Midlothian and Chester Campuses

Municipal Separate Storm Sewer System

Program Plan & Annual Report

For

General Permit No. VAR040110

And

Annual Reporting through

July 1, 2015 through June 30, 2016

This plan and annual report is submitted in accordance with 9VAC25-890-30 and 9VAC25-890-40 as part of registration statement for permit coverage to discharge stormwater to surface waters of the Commonwealth of Virginia consistent with the VAR04 General Permit, effective July 1, 2013.

Submitted: September 30, 2016
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Appendix A - BMP 1.2 Documentation of Public Education and Outreach Activities
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Appendix E - BMP 5.2 SWM Facility Tracking Database
"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 ensure 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."

Printed Name: Greg Dunaway
Title: Director of Facilities and Safety
Signature: [Signature]
Date: 09/28/2016
DEFINITIONS

"Best management practice" or "BMP" means schedules of activities, prohibitions of practices, including both structural and nonstructural practices, maintenance procedures, and other management practices to prevent or reduce the pollution of surface waters and groundwater systems from the impacts of land-disturbing activities.

"Chesapeake Bay Preservation Act land-disturbing activity" means a land-disturbing activity including clearing, grading, or excavation that results in a land disturbance equal to or greater than 2,500 square feet and less than one acre in all areas of jurisdictions designated as subject to the Chesapeake Bay Preservation Area Designation and Management Regulations (4VAC50-90) adopted pursuant to the Chesapeake Bay Preservation Act.

"Chesapeake Bay watershed" means all land areas draining to the following Virginia river basins: Potomac River Basin, James River Basin, Rappahannock River Basin, Chesapeake Bay and its small coastal basins, and York River Basin.

"Construction activity" means any clearing, grading or excavation associated with large construction activity or associated with small construction activity.

"Department" means the Department of Environmental Quality (DEQ).

"Discharge," when used without qualification, means the discharge of a pollutant.

"Drainage area" means a land area, water area, or both from which runoff flows to a common point.

"Hydrologic Unit Code" or "HUC" means a watershed unit established in the most recent version of Virginia's 6th Order National Watershed Boundary Dataset.

"Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater, except discharges resulting from firefighting activities, and discharges identified by and the following, unless identified by the Municipal Separate Storm Sewer System MS4 operator as significant contributors of pollutants: water line flushing, landscape irrigation, diverted stream flows, rising groundwaters, uncontaminated groundwater infiltration, uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water.

"Impervious cover" means a surface composed of material that significantly impedes or prevents natural infiltration of water into soil.

"Land disturbance" or "land-disturbing activity" means a manmade change to the land surface that potentially changes its runoff characteristics including clearing, grading, or excavation, except that the term shall not include the following potential activities:

- Campus land-disturbing activities that disturb less than 2,500 square feet
- Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original construction of the project. The paving of an existing road with a compacted or
impervious surface and reestablishment of existing associated ditches and shoulders shall be deemed routine maintenance.

- Land-disturbing activities in response to a public emergency where the related work requires immediate authorization to avoid imminent endangerment to human health or the environment. In such situations, DEQ shall be advised of the disturbance within seven days of commencing the land-disturbing activity.

"Municipal separate storm sewer system" or “MS4” means a conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains

“MS4 Program Plan” means the completed registration statement and all approved additions, changes and modifications detailing the comprehensive program implemented by the operator under this state permit to reduce the pollutants in the stormwater discharged from its MS4 that has been submitted and accepted by DEQ.

"Outfall" means, when used in reference to municipal separate storm sewers, a point source at the point where a municipal separate storm sewer discharges to surface waters and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other surface waters and are used to convey surface waters.

“Public” means, for the purpose of this Program Plan, the students, faculty, and staff population attending or employed by John Tyler Community College’s Midlothian and Chester campuses.

"State waters" means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands.

"Stormwater" means precipitation that is discharged across the land surface or through conveyances to one or more waterways and that may include stormwater runoff, snow melt runoff, and surface runoff and drainage.

"Stormwater management plan" means a document(s) containing material for describing methods for complying with the requirements of the Virginia Stormwater Management Program

"Total maximum daily load" or "TMDL" means the sum of the individual wasteload allocations for point sources, load allocations (LAs) for nonpoint sources, natural background loading and a margin of safety. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure. The TMDL process provides for point versus nonpoint source trade-offs.

"Virginia Stormwater Management Handbook" means a collection of pertinent information that provides general guidance for compliance with the Act and associated regulations and is developed by DEQ with advice from a stakeholder advisory committee.

"Wasteload allocation" or "wasteload" or "WLA" means the portion of receiving surface water's loading or assimilative capacity allocated to one of its existing or future point sources of pollution. WLAs are a type of water quality-based effluent limitation.

"Watershed" means a defined land area drained by a river or stream, karst system, or system of connecting rivers or streams such that all surface water within the area flows through a single outlet.
1.0 PROGRAM PLAN STRUCTURE

The Program Plan is structured to serve as a stand-alone document that, when implemented, meets the requirements of the VAR04 General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4s), referred to in the remainder of this Program Plan as the General Permit. However, the MS4 Program is intended to be subject to modifications throughout the 5-year permit cycle as part of an iterative process that seeks to improve the effectiveness of best management practices (BMPs). Measure(s) of effectiveness are incorporated in each BMP and annual reporting form in Section 3.

1.1 Minimum Control Measures

The General Permit requires the John Tyler Community College (JTCC) Program Plan to include BMPs to address the requirements of six minimum control measures (MCMs) described in Section II of the General Permit. The MCMs are summarized as:

- MCM 1: Public Education and Outreach on Stormwater Impacts
- MCM 2: Public Involvement and Participation
- MCM 3: Illicit Discharge Detection and Elimination
- MCM 4: Construction Site Stormwater Runoff Control
- MCM 5: Post-construction Stormwater Management
- MCM 6: Pollution Prevention/Good Housekeeping for Operations

Section 3.0 provides BMPs developed to address each General Permit requirements for each MCM. The title of each BMP is followed with a reference to the corresponding permit section. Each BMP included in the Program Plan is intended to specifically address permit requirements and includes the following information:

- A description of the BMP.
- A list of the necessary documentation to implement the BMP. This information is considered part of the Program and is readily available and updated, as necessary and consistent with the BMP schedule.
- The identification of the individual(s) responsible for implementation of the BMP.
- The objective of the BMP and the result expected from implementation of the BMP.
- An implementation schedule consistent with the General Permit.
- A description of the method(s) to be used to assess the effectiveness of the BMP.

1.2 Special Conditions for TMDLs

JTCC is subject to the Special Conditions for the Chesapeake Bay TMDL that requires the development and submission to DEQ, for its review and acceptance, an approvable TMDL Action Plan by July 1, 2016. The Action Plan becomes effective and enforceable 90 days after the date received by DEQ. A BMP is provided
in Section 3.2 for development of the Action Plan, and a second BMP is reserved to be developed for implementation of the Action Plan. BMPs are also provided to ensure JTCC annually determines if a WLA has been assigned during the reporting year and to provide public opportunity for participation in development of new TMDLs.

1.3 Annual Reporting

JTCC will submit an Annual Report to DEQ of Environmental Quality (DEQ) by October 1st of each year with the reporting period spanning from July 1st through June 30th. This Program Plan includes annual reporting forms in “fillable form” format. The completion of these forms provides all of the reporting requirements to satisfy the General Permit and include the:

- Cover sheet will be updated with the specific reporting year;
- Certification following the cover sheet;
- “Annual Reporting – General Information” form on the following page completed annually; and
- The annual reporting form following each BMP in Section 3 completed annually.

Information compiled for effectiveness for each BMP in Section 3.0 is utilized to evaluate and, if necessary, modify the corresponding BMP. Any modifications will be reported in the “Annual Reporting – General Information” form. Modifications to the Program made by JTCC will be done in accordance with the General Permit requirements described in Section 1.4.

The General Permit requires certification of the annual report and is provided immediately after the Table of Contents of this document. Certification is required by a principle executive officer or a duly authorized representative. The duly authorized representative must have overall responsibility of the campus operations and written authorization must be provided to DEQ.
### 1.4 Annual Reporting – General Information Form

- The BMPs described in Section 3 are the stormwater activities that JTCC plans to undertake during the next reporting cycle.
- JTCC relies on the Virginia Community College System (VCCS) for implementation of BMP 4.1, 4.3, and 4.4 through the DEQ approved VCCS Annual Standards and Specifications for Erosion and Sediment Control and the VCCS Construction and Professional Services Manual.
- Completed Annual Reporting Forms for each BMP in Section 3 provide an assessment of the appropriateness of each BMP, progress towards achieving each measurable goal, and results of collected information analyzed for appropriate assessments and effectiveness of the BMP.

| Were modifications to the responsible individual of any program role or responsibility or specific BMP included in the Program that occurred during the reporting year? (yes/no) | Yes ☑️ No
|---|---|

If yes, modifications are listed below (provide BMP # in Section 3 to reference modification rationale):

- BMP 4.3 and BMP 5.1 Virginia Community College System Annual Standards and Specifications incorporated.
- BMP 6.5 was modified to reflect periodic inspections by the College for outside contractors.
- BMP CB-SC.2 Chesapeake Bay TMDL Action Plan Implementation added.
- BMP SC.2 James River (Tidal) TMDL Action Plan Implementation added.

<table>
<thead>
<tr>
<th>Number of new MS4 outfalls at Midlothian Campus:</th>
<th>0</th>
<th>Associated acreage by HUC6 for Midlothian campus outfalls added during the permit year:</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of new MS4 outfalls at Chester Campus:</td>
<td>0</td>
<td>Associated acreage by HUC6 for Midlothian campus outfalls added during the permit year:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Based on a review of the reporting forms completed for the reporting year within Section 3 of this Program Plan, JTCC finds the college compliant with the permit conditions (yes/no):

- Yes ☑️ No

If no, listed below are additional BMPs and/or changes made to BMPs or measurable goals for any of the MCMs, including steps to address any deficiencies: N/A

* For Program modifications listed above, follow the guidance in Section 1.4 *

<table>
<thead>
<tr>
<th>Does JTCC’s MS4 directly discharge to waters that are identified as impaired in the 2010 §305(b)/303(d) Water Quality Assessment Integrated Report? (yes/no)</th>
<th>Yes ☑️ No</th>
</tr>
</thead>
</table>

If yes, list the impaired waters and pollutant impairment: N/A

Based on the water quality issues identified in BMP 1.2 and impairments identified above, does a review of the effectiveness of the BMPs listed in the program indicate they are appropriate? (yes/no)

- Yes ☑️ No

Please explain why they are effective for the impairments or identify potential modifications if not effective: BMPs address potential pollutants into the system and therefore are considered appropriate and effective based on the measure of effectiveness for each BMP provide in Section 3.
1.5 Program Modifications

Modifications to the MS4 Program may occur throughout the life of this Program Plan as part of an iterative process to reduce the pollutant loadings and to protect water quality. Modifications will most often be made when a BMP is deemed ineffective. The effectiveness of each BMP is reported in Section 3. When a BMP is determined ineffective, updates and modifications to the MS4 Program must be made in accordance with the following procedures:

- Adding (but not eliminating or replacing) BMPs may be made by JTCC at any time. Additions shall be reported as part of the annual report in the “Annual Reporting – General Information” form in Section 1.3.

- Updates and modifications to specific standards and specifications, schedules, operating procedures, manuals, checklists, and other documents routinely evaluated and modified are permitted provided that the updates and modifications are done in a manner that:
  - Is consistent with the conditions of the General Permit;
  - Follow any public notice and participation requirements established in the General Permit; and
  - Are documented in the annual report in the “Annual Reporting – General Information” form in Section 1.3.

- Replacing, or eliminating without replacement, any ineffective or infeasible strategies, policies, and BMPs with alternate strategies, policies, and BMPs may be requested at any time. Such requests must include the following:
  - An analysis of how or why the BMPs, strategies, or policies are ineffective or infeasible, including cost prohibitive;
  - Expectations on the effectiveness of the replacement BMPs, strategies, or policies;
  - An analysis of how the replacement BMPs are expected to achieve the goals of the BMPs to be replaced;
  - A schedule for implementing the replacement BMPs, strategies, and policies;
  - An analysis of how the replacement strategies and policies are expected to improve JTCC’s ability to meet the goals of the strategies and policies being replaced; and
  - Requests or notifications must be made in writing to DEQ and signed by a principle executive officer or a duly authorized representative. The duly authorized representative must have overall responsibility of the campus operations and written authorization must be provided to DEQ.
  - JTCC follows the public involvement requirements identified in the General Permit.
2.0 SCHEDULE

As discussed in Section 1, each BMP described in the Program Plan includes an implementation schedule. Some of the BMPs require actions to be taken to assist in the development or implementation of a BMP. Table 1 lists some of these actions but does not summarize all necessary Program implementation described in Section 3.0. The table provides a summary of dates critical for assuring compliance with the permit and is intended to assist with Program Plan implementation.

Table 1. Summary of critical items and deadlines for program implementation.

<table>
<thead>
<tr>
<th>BMP</th>
<th>Necessary Action</th>
<th>Due date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1, 1.2</td>
<td>Provide for public participation for education and outreach plan</td>
<td>Complete</td>
</tr>
<tr>
<td>1.2</td>
<td>Public Education/Outreach Plan</td>
<td>Complete</td>
</tr>
<tr>
<td>1.2, 2.1, 3.5, 4.2</td>
<td>Website postings (see BMPs for details)</td>
<td>Updated annually</td>
</tr>
<tr>
<td>2.1</td>
<td>Post Annual Report on website</td>
<td>30 days after submittal annually</td>
</tr>
<tr>
<td>2.2</td>
<td>Public participation activities</td>
<td>4x annually</td>
</tr>
<tr>
<td>3.1</td>
<td>Notification of MS4 Interconnections</td>
<td>Complete</td>
</tr>
<tr>
<td>3.1</td>
<td>Storm sewer mapping/information table</td>
<td>Complete</td>
</tr>
<tr>
<td>3.3</td>
<td>Develop IDDE Program Manual</td>
<td>Complete</td>
</tr>
<tr>
<td>3.3, 6.1, 6.3a</td>
<td>Written Training Program (see IDDE and Good Housekeeping/Pollution Prevention Manuals)</td>
<td>Complete</td>
</tr>
<tr>
<td>3.4, 6.1</td>
<td>Good Housekeeping/Pollution Prevention Program Manual</td>
<td>Complete</td>
</tr>
<tr>
<td>5.3</td>
<td>Post-construction SWM Inspection/ Maintenance Program Manual</td>
<td>Complete</td>
</tr>
<tr>
<td>6.2</td>
<td>Identify high priority areas</td>
<td>Complete</td>
</tr>
<tr>
<td>6.2</td>
<td>Campus-Specific SWPPP</td>
<td>Complete</td>
</tr>
<tr>
<td>6.3a</td>
<td>Staff training on pollution prevention</td>
<td>Annually (see PEOP)</td>
</tr>
<tr>
<td>6.3b</td>
<td>Pesticides/herbicides contract language</td>
<td>Complete</td>
</tr>
<tr>
<td>6.5</td>
<td>Good housekeeping contract language for contractors</td>
<td>Complete</td>
</tr>
<tr>
<td>SC.1</td>
<td>Chesapeake Bay Action Plan</td>
<td>Complete</td>
</tr>
<tr>
<td>SC.2</td>
<td>James River and Tributaries Action Plan</td>
<td>Complete</td>
</tr>
</tbody>
</table>
3.0 PROGRAM PLAN BEST MANAGEMENT PRACTICES

This Section includes the BMPs that JTCC will implement to meet the requirements for each MCM and the applicable Special Conditions described in the General Permit.

