housekeeping in Municipal Operations

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Discussion with town of Tewksbury on potential to adopt some town BMPs</td>
<td>Compliance officer</td>
<td>Meetings and review of documents</td>
<td>See information on town coordination in BMP 2-4 above.</td>
<td>See information on town coordination in BMP 2-4 above.</td>
</tr>
<tr>
<td>Revised</td>
<td>Review all relevant statewide and facility contracts for appropriate storm-water-related language</td>
<td>Facilities management and compliance officer</td>
<td>All contracts, etc., will be reviewed with changes made as applicable</td>
<td>This information has been incorporated into relevant contracts with programs.</td>
<td>This BMP will have ongoing maintenance of contracts new and existing.</td>
</tr>
<tr>
<td>Revised</td>
<td>Work with on-site farmers on good practices related to storm-water</td>
<td>Facilities management</td>
<td>New work procedures as needed to control impacts</td>
<td>All new contracts have been negotiated with the agricultural users of the facility. These contracts include information and requirements consistent with good storm-water practices and reporting of activities including those pertinent to good land stewardship. Any breach of these terms can be cause for termination of the contract.</td>
<td>Contract renewals occur every year for this land use and the farmers will be kept to the terms of the agreements.</td>
</tr>
<tr>
<td>Revised</td>
<td>Refine procedures to dispose of animal and horse waste from site</td>
<td>Facilities management</td>
<td>New work procedures to target these materials and prevent storm-water contamination</td>
<td>All new contracts have been negotiated with the operators of the horse operations on the site and signed. These contracts include information and requirements consistent with good</td>
<td>Regular monitoring of the terms of the contract is ongoing during the year.</td>
</tr>
</tbody>
</table>
### Revised

| Binding contracts between the facility and the operator specifying practices to be followed to prevent storm-water contamination | Storm-water practices and reporting of activities including those pertinent to good land stewardship. Any breach of these terms can be cause for termination of the contract. |
| Review relevant facility SOPs | Facilities management | All facility work practices will be reviewed and changes |
| 6a. Additions | This item has commenced. The facility management department has a handbook of SOPs which is being reviewed for relevance to storm-water activities. The new SOP developed for item B3-2 has been added to this book as well. |

#### 6a. Additions

**B6-5:** The facility has revised its practices for movement of snow removed from roads and parking lots. The facility staff and Compliance Officer located areas on the property where excess snow can be placed to melt when snowfall totals are high. This area is be outside of the watershed protection boundary and located away from stormdrains, surface water and wetlands to prevent the runoff of any contamination present in the snow. These locations are made a part of the facility operating practices when necessary during a heavy snowfall. The effectiveness of the new snow storage locations is reviewed after each season.
7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

TMDL issues exist for the Shawsheen River. Specific BMPs above which will have the most potential benefit on the river are B1-1, B1-2, B1-5, B2-4 and all BMPs under section 3 “illicit discharge detection and elimination”. “Good Housekeeping” items B6-4 and B6-5 may also reduce pathogen loads to the waterways which connect to the Shawsheen.

7a. Additions

(None)

7b. WLA Assessment

None performed by Tewksbury Hospital; this is not anticipated to be part of our strategy.

Part IV. Summary of Information Collected and Analyzed

Tewksbury Hospital does not have water quality data and does not intend to collect any under this permit.

Part IV. Summary of Information Collected and Analyzed

Since Tewksbury Hospital is not a municipality, many of these criteria do not apply. Relevant information on these outputs is contained in the tables above.

Part V. Program Outputs & Accomplishments (OPTIONAL)

(Since beginning of permit coverage unless specified otherwise by a **, which indicates response is for period covering April 1, 2015 through March 31, 2016)