1.1 Minimum Control Measures

**BMP 1.1 Public Participation for Public Education and Outreach Plan Development (Section II B.1.c.4)**

**Description:** Provide for public participation during public education and outreach program development through a survey distributed to students, faculty, and staff. The survey will be developed to assess the JTCC’s public knowledge regarding stormwater with the intent of assisting with the selection of high priority water quality issues. Opportunity to provide written comment will also be available with the survey.

**Necessary documentation for implementation:** (1) Survey and survey results

**Responsible individual for implementation:** JTCC Facilities Director

**Objectives and expected results in meeting measurable goals:** The objective is to include the public in the selection of water quality issues selected for Public Education and Outreach Plan.

**Implementation schedule:** An opportunity for public participation was provided in the fall of 2014 and the results incorporated into the Public Education and Outreach Plan (BMP 1.2).

**Method to determine effectiveness:** Effectiveness will be measured by the number of individuals responding to the survey and the incorporation of survey results into the Public Education and Outreach Plan.

**BMP 1.1 Annual Reporting Form**
(Completed once during the development of the Public Education and Outreach Plan)

| Description of how survey results and responses were incorporated into the Program: Survey results were used to identify rationale behind the 3 high priority water quality issues and determine the relevant messages to our target audience. |
| Necessary documents for implementation are not provided in the annual report, but will be retained on file for 3 years. |
**BMP 1.2 Develop Public Education and Outreach Program (Section II B.1.c.1-6)**

**Description:** Identify three (3) high priority water quality issues contributed to by the discharge of stormwater. For each issue identified, provide
- Rationale for the selection of each issue;
- An identification and estimate of population size of the target audience who is most likely to have significant impacts on the water quality issue; and
- A relevant message and educational and outreach materials to convey the message for distribution to the target audience.

**Necessary documentation for implementation:** (1) Survey results from BMP 1.1; (2) Written Plan describing the rationale of the selection of each water quality issue, identification of target audience and estimated population, and relevant message; (3) Materials described in the written Plan.

**Responsible individual for implementation:** JTCC Facilities Director

**Objectives and expected results in meeting measurable goals:** Objectives are to convey relevant information to target audiences regarding water quality issues. The expected result is that the target audiences will have an increased knowledge of the water quality issues over time.

**Implementation schedule:** Outreach will be conducted a minimum of once a year to at least 20% of each target audience for each water quality issue identified in the written Plan. A public survey to measure knowledge on the identified issues will be conducted in the fall of 2014 and again in the spring of 2018 to measure effectiveness.

**Method to determine effectiveness:** Two public surveys will be distributed via email to assess the effectiveness of the message delivered for each water quality issue, as noted in the implementation schedule. The first survey will occur near the start of implementation of the outreach program and the second in the final year of the permit cycle. Effectiveness will be measured by using a scoring system to compare results of the two surveys to determine if public knowledge regarding each water quality issue has increased.
### BMP 1.2 Annual Reporting Form

<table>
<thead>
<tr>
<th>Water quality Issue #</th>
<th>List of educational and outreach activities identified in Public Education and Outreach Plan Update</th>
<th>Target Audience</th>
<th>Number of people reached</th>
<th>Percent of target audience reached</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Public Education on stormwater impacts</td>
<td>Students, Faculty, and Staff</td>
<td>14,600</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Education on special water quality concerns (TMDLs)</td>
<td>Ground Staff</td>
<td>23</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Good Housekeeping and Pollution Prevention</td>
<td>Staff</td>
<td>23</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water quality Issue #</th>
<th>List of educational and outreach activities that will be conducted during the next reporting year</th>
<th>Target Audience</th>
<th>Minimum number of people to be reached</th>
<th>Minimum percent of target audience reached</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Public Education on stormwater impacts</td>
<td>Students, Faculty, and Staff</td>
<td>2,920</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>Education on special water quality concerns (TMDLs)</td>
<td>Ground Staff</td>
<td>23</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Good Housekeeping and Pollution Prevention</td>
<td>Staff</td>
<td>23</td>
<td>100</td>
</tr>
</tbody>
</table>

Necessary documents for implementation are not provided in the annual report, but will be retained for a minimum of 3 years and are available upon request.

### Measure of Effectiveness

<table>
<thead>
<tr>
<th>Measure of Effectiveness</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Average “knowledge” score from previous survey:</td>
<td>44%</td>
</tr>
<tr>
<td>Average “knowledge” score from latest survey:</td>
<td>TBD</td>
</tr>
<tr>
<td>Has the “knowledge” score gone up over the permit cycle?</td>
<td></td>
</tr>
<tr>
<td>Yes (BMP effective)</td>
<td></td>
</tr>
<tr>
<td>No (See below)</td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

If no, discuss potential ineffectiveness of the BMP (outreach materials, student retention time, etc.). **N/A**

If no, Suggest BMP modifications to the Program Plan with rationale to increase effectiveness: **N/A**
**BMP 2.1 Public Involvement through web posting of MS4 Program information (Section II B.2.a.1-2)**

**Description:** The following documentation will be maintained on the JTCC stormwater website:
- The latest version of this MS4 Program Plan
- Each of the annual reports developed within the permit cycle.

Public education and outreach materials developed for BMP 1.2 will include links to the Program Plan and Annual Reports.

**Necessary documentation for implementation:** (1) JTCC MS4 Program Plan; (2) JTCC MS4 Annual Reports; (3) Web address of posted materials; (4) Educational and outreach material from BMP 1.2

**Responsible individual for implementation:** JTCC Facilities Director

**Objectives and expected results in meeting measurable goals:** Objectives are to provide opportunity to the public to review JTCC MS4 Program documentation. Expected results are an increase in public knowledge of the BMPs implemented by JTCC to improve water quality from stormwater runoff.

**Implementation schedule:** The Program Plan will be posted on the JTCC website 30 days after approval from DEQ. Within 30 days of any modification to the Program Plan, the latest version will be posted. Annual reports will be posted on the web page within 30 days of submittal to DEQ, or by November 1st of each year.

**Method to determine effectiveness:** Same as BMP 1.2.

---

**BMP 2.1 Annual Reporting Form**

Web links to posted program material are provided below

<table>
<thead>
<tr>
<th>Program Plan link:</th>
<th><a href="https://jtcc.edu/about/sustainability-at-jtcc/">https://jtcc.edu/about/sustainability-at-jtcc/</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Report Link:</td>
<td><a href="https://jtcc.edu/about/sustainability-at-jtcc/">https://jtcc.edu/about/sustainability-at-jtcc/</a></td>
</tr>
</tbody>
</table>

Necessary documents for implementation are not provided in the annual report, but will be retained on file for 3 years.
<table>
<thead>
<tr>
<th>Description:</th>
<th>JTCC will participate, through promotion, sponsorship, or other involvement, in a minimum of four local activities annually.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Necessary documentation for implementation:</td>
<td>(1) A list of public participation opportunities; (2) Documentation of participation.</td>
</tr>
<tr>
<td>Responsible individual for implementation:</td>
<td>JTCC Facilities Director</td>
</tr>
<tr>
<td>Objectives and expected results in meeting measurable goals:</td>
<td>The objective is to increase public participation to reduce stormwater pollutant loads; improve water quality; and support local restoration and clean-up projects, programs, groups, meetings, or other opportunities for public involvement. Measurable goals will include a measure or estimation of the number of people that participate in each local activity.</td>
</tr>
<tr>
<td>Implementation schedule:</td>
<td>Public participation will be conducted a minimum of four times a year.</td>
</tr>
<tr>
<td>Method to determine effectiveness:</td>
<td>Effectiveness will be determined by successful public turn-out to each event. Selection of specific events may be modified from year to year based public on turn-out.</td>
</tr>
</tbody>
</table>
## BMP 2.2 Annual Reporting Form

<table>
<thead>
<tr>
<th>Local activity</th>
<th>Type of JTCC MS4 Program participation (e.g. promotion, sponsorship, other)</th>
<th>Estimated # people reached</th>
<th>Summary of documentation* that demonstrates participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math and Science STEM Camp on 8/10/2015</td>
<td>Sponsorship</td>
<td>9</td>
<td>Sign-In Sheet) See Appendix B</td>
</tr>
<tr>
<td>Fool for Art Class - Stormwater Management on 4/16/2016</td>
<td>Participation</td>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td>Building Tour and Stormwater Discussion on 7/6/2015</td>
<td>Sponsorship</td>
<td>11</td>
<td>Sign-in Sheet (see Appendix B)</td>
</tr>
<tr>
<td>Outfall Inspection - Environmental Science Class on 4/13/2016</td>
<td>Participation</td>
<td>45</td>
<td>PowerPoint and Photos (See Appendix B)</td>
</tr>
</tbody>
</table>

* Documentation is attached in Appendix B

### Measure of Effectiveness

<table>
<thead>
<tr>
<th>Local Activity (same as above)</th>
<th>Rationalization of effectiveness or ineffectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math and Science STEM Camp on 8/10/2015</td>
<td>Effective due to turnout.</td>
</tr>
<tr>
<td>Fool for Art Class - Stormwater Management on 4/16/2016</td>
<td>Ineffective due to turnout.</td>
</tr>
<tr>
<td>Building Tour and Stormwater Discussion on 7/6/2015</td>
<td>Effective due to turnout.</td>
</tr>
<tr>
<td>Outfall Inspection - Environmental Science Class on 4/13/2016</td>
<td>Effective due to turnout.</td>
</tr>
</tbody>
</table>

For an ineffective activity identified above, describe modifications to be made for next reporting year (e.g. different activity or different approach): N/A

**BMP 3.1 Storm Sewer Map and Outfall Information Table (Section II B.3.a.1-5)**

**Description:** JTCC will maintain an accurate storm sewer system map and information table. The map, at a minimum, will:
- Include the mapped location of all MS4 outfalls with a unique identifier that corresponds to the information table;
- Include the name and location of all waters receiving discharges from JTCC’s MS4 outfalls and the associated sixth order hydrologic unit code (HUC) from Virginia's 6th Order National Watershed Boundary Dataset; and
- Be updated in the case of installation of new storm sewer or outfalls.

The information table, at a minimum, will include for each outfall the:
- Unique identifier;
- Estimated campus acreage served;
- Name of the receiving surface water and indication as to whether the receiving water is listed as impaired on the Virginia 2010 303(d)/305(b) list; and
- Name of any applicable TMDL or TMDLs.

The information table will be updated as new outfalls come on-line. JTCC will notify Chesterfield County and/or VDOT, where applicable, in writing, of any known physical connection to their MS4 regulated area or new interconnections that occur with new development.

**Necessary documentation for implementation:** (1) Storm sewer system map; (2) Outfall information table; (3) List of construction/development activity on campus; (4) Written notification of physical interconnections to the downstream MS4.

**Responsible individual for implementation:** JTCC Facilities Director

**Objectives and expected results in meeting measurable goals:** The objective is to maintain an up-to-date map of the storm sewer that provides a tool for IDDE procedures (see BMP 3.3). Expected results are that the mapping and the information table serves as a useful tool for tracking illicit discharges.

**Implementation schedule:** The storm sewer mapping and information table has been completed with the JTCC IDDE Program Manual. Subsequently, the map and information table will be updated annually at the end of each reporting year.

**Method to determine effectiveness:** Effectiveness will be determined based on its use as a tool for identifying illicit discharges.
**BMP 3.1 Annual Reporting Form**

<table>
<thead>
<tr>
<th>Storm Sewer System Information Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Appendix C for outfall inventory.</td>
</tr>
</tbody>
</table>

* If yes, has the downstream MS4 been notified of the outfall? ☑ Yes ☐ No
  If no, please explain why: JTCC notified, in writing, Chesterfield County and VDOT.

Necessary documents for implementation are not provided in the annual report, but will be retained for a minimum of 3 years and are available upon request.

**Measure of Effectiveness**

If any potential illicit discharges were identified or reported (refer to reporting for BMP 3.2 and 3.3), was outfall mapping used to address the issue: Three POTENTIAL illicit discharges were reported. All were addressed and resolved. See Appendix D.
<table>
<thead>
<tr>
<th><strong>BMP 3.2 Prohibit non-stormwater discharges (Section II B.3.b)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong> JTCC will prohibit non-stormwater discharges into the storm sewer system through language provided within the Standards of Conduct for employees and the Student Handbook for students, each of which provide methods and procedures for reporting and corrective and disciplinary action. Students, faculty, and staff will be made aware of the methods and procedures for reporting and corrective and disciplinary action as part of the Public Education and Outreach Program described in BMP 1.2.</td>
</tr>
<tr>
<td>For effective prohibition of non-stormwater discharges from contractors operating on campus, refer to BMP 6.5.</td>
</tr>
<tr>
<td><strong>Necessary documentation for implementation:</strong> (1) Standards of Conduct for employees; (2) Student Handbook; (3) A list of any instances of violation and summary of actions taken by JTCC.</td>
</tr>
<tr>
<td><strong>Responsible individual for implementation:</strong> JTCC Facilities Director</td>
</tr>
<tr>
<td><strong>Objectives and expected results in meeting measurable goals:</strong> The objective is to effectively prohibit non-stormwater discharge to the extent allowable under federal, state, or local law, regulation, or ordinance. Expected result is an effective deterrent for students, faculty, and staff from willingly introducing non-stormwater discharges to the MS4.</td>
</tr>
<tr>
<td><strong>Implementation schedule:</strong> Implementation of the Standards of Conduct for employees and the Student Handbook for students will continue. The Public Education and Outreach Program will be implemented with the schedule described in BMP 1.2.</td>
</tr>
<tr>
<td><strong>Method to determine effectiveness:</strong> Effectiveness will be determined based on the elimination or reduction in the number of reported or observed non-stormwater discharges committed by students, faculty, or staff. Effectiveness will also be based on implementation of methods and procedures in the Standards of Conduct for employees and the Student Handbook for students in response to reports.</td>
</tr>
<tr>
<td>Violation #</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

Necessary documents for implementation are not provided in the annual report, but will be retained for a minimum of 3 years and are available upon request.

**Measure of Effectiveness**

Non-stormwater discharge violations committed by students, faculty, or staff

<table>
<thead>
<tr>
<th>Total number of violations for reporting year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>year 1</td>
<td>0</td>
</tr>
<tr>
<td>year 2</td>
<td>0</td>
</tr>
<tr>
<td>year 3</td>
<td>2</td>
</tr>
<tr>
<td>year 4</td>
<td>N/A</td>
</tr>
<tr>
<td>year 5</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Has the # of violations trended downward year to year or stayed at zero? [ ] Yes (BMP effective) [x] No (See below)

If ineffective, suggest BMP modifications with rationale: There were observed potential illicit discharges due to temporary sources from improper storage of a transmission. The BMP is effective due to citizen notification and proper immediate investigation and resolution from JTCC Staff. The truck driving school vendor is having their lease terminated for various reasons.

Were methods and procedures in the Standards of Conduct for employees and the Student Handbook for students used where violations were determined to have occurred? [ ] Yes [x] No (See below) [ ] N/A (No violations)

If no, explain why and if modifications are necessary to the BMP to improve effectiveness: Not necessary, items were corrected. See Appendix D.
**BMP 3.3 Develop Illicit Discharge Detection and Elimination Procedures (Section II B.3.c)**

**Description:** JTCC will develop and implement an Illicit Discharge Detection and Elimination (IDDE) Program Manual that includes written procedures to detect, identify, and address non-stormwater discharges, including illegal dumping, to the small MS4. Procedures will include written dry weather field screening methodologies that include field observations and field screening monitoring and that provide:

- A schedule of field screening activities to ensure all outfalls are screened annually;
- Methodologies to collect information such as time since the last rain, the quantity of the last rain, site descriptions (e.g., conveyance type and dominant watershed land uses), estimated discharge, and visual observations (e.g., order, color, clarity, floatables, deposits or stains, vegetation condition, structural condition, and biology);
- A time frame upon which to conduct an investigation to identify and locate the source of any observed continuous or intermittent non-stormwater discharges prioritized based on potential hazard to human health;
- Methodologies to determine the source of all illicit discharges shall be conducted with the required minimum investigations and timeframes per the college’s General Permit;
- Mechanisms to eliminate identified sources of illicit discharges including a description of the policies and procedures for when and how to use legal authorities;
- Methods for conducting a follow-up investigation in order to verify that the discharge has been eliminated; and
- A mechanism to track all investigations to document, at a minimum, the date(s) that the illicit discharge was observed and reported; the results of the investigation; any follow-up of the investigation; resolution of the investigation; and the date that the investigation was closed.

**Necessary documentation for implementation:** (1) Illicit Discharge Detection and Elimination (IDDE) Manual; (2) Outfall information table; (3) Outfall screening schedule and field forms.

**Responsible individual for implementation:** JTCC Facilities Director

**Objectives and expected results in meeting measurable goals:** The objective is to establish effective methods and procedures for detecting, identifying, and addressing non-stormwater discharges, including illegal dumping, into the storm sewer. Expected results are effective response to reports of illicit discharge and detection of non-stormwater discharge during outfall screenings.

**Implementation schedule:** Annual outfall screening, as described in JTCC’s IDDE Program Manual that includes the schedules, mechanisms, and procedures described in this BMP and the General Permit.

**Method to determine effectiveness:** Effectiveness will be determined based on the percentage of the reported and identified non-stormwater discharges that are eliminated.
**BMP 3.3 Annual Reporting Form**

<table>
<thead>
<tr>
<th>Outfall Screening Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total # of outfalls (refer to BMP 3.1):</td>
</tr>
<tr>
<td>Total # of outfalls screened during the reporting year:</td>
</tr>
</tbody>
</table>

If 100% of outfalls were not screened during the reporting year, explain why: **All outfalls were screened during this reporting year.**

See Appendix C for outfall inventory and required reporting information.

Necessary documents for implementation are not provided in the annual report, but will be retained on file for 3 years.

**Measure of Effectiveness**

| Percentage of identified non-stormwater discharges during screening that are eliminated: | 100 |

Please provide rationale that describes if the percentage listed indicates the BMP is effective. If not, describe modifications to increase effectiveness: **All non stormwater discharges were eliminated and therefore BMP is effective.**
BMP 3.4 Eliminate or minimize discharge of hazardous substances or oil (Section II B.3.d)

**Description:** JTCC will eliminate or minimize the potential for hazardous substance or oil in stormwater runoff through:

- The implementation of the methods, inspection schedules, and procedures in the JTCC Good Housekeeping & Pollution Prevention Manual described in BMP 6.1 and the Stormwater Pollution Prevention Plan described in BMP 6.2; and
- The expected measurable goals of the training component provided in BMP 6.4 for spill response, good housekeeping and pollution prevention for maintenance workers, and reporting illicit discharges.

**Necessary documentation for implementation:** (1) Good Housekeeping and Pollution Prevention Manual; (2) Training documentation; (3) Completed Comprehensive Campus Compliance Evaluation Forms provided in the Good Housekeeping and Pollution Prevention Manual

**Responsible individual for implementation:** JTCC Midlothian and Chester Campus Supervisors

**Objectives and expected results in meeting measurable goals:** The objective of the Good Housekeeping & Pollution Prevention Manual and associated training is to provide reference procedures, schedules, resource material and education to campus staff that result in daily operations that eliminate or prevent potential introduction of hazardous substances and oil to stormwater runoff. The expected result is the elimination of hazardous substances and oil spills and exposure.

**Implementation schedule:** The JTCC Good Housekeeping & Pollution Prevention Program Manual and incorporated training program are complete. Annual training will begin in the fall of 2015.

**Method to determine effectiveness:** Effectiveness will be determined by each of the following:

1) Effectiveness will be measured by recurring issues related to campus staff activities identified during the annual comprehensive campus compliance evaluation beginning in the spring of 2015, as described in BMP 6.2. The Comprehensive Campus Compliance Evaluation Form provided in the Good Housekeeping and Pollution Prevention Manual will be completed and include physical field inspection of:
   - Locations where hazardous chemicals or oil are used or stored;
   - Locations were equipment or vehicles are stored or where vehicle or equipment maintenance occurs; and
   - Other areas with potential for hazardous substances or oil to be exposed to precipitation.

2) The number of hazardous substances or oils related to illicit discharges reported or identified in the reporting forms for BMPs 3.2 and 3.3, respectively, that are found to originate from campus staff activities.
**BMP 3.4 Annual Reporting Form**

No additional reporting necessary.

Necessary documents for implementation are not provided in the annual report, but will be retained on file for 3 years.

<table>
<thead>
<tr>
<th>Measure of Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were any illicit discharges reported or identified in the reporting forms for BMPs 3.2 and 3.3 found to originate from staff activities?</td>
</tr>
<tr>
<td>If yes, describe how the BMP can be modified to improve effectiveness to specifically address the cause of the illicit discharge(s) or describe why modification is not necessary:</td>
</tr>
</tbody>
</table>
**BMP 3.5 Facilitate public reporting of illicit discharges and provide response (Section II B.3.e)**

**Description:** JTCC will promote, publicize, and facilitate public reporting of illicit discharges into or from MS4s with information describing an illicit discharge and contact information on the JTCC stormwater website. JTCC will investigate all reports using methods and procedures described in the JTCC IDDE Manual described in BMP 3.3. Tracking of reports will be recorded in the IDDE Tracking Form in Appendix D of the JTCC IDDE Program Manual.

**Necessary documentation for implementation:** (1) Web address of posted material; (2) Completed IDDE Tracking Form for each incident.

**Responsible individual for implementation:** JTCC Facilities Director

**Objectives and expected results in meeting measurable goals:** The objective is to first educate the public to recognize an illicit discharge and provide contact information that allows for the reporting of an observed illicit discharge. The ultimate objective is to track and eliminate reported illicit discharges.

**Implementation schedule:** Illicit discharge material and contact information will be placed on the website by July 1, 2015. Response to illicit discharge reports will be on-going, occurring in response to reports per the IDDE Manual.

**Method to determine effectiveness:** Effectiveness will be measured percentage of illicit discharge reports closed (as will be documented in the IDDE Tracking Forms).
### BMP 3.5 Annual Reporting Form

#### Illicit Discharge Reports

<table>
<thead>
<tr>
<th>Description of Reported Potential Illicit Discharge</th>
<th>Date observed and/or reported</th>
<th>Description of how the investigation was resolved/follow up</th>
<th>Resolution of the investigation</th>
<th>Close date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction vehicle related to Phase III project on campus dripped small amounts of diesel fuel on paved surface.</td>
<td>11/02/2015</td>
<td>Source was found and covered. Absorbent material was placed on oil and swept up. Closest DI was blocked with absorbent tube. No indication of discharge at outfall.</td>
<td>Source covered and spill cleaned up. No indication of discharge at outfall.</td>
<td>11/02/2015</td>
</tr>
<tr>
<td>Notified of oil/fuel leaking from truck.</td>
<td>11/10/2015</td>
<td>Unable to identify illicit discharge. Checked for source and pollutant in dry and wet weather. No indications of discharge at outfall.</td>
<td>Pollutant and sources were not identified after multiple investigations. No indication of discharge at outfall.</td>
<td>11/11/2015</td>
</tr>
<tr>
<td>Transmission fuel on pavement in truck driving area of Chester Campus.</td>
<td>11/30/2015</td>
<td>Source was found and covered. Absorbent material was placed on oil and swept up. Closest DI was blocked with absorbent tube. No indications of discharge at outfall.</td>
<td>Source covered and spill cleaned up. No indication of discharge at outfall.</td>
<td>11/30/2015</td>
</tr>
</tbody>
</table>

Necessary documents for implementation are not provided in the annual report, but will be retained on file for 3 years.

### Measure of Effectiveness

| Percentage of reported illicit discharge instances that have been closed: 100% |

If not all reports have been closed, please provide the reason and any necessary modification to the BMP: All reports have been closed. See Appendix D.
### BMP 4.1 ESC compliance for land disturbance activities (Section II B.4.a-c3, c5 c6, e1-6)

#### Description:
Regulated land disturbance activity on the JTCC campus is managed by the latest edition of DEQ approved Virginia Community College System’s (VCCS) “Annual Standards and Specifications (AS&S) for Erosion and Sediment Control and Stormwater Management.” Regulated land disturbance activities are those that disturb greater than 2,500 square feet except for the exceptions listed in the definition for “land disturbance activity” provided in the Definitions section of this document. The VCCS Annual Standards and Specifications provide for the following:

- Erosion and Sediment (ESC) plan approval by VCCS through recommendation of a VCCS contracted consultant. An approved plan is required prior to commencement of a regulated land disturbance activity and shall be compliant with the minimum standards listed in 9VAC25-840-40 of the Erosion and Sediment Control Regulations and the approved Annual Standards and Specifications.
- ESC inspection of land disturbance activities for compliance to the ESC Plan at least once every two weeks, within 48 hours of a runoff-producing event; and at project completion. Inspections shall be conducted by an individual with a current ESC Inspector’s Certification from DEQ.
- A description of circumstances that allow the VCCS Annual Standards and Specifications Project Manager (VCCS AS&S Project Manager) to make changes to an approved plan when found inadequate to address ESC.

#### Necessary documentation for implementation:
1. VCCS Annual Standards and Specifications for Erosion and Sediment Control
2. ESC Plan(s) approved by VCCS
3. Documentation of ESC Inspector Certification
4. Completed ESC Inspection Forms for each regulated project
5. Notice to Comply and/or Stop Work Orders documentation and documentation of follow-up actions

#### Responsible individual for implementation:
VCCS AS&S Project Manager (ESC Plan approval and inspections); JTCC Facilities Director (Coordination with VCCS and obtaining information to determine effectiveness as described in this BMP).

#### Objectives and expected results in meeting measurable goals:
The objective is to ensure ESC plans are prepared according to ESC Laws and Regulations, that ESC inspections are performed as specified in the regulations, and that correction or enforcement, when appropriate, occurs when inspections find deficiencies. The expected result is that all regulated land disturbance has an approved ESC plan, the appropriate number of inspections are performed, and a minimization of the number of recurring violations such as issued Notices to Comply and Stop Work Orders.

#### Implementation schedule:
The implementation of this BMP will be on-going with all regulated land disturbance activities on campus that disturb greater than 2,500 square feet.

#### Method to determine effectiveness:
Effectiveness will be measured by the percentage of regulated land disturbance activities that have an approved ESC Plan, and the implementation of the required inspection schedule.
### BMP 4.1 Annual Reporting Form

**Annual Land Disturbance Activity Record**

<table>
<thead>
<tr>
<th>Regulated Land Disturbance Activity Description</th>
<th>Approved plan (yes/no)</th>
<th>Total disturbed acreage</th>
<th>Number of inspections</th>
<th># and type of enforcement actions taken</th>
<th>Description of enforcement Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity #1 - Parking Garage and roadway at Midlothian Campus</td>
<td>Yes/No</td>
<td>10.2</td>
<td>13</td>
<td>0</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>Yes/No</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>Yes/No</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Necessary documents for implementation are not provided in the annual report, but will be retained for a minimum of 3 years and are available upon request.

**Measure of Effectiveness**

Do inspections appear to have been conducted every 2 weeks and within 48 hours of a runoff producing event?

- Yes (BMP effective)
- No (See below)
- N/A (No activities)

Describe program modifications to ensure inspections are conducted as required: A JTCC/VCCS project inspector certified in E&SC was on-site daily throughout project with responsibilities of oversight of site conditions, along with another certified E&SC consultant contracted for E&SC inspections. Inspections and feedback occurred more often than every two week and within 48 hours of rain. However, documentation was not completed for all inspections. JTCC/VCCS standards and specification put in to place in 2016 will improve upon this gap in documentation.
BMP 4.2 Receive and respond to complaints regarding land disturbing activity (Section II B.4.c4)

Description: JTCC will promote to the public through the stormwater webpage information on land disturbance erosion and sediment controls and provide a contact number for reporting complaints regarding regulated land disturbing activities. JTCC will initiate investigation of all reports within 72-hours and address the issue with the construction site operator by requiring maintenance to ESC controls, or plan modifications, as necessary, in accordance with the Virginia Community College System’s “Annual Standards and Specifications for Erosion and Sediment Control.”

Necessary documentation for implementation: (1) Web address of posted material; (2) Land disturbance complaint/report tracking record with date, description, and resolution for each complaint.

Responsible individual for implementation: JTCC Midlothian and Chester Campus Supervisors (Receiving and recording complaint); Certified ESC Construction Inspector (Assuring contractor implements ESC Plan); VCCS Annual Standards and Specifications Administrator (Approves ESC Plan modifications)

Objectives and expected results in meeting measurable goals: The objective is to educate the public to understand the purpose of ESC controls on a land disturbance activity, recognize the off-site impacts resulting from potential failure of ESC controls, and provide contact information that allows for the reporting of an off-site impact and ultimately the resolution of a reported issue.

Implementation schedule: Information regarding ESC controls for land disturbance activities and for reporting complaints will be placed on the website by July 1, 2015.

Method to determine effectiveness: Effectiveness will be measured by the percentage of resolved complaints that are reported by the public.
<table>
<thead>
<tr>
<th>Complaint #</th>
<th>Date of complaint</th>
<th>Description of complaint</th>
<th>Resolution of the investigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11/02/2015</td>
<td>Construction vehicle related to Phase III project on campus dripped small amounts of diesel fuel on paved surface. Source was found and covered. Absorbent material was placed on oil and swept up. Closest DI was blocked with absorbent tube. No indication of discharge at outfall.</td>
<td>Source covered and spill cleaned up. No indication of discharge at outfall.</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Necessary documents for implementation are not provided in the annual report, but will be retained on file for 3 years.

### Measure of Effectiveness

<table>
<thead>
<tr>
<th>Were all complaints resolved?</th>
<th>☑ Yes (BMP effective)</th>
<th>□ No (See below)</th>
<th>□ N/A (no complaints)</th>
</tr>
</thead>
</table>

Describe the reason for any unresolved complaint and any necessary program modifications to ensure complaints are resolved in the future. If no modifications are needed, provide rationale: N/A
**BMP 4.3 Ensure land disturbance activities secure VSMP General Permit (Section II B.4.c.7, d)**

**Description:** Regulated land disturbance activity for stormwater management on the JTCC campus is managed by the latest edition of DEQ approved Virginia Community College System’s “Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management.” Regulated land disturbance activities are those that disturb greater than 2,500 square feet except for the exceptions listed in the definition for “land disturbance activity” provided in the Definitions section of this document. In addition to the above, and in absence of a VAR10, the Virginia Construction and Professional Services Manual (CPSM) The Annual Standards and Specifications require a Stormwater Pollution Prevention Plan (SWPPP) be developed and submission for the VSMP General Permit Registration Statement – Construction Activity Stormwater Discharge (VAR10) prior to land disturbance. Through the development of the SWPPP, consistent with the VSMP General Permit, a pollution prevention plan will ensure implementation of appropriate controls to prevent non-stormwater discharges such as wastewater, concrete washout, fuels and oils, and other illicit discharges.

**Necessary documentation for implementation:** (1) VCCS Annual Standards and Specifications (Plan approval, VAR10 verification and SWPPP verification at the preconstruction meeting through VCCS Form LD-03); (2) Project-specific SWPPPs; (3) Project-specific General Permits for Construction Activity (VAR10).

**Responsible individual for implementation:** VCCS AS&S Project Manager; JTCC Facilities Director (Tracking required information for reporting)

**Objectives and expected results in meeting measurable goals:** The objectives are: (1) To provide a mechanism for assuring that VSMP General Permit coverage is obtained for all land disturbances exceeding 1-acre. The expected result is that coverage is obtained for all applicable land disturbances prior to commencement; (2) Ensure development and implementation of SWPPPs through the contractor’s requirement to develop and implement the plan.

**Implementation schedule:** All regulated land disturbance activities that disturb greater than 1-acre will continue to obtain a VAR10 General Permit.

**Method to determine effectiveness:** Effectiveness will be determined based on: (1) all regulated land disturbance activity operating under VSMP General Permit coverage and a SWPPP, (2) the number of violations related to pollution prevention from a construction site identified in the reporting for BMP 3.2, 3.3, 3.5, and 4.2.
**BMP 4.3 Annual Reporting Form**

<table>
<thead>
<tr>
<th>Regulated Land Disturbance Activity Description (should match 4.1 reporting column)</th>
<th>If greater than 1-acre, was VSMP General Permit coverage obtained? (yes/no)</th>
<th>If permit coverage is required, is a site-specific SWPPP available on site for the project? (yes/no)</th>
<th>Any illicit discharge reports from construction activities (see reporting for BMPs 3.2, 3.3, 3.5, and 4.2? (yes/no)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity #1 - Parking Garage and roadway at Midlothian Campus</td>
<td>☑ Yes ☐ No</td>
<td>☑ Yes ☐ No</td>
<td>☑ Yes ☐ No</td>
</tr>
<tr>
<td>N/A</td>
<td>☐ Yes ☑ No</td>
<td>☐ Yes ☑ No</td>
<td>☑ Yes ☐ No</td>
</tr>
<tr>
<td>N/A</td>
<td>☐ Yes ☑ No</td>
<td>☐ Yes ☑ No</td>
<td>☑ Yes ☐ No</td>
</tr>
</tbody>
</table>

Necessary documents for implementation are not provided in the annual report, but will be retained on file for 3 years.

**Measure of Effectiveness**

If no is answered in columns 2 or 3 above, explain why and actions taken to address the issue. Include rationale that describes if they BMP is ineffective, and if so, modification to the BMP to improve effectiveness: N/A

<table>
<thead>
<tr>
<th>Is yes answered in column 4? (yes/no)</th>
<th>☑ Yes (See below)</th>
<th>☐ No (Effective BMP)</th>
<th>☐ N/A (No activity)</th>
</tr>
</thead>
</table>

If yes, described the instance(s) and provide rationale if BMP modification is necessary, or not necessary, to improve the effectiveness of the BMP? Although reported as an illicit discharge, there was no indication of a discharge at the outfall. This was an isolated incident which was corrected. See Appendix D.
BMP 5.1 Compliance to post-construction stormwater management regulation (Section II B.5.a, b. d.1,2)

**Description:** JTCC will ensure post-construction stormwater management (SWM) for all regulated land disturbance activities over 2,500 square feet through VCCS plan approval in accordance with the VCCS Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management or JTCC Post Construction Stormwater Management Manual. Approval from VCCS will ensure the SWM plan has been prepared per the VSMP Regulations that, in part, require that stormwater runoff controls:

- are designed and installed in accordance with the appropriate water quality and water quantity design criteria as required in Part II (9VAC25-870-40 et seq.) of 9VAC25-870; and
- Have an inspection and maintenance plan.

Implementation of this BMP will be accomplished through the verification of a VCCS approved stormwater management plan by the Associate Vice Chancellor prior to providing written approval that allows the start of the land disturbance.

JTCC will extract and retain a copy of SWM facility inspection and maintenance plans from the approved stormwater management plan for proposed stormwater management facilities to be used with the implementation of BMP 5.3.

**Necessary documentation for implementation:** (1) VCCS approved SWM Plans and Calculations; (2) SWM Facility Inspection and Maintenance Plans.

**Responsible individual for implementation:** VCCS AS&S Project Manager (verification of approved plan prior to approval to start land disturbance); JTCC Facilities Director (Tracking required information for reporting and obtaining inspection and maintenance plans for stormwater facilities)

**Objectives and expected results in meeting measurable goals:** The objective is to ensure regulated projects are in compliance with the VSMP Stormwater Management Regulations. The expected goal is that all regulated projects have VCCS approved SWM Plans with SWM facility inspection and maintenance plans.

**Implementation schedule:** The implementation of this BMP will be on-going with all regulated land disturbance activities.

**Method to determine effectiveness:** Effectiveness will be measured by: (1) all regulated land disturbance activities having a VCCS approved SWM Plan; and (2) all stormwater management facilities with inspection and maintenance plans.
## BMP 5.1 Annual Reporting Form

The # of regulated land disturbance activities during the reporting year: 1

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulated Land Disturbance Activity Description (Same as BMP 4.1)</td>
<td>If greater than 2,500 square feet, does it have an approved SWM plan? (yes/no)</td>
<td>If SWM Plan includes a SWM facility, does it have an inspection and maintenance plan? (yes/no/no facility required)</td>
<td>If has an inspection and maintenance plan, has JTCC retained it on file? (yes/no/no facility)</td>
</tr>
<tr>
<td>Activity #1 - Parking Garage and roadway at Midlothian Campus</td>
<td>☑ Yes ☐ No</td>
<td>☑ Yes ☐ No ☐ No Facility</td>
<td>☑ Yes ☐ No ☐ No Facility</td>
</tr>
<tr>
<td>N/A</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No ☐ No Facility</td>
<td>☐ Yes ☐ No ☐ No Facility</td>
</tr>
<tr>
<td>N/A</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No ☐ No Facility</td>
<td>☐ Yes ☐ No ☐ No Facility</td>
</tr>
</tbody>
</table>

Necessary documents for implementation are not provided in the annual report, but will be retained on file for 3 years.

### Measure of Effectiveness

Was yes answered for all activities in Column 2 above? ☑ Yes (BMP effective), ☐ No (See below), ☑ N/A (No activity)

Describe the reason that an activity does not have an approved SWM plan and any necessary program modifications to the BMP to ensure an approved plan is obtained. If no modifications are needed, provide rationale: N/A

Was yes answered for all activities in Column 3 above? ☑ Yes (BMP effective), ☐ No (See below), ☑ N/A (No activity)

Describe the reason that an activity does not have an approved inspection and maintenance plan and any necessary program modifications to the BMP to ensure a plan is obtained. If no modifications are needed, provide rationale: N/A
BMP 5.2 Stormwater management facility tracking and reporting (Section II B.5.e)

Description: JTCC will maintain an updated electronic database in Excel format of all known stormwater management (SWM) facilities that discharge into the MS4. The database will include:

- The SWM facility ID #;
- The stormwater management facility type;
- A general description of the facility's location, including the address or latitude and longitude;
- The acres treated by the facility, including total acres, as well as the breakdown of pervious and impervious acres;
- The date the facility was brought online (MMYYYY);
- The sixth order hydrologic unit code (HUC) in which the stormwater management facility is located;
- The name of any impaired water segments within each HUC listed on the 2010 § 305(b)/303(d) Water Quality Assessment Integrate Report to which the stormwater management facility discharges;
- Whether the stormwater management facility is operator-owned or privately-owned;
- The date of the last inspection.

Upon final inspection of a newly constructed stormwater management facility, the facility will be included within the database.

Necessary documentation for implementation: (1) Updated SWM Tracking and Reporting Excel database; (2) Completed inspection checklist forms (see BMP 5.2)

Responsible individual for implementation: JTCC Facilities Director

Objectives and expected results in meeting measurable goals: The objective is to maintain an updated record of all of the SWM facilities. The expected result is that the list will be utilized to assist with implementation of BMP 5.3 and will be maintained as new SWM facilities come online.

Implementation schedule: The implementation of this BMP will be on-going.

Method to determine effectiveness: Effectiveness will be measured by the completeness of the annually reported database.
### BMP 5.2 Annual Reporting Form

**Stormwater Management Facility Tracking and Reporting***

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>N/A (No new facilities)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did any new SWM facilities come on-line during the reporting year?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(yes/no)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If yes, was the electronic database updated? (yes/no)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If no, explain why the database was not updated: <strong>N/A</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Provided as electronic database with annual report in Excel format as described in Appendix E.

### Measure of Effectiveness

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes (BMP effective)</th>
<th>No (See below)</th>
<th>N/A (No facilities)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the database complete to include all of the attributes for each new</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SWM facility described above in this BMP?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Describe the reason that the database is incomplete and provide rationale that determines whether or not the BMP needs to be modified to ensure completion of the database: <strong>N/A</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**BMP 5.3 Inspection, operation, and maintenance verification of SWM facilities**  
*(Section II B.5.c, d.3, 5)*

**Description:** JTCC will perform long-term operations and maintenance of all stormwater facilities on campus utilizing the inspection and maintenance plans obtained from implementation of BMP 5.1. Where inspection and maintenance plans are not available from approved SWM plans, JTCC will utilize BMP-specific inspection and maintenance instruction from the BMP Clearinghouse. Inspections will be performed either:
- As dictated on the schedule provided on the inspection and maintenance plans; or
- A minimum of once annually, whichever are the more frequent criteria.

Inspections will be performed using the best management practice (BMP) inspection and maintenance checklist, corresponding with the type of BMP, as provided in the latest edition of the Virginia Stormwater Management Handbook (Handbook) or the JTCC Post-Construction Stormwater Management Manual. The checklists provide lists of potential issues and methods to address the issue. Necessary maintenance identified during inspections will be conducted in a timely manner as indicated on the checklist or no later than the next scheduled inspection.

**Necessary documentation for implementation:** (1) BMP Database described in BMP 5.2; (2) BMP-specific Inspection and Maintenance Plan; (3) Completed BMP Specific inspection and maintenance checklist from the Virginia Stormwater Management Handbook or the JTCC Post-Construction Stormwater Management Manual.

**Responsible individual for implementation:** JTCC Facilities Director

**Objectives and expected results in meeting measurable goals:** The objective is to ensure the intended function of all SWM facilities through long-term maintenance. The expected result is completed inspection forms in accordance with the schedule described in the description above.

**Implementation schedule:** The implementation of this BMP will be on-going, with inspections performed as specified for each BMP in the BMP database.

**Method to determine effectiveness:** Effectiveness will be measured by: (1) Completion of required inspections, as scheduled, and (2) timely maintenance once a maintenance issue is identified during inspections.
**BMP 5.3 Annual Reporting Form**

<table>
<thead>
<tr>
<th>Stormwater Management Facility Inspection Record*</th>
</tr>
</thead>
<tbody>
<tr>
<td>The following information is provided in SWM Facility database described in BMP 5.2:</td>
</tr>
<tr>
<td>• SWM Facility ID</td>
</tr>
<tr>
<td>• Inspection Schedule (e.g. monthly, quarterly, annually)</td>
</tr>
<tr>
<td>• Dates of inspection(s) for the reporting year</td>
</tr>
<tr>
<td>• If inspected, any identified necessary maintenance per inspection form</td>
</tr>
<tr>
<td>• If maintenance is necessary, type and date the maintenance was performed</td>
</tr>
</tbody>
</table>

* Provided as electronic database with annual report in Excel format as described in Appendix E.

**Measure of Effectiveness**

<table>
<thead>
<tr>
<th>Do dates in the database indicate that inspections were performed as required for each BMP for the reporting year?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (BMP effective)</td>
</tr>
</tbody>
</table>

Describe the reason for inspections that were not performed and provide rationale that determines whether or not the BMP needs to be modified to ensure completion of inspections: JTCC has developed a Post-Construction SWM Program Manual. In accordance with the Manual, inspections were conducted for all stormwater management facilities during the reporting year.

<table>
<thead>
<tr>
<th>Do dates in the database indicate that maintenance was performed, where necessary, in a timely manner?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (BMP effective)</td>
</tr>
</tbody>
</table>

Describe the reason for that maintenance was not performed in a timely manner (e.g. minor repair needed that does not affect function of the facility) and provide rationale that determines whether or not the BMP needs to be modified to ensure completion of inspections: BMP maintenance will be performed in the future where indicated on inspection reports.
BMP 6.1 Pollution Prevention Procedures for Operations & Maintenance Activities (Section II B.6.a)

Description: JTCC will develop and implement comprehensive written procedures for good housekeeping and pollution prevention for daily operations and equipment maintenance within the JTCC Good Housekeeping and Pollution Prevention Program Manual. At a minimum the written procedures will include procedures that include the following goals:

- Prevent illicit discharges;
- Ensure the proper disposal of waste materials, including landscape waste;
- Prevent discharge of vehicle wash water to the storm sewer;
- Prevent the discharge of wastewater to the storm sewer;
- Require best management practices to filter water pumped from maintenance activities;
- Require best management practices to prevent pollutants in runoff from stored and stockpiled materials (e.g., soil stockpiles and salt storage);
- Prevent pollution discharges from leaking college automobiles and equipment;
- Ensure application of materials, such as pesticides, is conducted in accordance with manufacturer’s specifications.

Effective implementation will be supported with a campus-specific Stormwater Pollution Prevention Plan (SWPPP) as described in BMP 6.2, evaluated with a campus compliance evaluation as described for the measure of effectiveness for BMP 3.4, and the Pollution Prevention training described in BMP 6.3.

Necessary documentation for implementation: (1) JTCC Good Housekeeping/Pollution Prevention Program Manual; (2) Campus-specific SWPPP; (3) Training documentation; (4) Completed Comprehensive Campus Evaluation form. All documentation is incorporated into the JTCC Good Housekeeping/Pollution Prevention Program Manual.

Responsible individual for implementation: JTCC Facilities Director

Objectives and expected results in meeting measurable goals: The objective is to minimize or prevent pollutant discharges from campus operations and maintenance activities. The expected result is campus staff adherence to the JTCC Good Housekeeping/Pollution Prevention Manual during daily activities.

Implementation schedule: The Good Housekeeping/Pollution Prevention Manual is complete. Training will be provided biennially, with the initial training performed by J, 2015. Campus evaluations will be performed with the schedule described in BMP 6.2.

Method to determine effectiveness: Effectiveness will be measured by the results of the annual comprehensive campus compliance evaluation that will begin in the spring of 2015, as described in BMP 6.2. Measure of effectiveness for this BMP will be the same as described for BMP 3.4.
### BMP 6.1 Annual Reporting Form

<table>
<thead>
<tr>
<th>Good Housekeeping/Pollution Prevention Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has a Good Housekeeping/Pollution Prevention Manual been developed? (yes/no)</td>
</tr>
<tr>
<td>If no, explain why: N/A</td>
</tr>
</tbody>
</table>

Necessary documents for implementation are not provided in the annual report, but will be retained on file for 3 years.

### Measure of Effectiveness

See measure of effectiveness for BMP 3.4
**BMP 6.2 Campus Stormwater Pollution Prevention Plan (Section II B.6.b)**

**Description:** JTCC will develop and implement a campus-specific Stormwater Pollution Prevention Plan (SWPPP) that identifies areas on campus having a potential for the discharge of chemicals and other materials in stormwater. The SWPPP will include:

- Mapping that identifies all outfalls, direction of flows, existing source controls, and receiving water bodies;
- A discussion and checklist of potential pollutants and pollutant sources;
- A discussion of all potential non-stormwater discharges;
- Written procedures, or reference to written procedures, designed to reduce and prevent pollutant discharge;
- A description of the applicable training described in BMP 6.3;
- Procedures to conduct an annual comprehensive campus compliance evaluation; and
- An inspection and maintenance schedule for site specific source controls. The date of each inspection and associated findings and follow-up shall be logged in each SWPPP.

The SWPPP will provide instruction for updates, as necessary, to reflect changes on campus, modifications to operations and maintenance procedures, or shortcomings resulting in a reportable spill. Inspection forms will be completed in accordance with the prescribed schedule within the SWPPP and maintained on file with the Facilities Director.

**Necessary documentation for implementation:** (1) JTCC Good Housekeeping/Pollution Prevention Manual; (2) Campus Specific SWPPP; (3) Completed annual comprehensive site compliance evaluation forms. All documentation is incorporated into the JTCC Good Housekeeping/Pollution Prevention Program Manual.

**Responsible individual for implementation:** JTCC Facilities Director

**Objectives and expected results in meeting measurable goals:** The objective and expected result is to minimize or prevent pollutant discharges from campus facilities through adherence to the campus specific SWPPP.

**Implementation schedule:** JTCC has incorporated areas of each campus with potential for the discharge of chemicals and other materials into stormwater in a campus-wide SWPPP. The annual comprehensive campus compliance evaluation will be completed in the spring of each year beginning in 2015.

**Method to determine effectiveness:** Effectiveness will be measured by: the results of the annual comprehensive campus compliance evaluation. Measure of effectiveness for this BMP will be the same as described for BMP 3.4.
**BMP 6.2 Annual Reporting Form**

<table>
<thead>
<tr>
<th>Stormwater Pollution Prevention Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did any changes on campus that could potentially affect stormwater runoff occur during the reporting year (e.g. new outfalls, facilities)? (yes/no)</td>
</tr>
<tr>
<td>If yes, are the changes reflected in the SWPPP? (yes/no)</td>
</tr>
<tr>
<td>If the changes were not reflected, explain why:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measure of Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results from Comprehensive Campus Evaluation (see BMP 6.2)</td>
</tr>
<tr>
<td>Total number of recurring items originating from campus activities identified Spring 2016*:</td>
</tr>
<tr>
<td>Total number of recurring items originating from campus activities identified Spring 2017:</td>
</tr>
<tr>
<td>Total number of recurring items originating from campus activities identified Spring 2018:</td>
</tr>
<tr>
<td>Has the # of recurring items trended downward or remained at zero from year to year?</td>
</tr>
<tr>
<td>No (See below)</td>
</tr>
<tr>
<td>N/A (Comparison in 2016-2017 year.)</td>
</tr>
<tr>
<td>If no, discuss the specific recurring items and describe how the BMP can be modified to improve effectiveness to specifically address recurring items (e.g. improved training, improved inspection form) or describe why modification is not necessary:</td>
</tr>
<tr>
<td>Were any illicit discharges reported or identified in the reporting forms for BMPs 3.2 and 3.3 found to originate from campus staff activities?</td>
</tr>
<tr>
<td>No (BMP effective)</td>
</tr>
<tr>
<td>If yes, describe how the BMP can be modified to improve effectiveness to specifically address the cause of the illicit discharge(s) or describe why modification is not necessary:</td>
</tr>
</tbody>
</table>

* Note that measure of effectiveness begins in 2016 since recurring items would not be available in 2015 with the first inspection.
**BMP 6.3a Employee Good Housekeeping/Pollution Prevention Training Plan (Section II B.6.d)**

**Description:** JTCC will incorporate a written training plan into its Good Housekeeping/Pollution Prevention and IDDE Program Manuals, including a schedule of training events. The Program Manuals will serve as the training material and include Appendices to document training and list relevant staff for the following specific training:

- Annual training to relevant field personnel in the recognition and reporting of illicit discharges. Training will utilize the IDDE Manual described in BMP 3.3.
- Annual training to relevant employees in good housekeeping and pollution prevention practices that are to be employed during road and parking lot maintenance and around maintenance and operations facilities. Training will utilize the JTCC Good Housekeeping/Pollution Prevention Manual described in BMP 6.1.

The plan will also require the following:

- Training or certification in spill response for emergency response employees.
- Training or certification for applying pesticides and herbicides in accordance with the Virginian Pesticide Control Act (§ 3.1-249.27 et seq. of the Code of Virginia) for employees performing applications.

Training required by the General Permit that is not applicable to JTCC includes the following:

- Training to employees in and around recreational facilities.
- Certifications as required under the Virginia Erosion & Sediment Control Law (See BMPs 4.1 and 4.3)

**Necessary documentation for implementation:** (1) Training documentation or appropriate certifications for employees; (2) JTCC IDDE Manual; (3) JTCC Good Housekeeping/Pollution Prevention Program Manual.

**Responsible individual for implementation:** JTCC Midlothian and Chester Campus Supervisors

**Objectives and expected results in meeting measurable goals:** The objective is to ensure effective training on the procedures provided in the Good Housekeeping/Pollution Prevention and IDDE Program Manuals and to have them carried out during employee daily operations. The expected result is well trained employees that minimize pollutant discharges through good housekeeping practices and IDDE screening and source identification and elimination.

**Implementation schedule:** The written training plan is complete and incorporated in the JTCC Good Housekeeping/Pollution Prevention and IDDE Program Manuals. Training and certification requirements will occur prior to July 1, 2015, with illicit discharge and good housekeeping training occurring once every two years thereafter.

**Method to determine effectiveness:** Effectiveness will be measured by the results of a “Knowledge Check” quiz that will be taken by each employee that takes the training. The “Knowledge Check” quiz in provided in the Appendix of the Program Manuals.
## BMP 6.3a Annual Reporting Form

### Training Plan

<table>
<thead>
<tr>
<th>Has the JTCC annual written Training Plan been developed? (yes/no)</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

### Training & Certifications

<table>
<thead>
<tr>
<th>Has employee training been provided? (yes/no)</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>If no, explain:</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date of latest training to relevant field personnel in the recognition and reporting of illicit discharges:</th>
<th>6/22 and 6/23/2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees that participated in the latest training in the recognition and reporting of illicit discharges:</td>
<td>23</td>
</tr>
<tr>
<td>Date of last training to relevant employees in good housekeeping and pollution prevention practices:</td>
<td>6/22 and 6/23/2016</td>
</tr>
<tr>
<td>Number of employees that participated in the latest training in good housekeeping and pollution prevention practices:</td>
<td>23</td>
</tr>
<tr>
<td>Do the number of individuals reported above that participated in training represent all employees that conduct daily activities that could potentially affect stormwater runoff? (yes/no)</td>
<td>Yes</td>
</tr>
<tr>
<td>If no, explain:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Did any employees apply pesticides and herbicides? (yes/no)</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>If yes, identify the employee and their certification:</td>
<td>Shannon Alley -106802-T, David Pecht -116263-T And Jamie Albright- 131593-G</td>
<td></td>
</tr>
</tbody>
</table>

Provide a summary of the training or certification program provided to emergency response employees that includes training in spill response: Annual training is incorporated into the Good Housekeeping and Pollution Prevention Program manuals.

Necessary documents for implementation are not provided in the annual report, but will be retained on file for 3 years.

### Measure of Effectiveness

<table>
<thead>
<tr>
<th>Did scores from the “Knowledge Check” quiz improve from the previous training? (yes/no)</th>
<th>Yes (BMP effective)</th>
<th>No (See below)</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>If no, describe modifications to the BMP to increase effectiveness (e.g. training frequency, training material, etc.): Average knowledge score went down 1 point; However, the average score is in the upper 80's which shows that information is being conveyed. JTCC will look into reasons why the score went down (i.e. staff turnover, etc).</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
BMP 6.3b Contractor Certification for Pollution Prevention (Section II B.6.d.4)

Description: JTCC will require, through contract language, the certification for contractors applying pesticides and herbicides in accordance with the Virginia Pesticide Control Act (§ 3.1-249.27 et seq. of the Code of Virginia). Contract language will require contractors to provide proof of the appropriate certification prior to contract execution.

 Necessary documentation for implementation: (1) Contract language; (2) Proof of certifications.

 Responsible individual for implementation: JTCC Midlothian and Chester Campus Supervisors

Objectives and expected results in meeting measurable goals: The objectives are to ensure the proper application of pesticides and herbicides. The expected result is that contractors used by the college will have appropriate certifications for application of pesticides and herbicides.

 Implementation schedule: JTCC will develop and begin implementation of contract language by July 1, 2016.

 Method to determine effectiveness: Effectiveness will be measured by evaluation of trends in confirmed reports of illicit discharge related to herbicides and pesticides.

BMP 6.3b Annual Reporting

<table>
<thead>
<tr>
<th>Pesticides and Herbicides</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of contracts executed during the reporting year that includes application of pesticides and herbicides?</td>
</tr>
<tr>
<td>Was proof of certification provided for each contract that includes the application of pesticides and herbicides? (yes/no)</td>
</tr>
<tr>
<td>If no, explain: N/A</td>
</tr>
</tbody>
</table>

Necessary documents for implementation are not provided in the annual report, but will be retained on file for 3 years.

Measure of Effectiveness

| Were any illicit discharges related to herbicides and pesticides application by contractors reported or identified in the reporting forms for BMPs 3.2 and 3.3? | ☐ Yes (See below) ☒ No (BMP effective) |

If no, describe how the BMP can be modified to improve effectiveness to specifically address the cause of the illicit discharge(s) or describe why modification is not necessary: N/A
BMP 6.4 Turf and Landscape Management  (Section II B.6.c)

Description:  JTCC is regulated under §10.1-104.4 of the Code of Virginia and therefore will continue to implement DEQ approved and campus-specific Nutrient Management Plan (NMP) prepared by a Certified Nutrient Management Planner. Fertilizer application records will be maintained with each application using the application record provided in the NMP.

In addition, JTCC will not apply any deicing agent containing urea or other forms of nitrogen or phosphorus to parking lots, roadways, and sidewalks, or other paved surfaces.

Necessary documentation for implementation:  (1) JTCC Nutrient Management Plan; (2) Completed Fertilizer Application Record; (3) Ingredients of deicers used on campus.

Responsible individual for implementation:  JTCC Facilities Director

Objectives and expected results in meeting measurable goals:  The objective is to avoid excessive application of nutrients where applied on campus. The expected results are reduction of downstream impacts from nutrient loads.

Implementation schedule:  The NMP will continue to be implemented.

Method to determine effectiveness:  Effectiveness will be measured by the implementation of the NMP through completion of the application record and periodic updates to the NMP to make necessary adjustments based on soil conditions.

---

BMP 6.4 Annual Reporting Form

<table>
<thead>
<tr>
<th>Nutrient Management Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were nutrients used during the reporting year?</td>
</tr>
<tr>
<td>Total acreage of lands where nutrient management plans are required:</td>
</tr>
<tr>
<td>Acreage of lands upon which nutrient management plans have been implemented:</td>
</tr>
<tr>
<td>Date of last NMP update:</td>
</tr>
</tbody>
</table>

Necessary documents for implementation are not provided in the annual report, but will be retained on file for 3 years.

Measure of Effectiveness

| Why the NMP’s fertilizer application record maintained and in adherence to the NMP? (yes/no) | ☒ Yes (BMP effective) |
| If no, describe how the BMP can be modified to improve effectiveness. Provide rationalization for modification or if modification is deemed unnecessary: | N/A | ☐ No (See below) |
**BMP 6.5 Contractor Safeguards to Ensure Program Consistent Measures and Procedures (Section II B.6.e)**

**Description:** JTCC will use contract language that references sections within the JTCC Good Housekeeping and Pollution Prevention Manual to require campus contractors to use appropriate control measures and procedures for stormwater discharges, when applicable. Oversight will be provided through periodic inspections using a contractor inspection form provided in the Manual. Contract language will require contractors to address items identified during inspections within a time period appropriate to prevent the potential of non-stormwater discharges. The contract language will also allow the college to stop-work, address the problem, and recoup cost for the remedy from the contractor.

Contract language described in this BMP is not intended for regulated land disturbance activity addressed with BMPs 4.1, 4.2, and 4.3.

**Necessary documentation for implementation:** (1) JTCC Good Housekeeping and Pollution Prevention Manual; (2) Completed inspection forms; (3) Contract language.

**Responsible individual for implementation:** JTCC Midlothian and Chester Campus Supervisors, and Facilities Project Manager

**Objectives and expected results in meeting measurable goals:** The objective and expected result is to minimize or prevent pollutant discharges from contractor activities.

**Implementation schedule:** By July 1, 2015, JTCC will have developed and begin execution of contract language to require contractors to use appropriate control measures and procedures for stormwater discharges.

**Method to determine effectiveness:** Effectiveness will be measured by the inspection results specific to work performed by contractors, the responsiveness of contractors to address observed issues, and reported illicit discharges originating from contracted work on campus.
### BMP 6.5 Annual Reporting Form

#### Contractor Safeguards

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has contract language, as described above, been included in contracts with all contractors where the work performed could require appropriate control measures and procedures for stormwater discharges? This does not include regulated land disturbance activity addressed with BMPs 4.1, 4.2, and 4.3 (yes/no)</td>
<td>❑</td>
<td>☐</td>
</tr>
</tbody>
</table>

If no, explain: N/A

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>N/A (no contracts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were periodic inspections performed to ensure oversight? (yes/no)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If no, explain: N/A

Necessary documents for implementation are not provided in the annual report, but will be retained on file for 3 years.

#### Measure of Effectiveness

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes (See below)</th>
<th>No (BMP effective)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were any illicit discharges related to contracted work on campus (other than regulated land disturbance activity) reported or identified in the reporting forms for BMPs 3.2 and 3.3?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If yes, describe how the BMP can be modified to improve effectiveness to specifically address the cause of the illicit discharge(s) or describe why modification is not necessary: BMP effectively identified and resolved all potential illicit discharges. See Appendix D.
1.2 Special Conditions for the Chesapeake Bay TMDL

**BMP CB-SC.1 Chesapeake Bay TMDL Action Plan (Section I C.2)**

**Description:** JTCC will develop a phased Chesapeake Bay Action Plan that incorporates public comment and includes:

- A review of the Program Plan BMPs described in Section 3.1 for consistency with the TMDL and for the purpose of identifying necessary modifications;
- An estimate of the annual POC loads discharged from the existing sources as of June 30, 2008, based on the 2009 progress run;
- An estimate of the total reductions necessary to reduce the annual POC loads from existing sources to the L2 implementation level;
- The means and methods that will be utilized to implement sufficient reductions from existing sources equal to 5.0% of the estimated total reductions necessary;
- Mechanism to address any modification to the TMDL or watershed implementation plan that occurs during the term of this state permit as part of its permit reapplication and not during the term of this state permit;
- An estimate of the expected costs to implement the requirements of this special condition during the state permit cycle; and
- An opportunity for receipt and consideration of public comment regarding the draft Chesapeake Bay TMDL Action Plan.
- A draft second phase Chesapeake Bay TMDL Action Plan designed to reduce the existing pollutant load by an additional 35%.

The Action Plan development will consider DEQ’s Chesapeake Bay Action Plan Guidance. Additional BMPs will be included in this Section of the Program Plan to include the identified means and methods.

**Necessary documentation for implementation:** (1) Chesapeake Bay TMDL Action Plan; (2) Documentation of public participation; (3) JTCC Program Plan Updates, as necessary.

**Responsible individual for implementation:** JTCC Facilities Director

**Objectives and expected results in meeting measurable goals:** The objective is to achieve reductions required by the Chesapeake Bay TMDL for sediment, phosphorus, and nitrogen. The expected result is the development of a TMDL Action Plan.

**Implementation schedule:** The Chesapeake Bay Action Plan will be developed by July 1, 2015. The schedule developed in the Action Plan will be implemented thereafter.

**Method to determine effectiveness:** Effectiveness will be determined by the selection of cost effective BMPs supported by model quantification to achieve the required pollutant reductions.
<table>
<thead>
<tr>
<th><strong>BMP CB-SC.1 Annual Reporting Form</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chesapeake Bay Action Plan</strong></td>
</tr>
</tbody>
</table>
| Has the JTCC Chesapeake Bay Action Plan been developed? | ☒ Yes  
  ☐ No |
| If no, please explain and provide expected date of completion: | N/A |
| Method to receive and consider public comment, including dates: | JTCC posted a copy of the Action Plan on its stormwater website to receive and consider public comments. |
| Date of Action Plan submittal to DEQ: | Submitted with 2014-2015 Annual Report |
| Does quantification demonstrate the selected means and methods in the completed Action Plan can achieve the required reductions? | ☒ Yes  
  ☐ No |
| Necessary documents for implementation are not provided in the annual report, but will be retained on file for 3 years. |

### Measure of Effectiveness

| **Does quantification demonstrate the selected means and methods in the completed Action Plan can achieve the required reductions in the required time frames?** | ☒ Yes  
  ☐ No |
| If no, explain how the Action Plan can be modified to achieve the required reductions in the required time frames: | N/A |
**BMP CB-SC.2 Chesapeake Bay TMDL Action Plan Implementation (Section I B.5.b)**

**Description:** On an annual basis, JTCC will report progress on the implementation of the Chesapeake Bay TMDL Action Plan and associated evaluation. In addition to continued implementation of JTCC’s MS4 Program BMPs, JTCC’s Chesapeake Bay TMDL Action Plan Implementation Schedule is summarized below as refined based on actual implementation:

**Chesapeake Bay TMDL Action Plan Implementation Plan**

<table>
<thead>
<tr>
<th>Step</th>
<th>General Description</th>
<th>Measurable Goal</th>
<th>Target Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>Continued sweeping.</td>
<td>Sweep a minimum of 189 pounds.</td>
<td>by July 1, 2018</td>
</tr>
<tr>
<td>1</td>
<td>Improve tracking and information on areas swept.</td>
<td>Written report and supporting materials for tracking documentation; completed tracking documentation beginning after completion date.</td>
<td>July. 2016</td>
</tr>
<tr>
<td>2</td>
<td>Begin annual training for staff identified in the Written Program.</td>
<td>Training materials and documentation of training implementation.</td>
<td>July. 2016</td>
</tr>
<tr>
<td>3</td>
<td>Conduct collected material sampling and analysis.</td>
<td>Written report incorporating a summary of relevant sampling data and analysis for computing POC fraction(s).</td>
<td>Oct. 2016</td>
</tr>
<tr>
<td>4</td>
<td>Target area identification and sediment reduction assessment.</td>
<td>Written reporting building on field collected data from Steps 1 and 3 to target areas for sweeping to maximize POC reduction.</td>
<td>July. 2017</td>
</tr>
<tr>
<td>5</td>
<td>Sweeper evaluation.</td>
<td>Written report assessing the effectiveness and appropriateness of the contractor’s sweepers.</td>
<td>Jan. 2018</td>
</tr>
<tr>
<td>6</td>
<td>Implementation of targeted areas for sweeping.</td>
<td>Implementation of the identified target areas resulting from Step 4.</td>
<td>Annually, begin July 2018</td>
</tr>
</tbody>
</table>

Continued implementation of JTCC’s MS4 Program Plan BMPs demonstrates implementation of the JTCC Chesapeake Bay TMDL Action Plan to the maximum extent practicable and demonstrates adequate progress satisfying the following special conditions: “Implementation of nutrient management plans ...” [Section I(C)(3)(a)] and “Implementation of the minimum control measure ... related to construction site stormwater runoff control in accordance with this state permit shall address discharges from transitional sources.” [Section I(C)(3)(b)]

**Necessary documentation for implementation:** (1) Chesapeake Bay TMDL Action Plan; (2) Documentation of Measurable Goals described in the Implementation Plan.

**Responsible individual for implementation:** JTCC Facilities Director

**Objectives and expected results in meeting measurable goals:** The objective is to achieve sediment, phosphorus, and nitrogen reductions required by the MS4 General Permit.

**Implementation schedule:** Per the Implementation Plan summarized in the above Table.

**Method to determine effectiveness:** Effectiveness will be determined by the quantitative computation of pollutant reductions using approved or scientifically supportable methods.
**BMP CB-SC.2 Chesapeake Bay TMDL Action Plan Implementation (Section I B.5.b)**

**Description:** On an annual basis, JTCC will report progress on the implementation of the Chesapeake Bay TMDL Action Plan and associated evaluation. In addition to continued implementation of JTCC’s MS4 Program BMPs, JTCC’s Chesapeake Bay TMDL Action Plan Implementation Schedule is summarized below as refined based on actual implementation:

**Chesapeake Bay TMDL Action Plan Implementation Plan**

<table>
<thead>
<tr>
<th>Step</th>
<th>Measurable Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Written report and supporting materials for tracking documentation; completed tracking documentation beginning after completion date.</td>
</tr>
<tr>
<td></td>
<td>Sweeping data collection form and Sampling protocol have been developed.</td>
</tr>
<tr>
<td></td>
<td>Materials in Step 1 have been developed and training completed.</td>
</tr>
<tr>
<td>3</td>
<td>Written report incorporating a summary of relevant sampling data and analysis for computing POC fraction(s).</td>
</tr>
<tr>
<td></td>
<td>See BMP Schedule</td>
</tr>
<tr>
<td>4</td>
<td>Written reporting building on field collected data from Steps 1 and 3 to target areas for sweeping to maximize POC reduction.</td>
</tr>
<tr>
<td></td>
<td>See BMP Schedule</td>
</tr>
<tr>
<td>5</td>
<td>Written report assessing the effectiveness and appropriateness of the contractor’s sweepers.</td>
</tr>
<tr>
<td></td>
<td>See BMP Schedule</td>
</tr>
<tr>
<td>6</td>
<td>Implementation of the identified target areas resulting from Step 4.</td>
</tr>
<tr>
<td></td>
<td>See BMP Schedule</td>
</tr>
</tbody>
</table>

Continued implementation of JTCC’s MS4 Program Plan BMPs demonstrates implementation of the JTCC Chesapeake Bay TMDL Action Plan to the maximum extent practicable and demonstrates adequate progress satisfying the following special conditions: “Implementation of nutrient management plans …” [Section I(C)(3)(a)] and “Implementation of the minimum control measure … related to construction site stormwater runoff control in accordance with this state permit shall address discharges from transitional sources.” [Section I(C)(3)(b)]

**Necessary documentation for implementation:** (1) Chesapeake Bay TMDL Action Plan; (2) Documentation of Measurable Goals described in the Implementation Plan.

**Responsible individual for implementation:** JTCC Facilities Director

**Objectives and expected results in meeting measurable goals:** The objective is to achieve sediment, phosphorus, and nitrogen reductions required by the MS4 General Permit.

**Implementation schedule:** Per the Implementation Plan summarized in the above Table.

**Method to determine effectiveness:** Effectiveness will be determined by the quantitative computation of pollutant reductions using approved or scientifically supportable methods.
1.3 Special Conditions for Approved TMDL other than the Chesapeake Bay TMDL

**BMP SC.1 James River (Tidal) TMDL Action Plan (Section I B)**

**Description:** JTCC has been assigned a waste load allocation (WLA) for E. coli in the James River (Tidal), City of Richmond TMDL approved on June 29, 2012. JTCC will develop an action plan to address the WLA that includes:

- A list of legal authorities applicable to reducing E. coli;
- Identification and methods for maintaining a list of practices, methods, and controls implemented to reduce the E. coli;
- Description of means for incorporation of identified practices, methods, and controls into the public education and outreach and employee training programs;
- Results of an assessment of facilities of concern for significant contribution of E. coli;
- Develop methodology for assessing effectiveness of the TMDL Action Plan using modeling tools (in-lieu of water quality monitoring), specifically the Excel spreadsheet based Watershed Treatment Model (WTM). Assessment will also incorporate methodology for evaluation of facilities identified to significantly contribute to the POC;
- An annual reporting worksheet consistent with the TMDL Action Plan and the General Permit.

Additional BMPs will be included in this Section of the Program Plan, as necessary, to include implementation of the Action Plan.

**Necessary documentation for implementation:** (1) James River (Tidal) JTCC TMDL Action Plan; (2) JTCC Program Plan Updates, as necessary.

**Responsible individual for implementation:** JTCC Facilities Director

**Objectives and expected results in meeting measurable goals:** The objective is to achieve reductions required by the James River (Tidal) TMDL for E. coli. The expected result is the development of a TMDL Action Plan.

**Implementation schedule:** The James River (Tidal) Action Plan will be developed by July 1, 2016. The schedule developed in the Action Plan will be implemented thereafter.

**Method to determine effectiveness:** Effectiveness will be determined by the selection of cost effective BMPs supported by model quantification to achieve the required pollutant reductions.
### BMP SC.1 Annual Reporting Form

<table>
<thead>
<tr>
<th>James River (Tidal) TMDL Action Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has the JTCC James River (Tidal) Action TMDL Plan been developed?</td>
</tr>
<tr>
<td>If no, please explain and provide expected date of completion:</td>
</tr>
</tbody>
</table>

Necessary documents for implementation are not provided in the annual report, but will be retained on file for 3 years.

### Measure of Effectiveness

| Does quantification demonstrate the selected means and methods in the completed Action Plan can achieve the required reductions in the required time frames? | ☑ Yes ✘ No |
| If no, explain how the Action Plan can be modified to achieve the required reductions in the required time frames: | N/A |
**BMP SC.2 James River (Tidal) TMDL Action Plan Implementation (Section I B.5.b)**

**Description:** On an annual basis, JTCC will report progress on the implementation of the James River (Tidal) TMDLs Action Plan and associated evaluation. As described in Section 4.1 of the Action Plan, BMPs implemented to address each minimum control measure (MCM) in JTCC’s MS4 Program BMPs are applicable to the reduction of E. coli. To reduce E. coli to the maximum extent practicable, JTCC’s E. coli Action Plan also lists practices and controls to address E. coli beyond those incorporated into the MCM BMPs summarized as:

### James River (Tidal) TMDL Action Plan Practices & Controls

<table>
<thead>
<tr>
<th>BMP General Description</th>
<th>Measurable Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>WQ Issue #2: Education on special water quality concerns (TMDLs)</td>
<td>Assess target audience’s knowledge through quizzes at the end of training sessions, as described in JTCC’s PEOP</td>
</tr>
<tr>
<td>Online Bacteria TMDL Action Plan posting</td>
<td>Maintain Bacteria TMDL Action Plan on website</td>
</tr>
<tr>
<td>Illicit discharge prohibition</td>
<td>Reported/observed potential bacteria illicit discharges resolved</td>
</tr>
<tr>
<td>Outfall screening</td>
<td>Screened outfalls with potential bacteria discharges investigated and resolved</td>
</tr>
<tr>
<td>Public reporting</td>
<td>Publicly reported potential bacteria illicit discharges resolved</td>
</tr>
<tr>
<td>Receive and respond to public complaints about construction sites</td>
<td>Reported potential bacteria illicit discharges from construction activities resolved</td>
</tr>
<tr>
<td>Construction site Stormwater Pollution Prevention Plan (SWPPP)</td>
<td>Ensure SWPPPs provided for applicable construction sites</td>
</tr>
<tr>
<td>VSMP Stormwater Management Regulations</td>
<td>Verify land disturbance projects are compliant with VSMP Stormwater Management Regulations</td>
</tr>
<tr>
<td>Stormwater management facility inspections</td>
<td>Annual inspection of all stormwater management facilities. Maintenance performed on facilities, as deemed necessary from inspection.</td>
</tr>
<tr>
<td>Campus Stormwater Pollution Prevention Plan</td>
<td>Reduction, over time, of items of concern resulting from annual SWPPP inspections.</td>
</tr>
<tr>
<td>Employee Good Housekeeping/Pollution Prevention training</td>
<td>Increase, over time, in the &quot;knowledge score&quot; resulting from quizzes given during training events.</td>
</tr>
<tr>
<td>Contractor safeguards</td>
<td>Elimination of bacteria related illicit discharges from contractor activity</td>
</tr>
<tr>
<td>Elimination of straight pipes</td>
<td>Implementation of Action Plan BMPs beyond those described in the Minimum Control Measure BMPs</td>
</tr>
</tbody>
</table>

**Necessary documentation for implementation:** (1) James River (Tidal) TMDLs Action Plan; (2) Measurable goal documentation, as necessary.

**Responsible individual for implementation:** JTCC Facility Manager
Objectives and expected results in meeting measurable goals: The objective is to achieve reductions required by the James River (Tidal) TMDLs for E. Coli. The expected result is implementation of the identified measurable goals.

Implementation schedule: Ongoing, to the maximum extent practicable, or as otherwise identified for applicable BMPs in JTCC’s Program Plan.

Method to determine effectiveness: Effectiveness will be determined based on the achievement of measurable goals described in this BMP.
### BMP SC.2 Annual Reporting Form

**Description:** JTCC’s progress on the implementation of the James River (Tidal) TMDLs Action Plan measurable goals is reported below. Supporting documentation is not provided with the annual report, but can be provided upon request.

**James River (Tidal) TMDL Action Plan Practices & Controls**

<table>
<thead>
<tr>
<th>BMP General Description</th>
<th>Progress Towards Measurable Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess target audience’s knowledge through quizzes at the end of training sessions, as described in JTCC’s PEOP</td>
<td>See BMP 1.2</td>
</tr>
<tr>
<td>Maintain Bacteria TMDL Action Plan on website</td>
<td>See BMP 2.1</td>
</tr>
<tr>
<td>Reported/observed potential bacteria illicit discharges resolved</td>
<td>See BMP 3.2</td>
</tr>
<tr>
<td>Screened outfalls with potential bacteria discharges investigated and resolved</td>
<td>See BMP 3.3</td>
</tr>
<tr>
<td>Publicly reported potential bacteria illicit discharges resolved</td>
<td>See BMP 3.5</td>
</tr>
<tr>
<td>Reported potential bacteria illicit discharges from construction activities resolved</td>
<td>See BMP 4.1</td>
</tr>
<tr>
<td>Ensure SWPPPs provided for applicable construction sites</td>
<td>See BMP 4.3</td>
</tr>
<tr>
<td>Verify land disturbance projects are compliant with VSMP Stormwater Management Regulations</td>
<td>See BMP 4.3</td>
</tr>
<tr>
<td>Annual inspection of all stormwater management facilities. Maintenance performed on facilities, as deemed necessary from inspection.</td>
<td>See BMP 5.1</td>
</tr>
<tr>
<td>Reduction, over time, of items of concern resulting from annual SWPPP inspections.</td>
<td>See BMP 6.2</td>
</tr>
<tr>
<td>Increase, over time, in the &quot;knowledge score&quot; resulting from quizzes given during training events.</td>
<td>See BMP 1.2</td>
</tr>
<tr>
<td>Elimination of bacteria related illicit discharges from contractor activity</td>
<td>See BMP 6.2</td>
</tr>
<tr>
<td>Implementation of Action Plan BMPs beyond those described in the Minimum Control Measure BMPs</td>
<td>See Action Plan Section 4.2.1</td>
</tr>
<tr>
<td>• Prohibition of Potential Sources</td>
<td>See Action Plan Section 4.2.2</td>
</tr>
<tr>
<td>• Increased Frequency of Staff Training</td>
<td>See Action Plan Section 4.2.3</td>
</tr>
<tr>
<td>• Enhanced Public Education and Outreach Plan</td>
<td></td>
</tr>
</tbody>
</table>

### Measure of Effectiveness

Were measurable goals achieved consistent with the Action Plan?  [ ] Yes  [ ] No

If no, explain how JTCC plans to achieve Action Plan measurable goals for the permit cycle, consistent with the DEQ-approved Action Plan: **N/A since measurable goals achieved per the Action Plan schedule.**
Appendix A - BMP 1.2 Documentation of Public Education and Outreach Activities
Protecting our watersheds/what is an MS4?

Do you know what MS4 stands for? It stands for Municipal Separate Storm Sewer Systems. Discharges from MS4s are regulated under the Virginia Stormwater Management Act, the Virginia Stormwater Management Program (VSMP), and the EPA’s Clean Water Act. John Tyler Community College’s storm water discharges are regulated under this federal and state program. As part of our permit responsibilities, JTCC submits an MS4 Report to the Virginia Department of Environmental Quality, to show that we are meeting our established BMP’s (Best Management Practices).

What is a watershed?

A watershed is an area of land that drains all the streams and rainfall to a common outlet such as the outflow of a reservoir, mouth of a bay, or any point along a stream channel. The word watershed is sometimes used interchangeably with drainage basin or catchment. We all live in a watershed, and our individual actions can directly affect it. Pollutants that dump into our waterways not only contaminate our drinking water, but they also kill wildlife that inhabit the watershed.

What is JTCC’s watershed?

All precipitation and water draining from the Midlothian Campus flows into Tomahawk Creek and then into the Swift Creek Reservoir. The Chester Campus drains in two directions. The east side of Chester Campus drains into Redwater Creek, a tributary of Proctors Creek, and ultimately to the James River. The west side of Chester Campus drains to Ashton Creek, a tributary of the Appomattox River. Both Chester and Midlothian watersheds flow into a larger watershed which is the Chesapeake Bay. The Chesapeake Bay Watershed covers 64,000 square miles and drains from six states, including the Commonwealth of Virginia.

What is JTCC doing?

Through JTCC’s MS4 program, JTCC aims to be good environmental and community stewards by preventing pollution, providing resources for detecting/eliminating illicit discharges, and promoting awareness to our students, staff, and service region.

How can I help?

- Conserve water every day. Take shorter showers, fix leaks & turn off the water when not in use.
- Don’t pour toxic household chemicals down the drain; take them to a hazardous waste center.
- Use hardy plants that require little or no watering, fertilizers or pesticides in your yard.
- Do not over apply fertilizers. Consider using organic or slow release fertilizers instead.
- Recycle yard waste in a compost pile & use a mulching mower.
- Use surfaces like wood, brick or gravel for decks & walkways; allows rain to soak in & not run off.
- Never pour used oil or antifreeze into the storm drain or the street.
- Pick up after your dog, and dispose of the waste in the toilet or the trash.
- Drive less—walk or bike; many pollutants in our waters come from car exhaust and car leaks.
- Report any illicit discharges
  - JTCC Chester Campus – 804-796-4025
  - JTCC Midlothian Campus – 804-897-6678
  - Chesterfield County – 804-717-6161
  - VDOT – 800-663-4188

Additional Resources

https://jtcc.edu/about/sustainability-at-jtcc/
http://www.jtcc.edu/revive/
http://water.epa.gov/action/weatherchannel/

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Director of Facilities
John Tyler Community College – Defining Your Future
800 Charter Colony Parkway
Midlothian, Virginia, 23114
Midlothian Phone: (804) 594-1430
Chester Phone: (804) 706-5063
gdunaway@jtcc.edu

Tyler Outlook signature block
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Chester Phone: (804) 706-5063  
gdunaway@jtcc.edu
# John Tyler Community College Annual Good Housekeeping/Pollution Prevention Training Documentation Form

![Image of the form]

**THIS SECTION TO BE COMPLETE BY FACILITIES MANAGER OR APPOINTEE ONLY**

<table>
<thead>
<tr>
<th>Name (Printed)</th>
<th>Position</th>
<th>Staff Signature</th>
<th>Date of Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>D. Recht</td>
<td>Grounds</td>
<td>John P. Smith</td>
<td>6-22-16</td>
</tr>
<tr>
<td>E. Young</td>
<td>Housekeeping</td>
<td>Joseph A. Jones</td>
<td>6-22-16</td>
</tr>
<tr>
<td>T. Patterson</td>
<td>Grounds</td>
<td>John P. Smith</td>
<td>6-22-16</td>
</tr>
<tr>
<td>S. Alley</td>
<td>Grounds</td>
<td>Joseph A. Jones</td>
<td>6-22-16</td>
</tr>
<tr>
<td>K. Cheatham</td>
<td>Trades Tech</td>
<td>Linda Miller</td>
<td>6-22-16</td>
</tr>
<tr>
<td>L. Roe</td>
<td>Housekeeping</td>
<td>Natasha zona</td>
<td>6-22-16</td>
</tr>
<tr>
<td>Ray Robinson</td>
<td>Trades Tech</td>
<td>John P. Smith</td>
<td>6-22-16</td>
</tr>
<tr>
<td>C. Yank</td>
<td>Trades Tech</td>
<td>Joseph A. Jones</td>
<td>6-22-16</td>
</tr>
<tr>
<td>M. Mitchell</td>
<td>Mail Guy</td>
<td>Joseph A. Jones</td>
<td>6-22-16</td>
</tr>
<tr>
<td>Ess Robinson</td>
<td>BOC Supervisor</td>
<td>Robert Davis</td>
<td>6-22-16</td>
</tr>
<tr>
<td>J. Barlow</td>
<td>Assis. Dir. Safety</td>
<td>Janie Clark</td>
<td>6-22-16</td>
</tr>
<tr>
<td>Tonya Brown</td>
<td>Housekeeping</td>
<td>Janie Clark</td>
<td>6-23-16</td>
</tr>
<tr>
<td>D. Ragsdale</td>
<td>Grounds</td>
<td>John P. Smith</td>
<td>6-23-16</td>
</tr>
<tr>
<td>T. Elrod</td>
<td>Grounds</td>
<td>John P. Smith</td>
<td>6-23-16</td>
</tr>
<tr>
<td>Jamie Martinez</td>
<td>Grounds</td>
<td>John P. Smith</td>
<td>6-23-16</td>
</tr>
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<td>Niki Hewett</td>
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<td>Christopher</td>
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</tbody>
</table>
What is stormwater runoff?

Stormwater runoff occurs when precipitation from rain or snowmelt flows over the ground and does not soak into the ground. Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from naturally soaking into the ground. Rainwater and melted snow can run off the land and enter storm sewers or drainage systems.

Why is stormwater runoff a problem?

Stormwater can carry pollutants from paved areas into waterbodies. Pollutants can include debris, chemicals, dirt, and other pollutants.

The effects of pollution

- Antibiotics, hormones, and other pharmaceutical waste can enter waterbodies through stormwater runoff.
- Bacteria and other pathogens can wash into swimming areas and create health hazards, often making beach closures necessary.
- Debris—plastic bags, six-pack rings, bottles, and cigarette butts—can wash into waterbodies and choke, suffocate, or disable aquatic life like ducks, fish, turtles, and birds.
- Stormwater can carry household hazardous wastes like insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids that can poison aquatic life. Land animals and people can become sick or die from eating diseased fish and shellfish or ingesting polluted water.

Polluted stormwater often affects drinking water sources. This, in turn, can affect human health and increase drinking water treatment costs.

The effects of pollution can include:

- Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment also can destroy aquatic habitats.
- Excess nutrients can cause algae blooms. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms cannot exist in water with low dissolved oxygen levels.
- Bacteria and other pathogens can wash into swimming areas and create health hazards, often making beach closures necessary.

After the Storm

When it rains, it drains.
**What is stormwater runoff?**

Stormwater runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from naturally soaking into the ground.

**Why is stormwater runoff a problem?**

Stormwater can pick up debris, chemicals, dirt, and other pollutants and flow into a storm sewer system or directly to a lake, stream, wetland, or coastal water. Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing, and providing drinking water.

**The effects of pollution**

Polluted stormwater runoff can have many adverse effects on plants, fish, animals, and people:

- Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment also can destroy aquatic habitats.
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- Polluted stormwater often affects drinking water sources. This, in turn, can affect human health and increase drinking water treatment costs.
Stormwater Pollution Solutions

Residential

Lawn care
Excess fertilizers and pesticides applied to lawns and gardens wash off and pollute streams. In addition, yard clippings and leaves can wash into storm drains and contribute nutrients and organic matter to streams.

- Don’t overwater your lawn. Consider using a soaker hose instead of a sprinkler.
- Use pesticides and fertilizers sparingly. When use is necessary, use these chemicals in the recommended amounts. Use organic mulch or safer pest control methods whenever possible.
- Compost or mulch yard waste. Don’t leave it in the street or sweep it into storm drains or streets.
- Cover piles of dirt or mulch being used in landscaping projects.

Auto care
Washing your car and degreasers at home can send detergents and other contaminants through the storm sewer system. Dumping automotive fluids into storm drains has the same result as dumping the materials directly into a waterbody.

- Use a commercial car wash that treats or recycles its wastewater, or wash your car on your yard so the water infiltrates into the ground.
- Repair leaks and dispose of used auto fluids and batteries at designated drop-off or recycling locations.

Septic systems
Leaking and poorly maintained septic systems release nutrients and pathogens (bacteria and viruses) that can be picked up by stormwater and discharged into nearby waterbodies. Pathogens can cause public health problems and environmental concerns.

- Inspect your system every 3 years and pump your tank as necessary (every 3 to 5 years).
- Don’t dispose of household hazardous waste in sinks or toilets.

Pet waste
Pet waste can be a major source of bacteria and excess nutrients in local waters.

- When walking your pet, remember to pick up the waste and dispose of it properly. Flushing pet waste is the best disposal method. Leaving pet waste on the ground increases public health risks by allowing harmful bacteria and nutrients to wash into the storm drain and eventually into local waterbodies.

Commercial

Dirt, oil, and debris that collect in parking lots and paved areas can be washed into the storm sewer system and eventually enter local waterbodies.

- Sweep up litter and debris from sidewalks, driveways, and parking lots, especially around storm drains.
- Cover grease storage and dumpsters and keep them clean to avoid leaks.
- Report any chemical spill to the local hazardous waste cleanup team. They’ll know the best way to keep spills from harming the environment.

Agriculture
Lack of vegetation on streambanks can lead to erosion. Overgrazed pastures can also contribute excessive amounts of sediment to local waterbodies. Excess fertilizers and pesticides can poison aquatic animals and lead to destructive algae blooms. Livestock in streams can contaminate waterways with bacteria, making them unsafe for human contact.

- Keep livestock away from streambanks and provide them a water source away from waterbodies.
- Store and apply manure away from waterbodies and in accordance with a nutrient management plan.
- Vegetate riparian areas along waterways.
- Rotate animal grazing to prevent soil erosion in fields.
- Apply fertilizers and pesticides according to label instructions to save money and minimize pollution.

Forestry
Improperly managed logging operations can result in erosion and sedimentation.

- Conduct preharvest planning to prevent erosion and lower costs.
- Use logging methods and equipment that minimize soil disturbance.
- Plan and design skid trails, yard areas, and truck access roads to minimize stream crossings and avoid disturbing the forest floor.
- Construct stream crossings so that they minimize erosion and physical changes to streams.
- Expedite revegetation of cleared areas.

Residential landscaping

Permeable Pavement—Traditional concrete and asphalt don’t allow water to soak into the ground. Instead these surfaces rely on storm drains to divert unwanted water. Permeable pavement systems allow rain and snowmelt to soak through, decreasing stormwater runoff.

Rain Barrels—You can collect rainwater from rooftops in mosquito-proof containers. The water can be used later on lawn or garden areas.

Rain Gardens and Grassy Swales—Specially designed areas planted with native plants can provide natural places for rainwater to collect and soak into the ground. Rain from rooftop areas or paved areas can be diverted into these areas rather than into storm drains.

Vegetated Filter Strips—Filter strips are areas of native grass or plants created along roadways or streams. They trap the pollutants from stormwater and pick up as it flows across driveways and streets.

Education is essential to changing people’s behavior. Signs and markers near storm drains warn residents that pollutants washing the drain will be carried untreated into a local waterbody.

Facilities

Uncovered fueling stations allow spills to be washed into storm drains. Cars waiting to be repaired can leak fuel, oil, and other harmful fluids that can be picked up by stormwater.

- Clean up spills immediately and properly dispose of cleanup materials.
- Provide cover over fueling stations and design or retrofit facilities for spill containment.
- Properly maintain fleet vehicles to prevent oil, gas, and other discharges from being washed into local waterbodies.
- Install and maintain oil/water separators.
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Erosion controls that aren’t maintained can cause excessive amounts of sediment and debris to be carried into the stormwater system. Construction vehicles can leak fuel, oil, and other harmful fluids that can be picked up by stormwater and deposited into local waterbodies.

- Divert stormwater away from disturbed or exposed areas of the construction site.
- Install silt fences, vehicle mud removal areas, vegetative cover, and other sediment and erosion controls and properly maintain them, especially after rainstorms.
- Prevent soil erosion by minimizing disturbed areas during construction projects, and seed and mulch bare areas as soon as possible.

Residential landscaping

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What is stormwater runoff?

**Why is stormwater runoff a problem?**

Stormwater runoff occurs when precipitation, such as rain or snowmelt, flows over the ground and does not infiltrate into the soil. This runoff can contain contaminants such as debris, chemicals, dirt, and other pollutants. Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from seeping into the ground, which can cause runoff to flow directly into storm sewers or nearby water bodies. Anything that enters a storm sewer system is discharged untreated into the bodies of water we use for swimming, fishing, and drinking water.

The effects of pollution

Polluted stormwater runoff can have many adverse effects on plants, fish, animals, and people.

- **Sediment** can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment also can destroy aquatic habitats.
- **Excess nutrients** can cause algae blooms. When algae die, they sink to the bottom and decompose, a process that removes oxygen from the water. Fish and other aquatic organisms cannot exist in water with low dissolved oxygen levels.
- **Bacteria and other pathogens** can wash into swimming areas, creating health hazards and sometimes leading to beach closures.
- **Debris**—such as plastic bags, six-pack rings, bottles, and cigarette butts—can wash into water bodies, chocking, suffocating, or disabling aquatic life. Ducks, fish, turtles, and birds can become entangled in debris or ingest it.
- **Household hazardous wastes** like insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life.
- **Land animals and people** can become sick or die from eating diseased fish and shellfish or ingesting polluted water.
- **Polluted stormwater** can affect drinking water sources, which can increase drinking water treatment costs.

A Citizen's Guide to Understanding Stormwater

**WHEN IT RAINS IT DRAINS**

For more information contact:

**JTCC FACILITIES**

804-594-1430

or visit

www.epa.gov/nmdes/stormwater

www.epa.gov/nps

The effects of pollution

Poll uted stormwater often affects drinking water sources. This, in turn, can affect human health and increase drinking water treatment costs.

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JTCC FACILITIES
804-594-1430

or visit
www.epa.gov/npdes/stormwater
www.epa.gov/nps

The effects of pollution

When it rains, it drains.

Ditching water

The watersheds we use for swimming, fishing, and providing drinking water are forests, farm fields, and urban areas. Any time it rains, water flows into the storm sewer system or directly to a lake, stream, river, wetland, or coastal water. Anything that enters a storm sewer system is discharged untreated into waterbodies we use for swimming, fishing, and providing drinking water.
Appendix B - BMP 2.2 Documentation of Public Involvement/Participation Activities
Tyler Leads

Leadership Project
MS4 Stormwater Outfall Screening – JTCC Science Coursework

Greg Dunaway, Director of Facilities and Safety
Municipal Separate Storm Sewer Systems (MS4s) regulated under the Virginia Stormwater Management Act and the EPA Clean Water Act

JTCCs MS4 Program Plan requires annual documented outfall inspections and multiple public outreach events to educate the “community”
Initial Project Scope/Goals

- Educate students on properties of storm water and outfall screening
- Providing hands-on environmental engineering and environmental awareness course material
- Inspection reports will be used as a class assignment and utilized in annual MS4 report
- Develop relationship between students and Consultant’s internship program
- Ensure JTCC maintains compliance with all state and federal stormwater regulations
- Provide an “out-of-the-box” learning experience, connecting course material to real world scenarios and tie students to interworking of the College
Associated Costs/Funding Requirements

- Prior to project JTCC paid consultant to conduct inspection and train staff
- Through project staff, faculty, and students are trained
- JTCC Facilities $SAVE$ COST$ through this project! (approx. $800)
- At a minimum, reduces Facilities man-hours tied to inspections
Dec. 2015 • Meeting between Science Faculty and Stormwater Consultant

Jan. 2016 • Received draft OER material from Faculty

Feb. 2016 • Meeting between Stormwater Consultant and Internship Coordinator

Mar. 2016 • Complete OER Material and obtain inspection forms

Apr. 2016 • Conduct outfall inspections with students

Oct. 2016 • Submit completed forms and documentation of classes in MS4 report
Class Sessions and Faculty Members

Joressia Beyer – Associate Professor

- Midlothian Campus
- Class: ENV 122 - General Environmental Science II
- Date: 4/14/2016

Amanda Lentz-Ronning – Associate Professor

- Chester Campus
- Class: ENV 122 - General Environmental Science II
- Date: 04/11/2016
Outfalls
## Inspection Forms

### Sample Outfall Reconnaissance Inventory / Sample Collection Field Sheet

#### Section 1: Background Data
- **Date:**
- **Time:**
- **Investigator:**
- **Form completed by:**
- **Temperature (°F):**
- **Rainfall (in):**
- **Last 24 hours:**
- **Last 48 hours:**
- **Camera:**
- **Photo:**

**Notes:** (e.g., origin of outfall, if known)

#### Section 2: Outfall Description

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>MATERIAL</th>
<th>CROSS-SECTION (SHAPE)</th>
<th>DIMENSIONS (in)</th>
<th>SUBMERGED</th>
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<tr>
<td>Closed ( )</td>
<td>Concrete</td>
<td>Single</td>
<td>Diameter/Dimensions</td>
<td>in Water</td>
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<tr>
<td>Open channel ( )</td>
<td>Concrete</td>
<td>Tunnel</td>
<td>Top Width</td>
<td>With Sediment</td>
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**Flow Present?**
- **Yes**
- **No**

**Flow Description:**
- **Trickle**
- **Moderate**
- **Substantial**

#### Section 3: General Physical Indicators for both Flowing and Non-Flowing Outfalls

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<th>INDICATOR</th>
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<tr>
<td>Turbidity</td>
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<tr>
<td>Flow Rate</td>
<td></td>
<td></td>
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<tr>
<td>Spotter</td>
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#### Section 4: Physical Indicators for Flowing Outfalls Only

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#### Section 5: Quantitative Characterization

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<td></td>
<td>Flow depth</td>
<td>in</td>
<td>Tape measure</td>
</tr>
<tr>
<td></td>
<td>Flow width</td>
<td>ft</td>
<td>Tape measure</td>
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<tr>
<td></td>
<td>Measured length</td>
<td>ft</td>
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<td></td>
<td>Temperature</td>
<td>°F</td>
<td>Thermometer</td>
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<tr>
<td></td>
<td>Time of flow</td>
<td>s</td>
<td>Stop watch</td>
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<tr>
<td></td>
<td>Temperature</td>
<td>°F</td>
<td>Thermometer</td>
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<tr>
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<td>Ammonia</td>
<td>mg/L</td>
<td>Test strip</td>
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</table>
Concepts

The pH Scale

Neutral

Acidic

Alkaline

DISSOLVED OXYGEN
ppm

Turbidity (NTU)

Water Samples:

250, 100, 50, 25, 10

River with fish swimming.
Concepts

[Diagram showing water cycle and runoff from household sources ending up in local streams, creeks, rivers, and lakes]

- Runoff from roof
- Lawn runoff
- Street runoff
- Stormwater runoff

[Images of water samples and water pollution]
Next Steps/Future Plans

- Continue dialogue with consultants and JTCC to develop internship
- Additional quantitative measurements related to water runoff
  - Phosphates, nitrogen, coliform
- Sustainability labs highlighting JTCCs efforts
- Expand participation in MSiC Stem Camps
- Many opportunities tying course materials to Facilities-related responsibilities
Going Green at JTCC

Find out what John Tyler is doing to be more environmentally friendly

Greg Dunaway
Director of Facilities and Safety
Main Topics

- New building features to caring for our campuses
- Storm water management
- Tips on what you can do to help protect the environment
T-Building

1st Public Academic Building new construction under the IGCC-VEES in Virginia

International Green Construction Code
Virginia Energy Conservation and Environmental Standards
What does that mean?

VEES assures energy conservation and environmental performance standards through:

- site development, land use
- indoor environmental quality
- water conservation
- efficiency of energy and resources
• Low flow fixtures
• LED lighting
• Chilled beam technology
• Low VOC materials
• Low construction waste
Where does Stormwater Go?

- Stormwater flows to storm drains along streets.
- It may carry soil, pet waste, oil, pesticides, & other pollutants with it.
- This polluted runoff goes to streams & lakes untreated.

Stormwater goes into storm drains and pollutants flow untreated into local streams, rivers & lakes.
Where does storm water go?

- **Midlothian**
  - All precipitation and water draining from the Midlothian Campus flows into Tomahawk Creek and then into the Swift Creek Reservoir.

- **Chester**
  - The Chester Campus drains in two directions. The east side of Chester Campus drains into Redwater Creek, a tributary of Proctors Creek, and ultimately to the James River. The west side of Chester Campus drains to Ashton Creek, a tributary of the Appomattox River.

Both Chester and Midlothian watersheds flow into a larger watershed which is the Chesapeake Bay. The Chesapeake Bay Watershed covers 64,000 square miles and drains from six states, including the Commonwealth of Virginia.
How can I help?

• Hang clothes to dry
• Use rain barrels to collect rain
  • LED lighting
  • Increase insulation
• Reduce hot water setting to 120F
  • Change filters
  • Use ceiling fans
• Recycle
• Energy Star appliances
How can I reduce pollution?

• If you wash car at home, wash on area that will absorb water.
• When walking your pet pickup after them.
• Don’t over fertilize
• Sweep driveways, don’t hose them off. Otherwise sediment flows to storm drain.
• Never blow leaves or grass clippings into street
• DCR Stormwater Good Stewardship:  

• DCR Stormwater Management Resources:  

• DEQ Water Regulations:  

• Chesapeake Bay Foundation:  http://www.cbf.org/

• Sustainability at JTCC:  http://www.jtcc.edu/about/sustainability-at-jtcc/
<table>
<thead>
<tr>
<th>Name</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connor Reynolds</td>
<td>Connor Reynolds</td>
</tr>
<tr>
<td>Grant Hess</td>
<td>Grant Hess</td>
</tr>
<tr>
<td>Zachary J. Brink</td>
<td>Zach</td>
</tr>
<tr>
<td>Matt Solomon</td>
<td>MGS</td>
</tr>
<tr>
<td>Nina Franklin</td>
<td>Nina Franklin</td>
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<tr>
<td>Anushka Pandya</td>
<td>Anushka</td>
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<td>Elijah Carl</td>
<td>Elijah</td>
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<td>Leslie Winston</td>
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<td>Megan Sherwood</td>
<td>Megan Sherwood</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## John Tyler Community College Outfall Inventory

### Chester Campus

<table>
<thead>
<tr>
<th>Outfall ID</th>
<th>Area Draining to Outfall (Acres)</th>
<th>HUC</th>
<th>Receiving Water</th>
<th>Direct discharge to impaired waters identified in 2010 303(d)/305(b)?</th>
<th>Applicable TMDL(s)</th>
<th>TMDL Pollutants</th>
<th>Date of Last Screening</th>
<th>Summary of Screening Result</th>
<th>Details of Any Necessary Followup</th>
<th>Date of Followup Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>JTCC-C-1</td>
<td>1</td>
<td>JL03</td>
<td>Unnamed Tributary</td>
<td>Not Assessed</td>
<td>Chesapeake Bay</td>
<td>N, P, Sediment</td>
<td>4/11/2016</td>
<td>No Observed Issues</td>
<td>N/A</td>
<td>N/A</td>
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<td>JTCC-C-2</td>
<td>15</td>
<td>JL03</td>
<td>Unnamed Tributary</td>
<td>Not Assessed</td>
<td>James River (Tidal)</td>
<td>N, P, Sediment</td>
<td>4/12/2016</td>
<td>No Observed Issues</td>
<td>N/A</td>
<td>N/A</td>
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<td>JL03</td>
<td>Unnamed Tributary</td>
<td>Not Assessed</td>
<td>James River (Tidal)</td>
<td>N, P, Sediment</td>
<td>4/13/2016</td>
<td>No Observed Issues</td>
<td>N/A</td>
<td>N/A</td>
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<td>Unnamed Tributary</td>
<td>Not Assessed</td>
<td>James River (Tidal)</td>
<td>N, P, Sediment</td>
<td>4/14/2016</td>
<td>No Observed Issues</td>
<td>N/A</td>
<td>N/A</td>
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<td>JA45</td>
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<td>Not Assessed</td>
<td>James River (Tidal)</td>
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<td>No Observed Issues</td>
<td>N/A</td>
<td>N/A</td>
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<td>JTCC-C-6</td>
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<td>JA46</td>
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<td>James River (Tidal)</td>
<td>N, P, Sediment</td>
<td>4/16/2016</td>
<td>No Observed Issues</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Midlothian Campus

<table>
<thead>
<tr>
<th>Outfall ID</th>
<th>Area Draining to Outfall (Acres)</th>
<th>HUC</th>
<th>Receiving Water</th>
<th>Direct discharge to impaired waters identified in 2010 303(d)/305(b)?</th>
<th>Applicable TMDL</th>
<th>TMDL Pollutants</th>
<th>Date of Last Screening</th>
<th>Summary of Screening Result</th>
<th>Details of Any Necessary Followup</th>
<th>Date of Followup Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>JTCC-M-1</td>
<td>2.4</td>
<td>JA41</td>
<td>Unnamed Tributary</td>
<td>Not Assessed</td>
<td>Chesapeake Bay</td>
<td>N, P, Sediment</td>
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<td>No Observed Issues</td>
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<td>N/A</td>
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<td>JTCC-M-2</td>
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<td>Chesapeake Bay</td>
<td>N, P, Sediment</td>
<td>4/15/2016</td>
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<td>JTCC-M-3</td>
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<td>JA41</td>
<td>Unnamed Tributary</td>
<td>Not Assessed</td>
<td>Chesapeake Bay</td>
<td>N, P, Sediment</td>
<td>4/16/2016</td>
<td>No Observed Issues</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Appendix D – BMP 3.2, 3.5 & 4.1 Potential Illicit Discharges
IDDE TRACKING Form

Date Illicit Discharge Observed/Reported: 11/02/2015
Outfall # (if applicable): 3

Description of IDDE: Construction vehicle related to Phase III project on Campus
dripped small amounts of diesel fuel on paved service

Date of Investigation: 11/02/2015

Was the Source found?  X Yes  □ No

If “Yes”, please describe: Construction water tank truck. Fuel tank had a small drip from tank.

Was IDDE Resolved?  X Yes  □ No

If “Yes”, please explain how it was resolved (Please include any personnel or outside parties contacted or involved):
Source was found and covered. Areas where fuel was on asphalt was covered with absorbent material and swept up. Closest DI was blocked with absorbent tube. No fuel found at outfall 3 upon investigation.

If “No”, please explain why it was not resolved:

Is any follow-up action required?  □ Yes  X No

If “Yes”, please explain:

Date investigation closed: 11/02/2015

Attach photos to this form and retain for records.
Illicit Discharge – 11/2/2015 – Midlohtian Campus

IDDE Issue: Minor fuel drip from construction water tank truck’s fuel tank

Fuel from truck

Absorbent material

Absorbent socks used to block flow to DI

No fuel found at outfall after several inspections
IDDE TRACKING Form

Date Illicit Discharge Observed/Reported: 11/10/2015 (reported)  
Outfall # (if applicable): N/A

Description of IDDE: Received notification of oil/fuel leaking from a truck affiliated with the truck driving program. Per notification, leak was near storage units at the rear of F-lot.

Date of Investigation: 11/10/2015

Was the Source found? □ Yes ☒ No

If “Yes”, please describe: Was unable to find any leaks in areas or in the vicinity (see attached pictures).

Was IDDE Resolved? □ Yes ☒ No

If “Yes”, please explain how it was resolved (Please include any personnel or outside parties contacted or involved):

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

If “No”, please explain why it was not resolved: No leaks were found in area. It was raining on-site which should have assisted in identifying oil/petroleum based products, but none was found.

Is any follow-up action required? □ Yes ☒ No

If “Yes”, please explain:
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

Date investigation closed: 11/11/2015

Attach photos to this form and retain for records.
Illicit Discharge Notification – 11/10/2015 – JTCC Chester Campus

IDDE Issue: Fuel/oil leaking from truck near storage containers in F-lot

No oil/fuel found in area of complaint or in vicinity. Dark areas on pavement is water seeping up from crack in pavement and rain from truck

No oil/fuel found in area of complaint or in vicinity. Puddles of rain in picture did not contain any fuel/oil
IDDE TRACKING Form

Date Illicit Discharge Observed/Reported: 11/30/2015  Outfall # (if applicable): 6

Description of IDDE: Transmission from Truck Driving Program dripping fluid on pavement in rain
(email notification attached)

Date of Investigation: 11/30/2015

Was the Source found?  □ Yes  □ No
If “Yes”, please describe: Transmission body of truck.

Was IDDE Resolved?  □ Yes  □ No
If “Yes”, please explain how it was resolved (Please include any personnel or outside parties contacted or involved):
Source was found and covered. Areas where fuel was on asphalt was covered with absorbent material and swept up. Closest DI was blocked with absorbent tube. No fuel found at outfall 6 upon multiple investigations.

If “No”, please explain why it was not resolved:

Is any follow-up action required?  □ Yes  □ No
If “Yes”, please explain:

Date investigation closed: 11/30/2015

Attach photos to this form and retain for records.
Transmission unit not stored properly

Transmission unit removed

DI blocked

DI blocked – additional oil dry

Clean Harbors removed materials
Hello Greg,

I am sorry for not getting back to you sooner. Based on your investigation and actions with regard to the truck transmission, there no longer appears to be any issues associated with petroleum releases at this site. I have closed the complaint on our end. If you have any questions or concerns, please don’t hesitate to contact me.

Jeremy Kazio | DEQ-PRO Pollution Response Coordinator | 804-527-5042 (OF) | 804-382-0925 (C) | 4949-A Cox Rd., Glen Allen VA 23060

Good afternoon Mr. Taylor, just following up to see if you or Mr. Kazio needed anything further from JTCC to close this matter. Thank you again forwarding the notification.

Greg

Greg A. Dunaway
Director of Facilities and Safety
John Tyler Community College
800 Charter Colony Parkway
Midlothian, Virginia, 23114
Midlothian Phone: (804) 594-1430
Chester Phone: (804) 706-5063
gdunaway@jtcc.edu

From: Dunaway, Gregory [mailto:Gdunaway@jtcc.edu]
Sent: Monday, December 07, 2015 3:57 PM
To: TaylorDA@chesterfield.gov
Cc: FlaniganS@chesterfield.gov; Kazio, Jeremy (DEQ)
Subject: RE: Illicit Discharge Notification

From: Dunaway, Gregory
Sent: Monday, November 30, 2015 4:18 PM
To: Taylor, David <TaylorDA@chesterfield.gov>
Cc: Kazio, Jeremy (DEQ) <Jeremy.Kazio@dept.virginia.gov>; Flanigan, Scott <FlaniganS@chesterfield.gov>; Grinnan, Susan <sgrinnann@jtcc.edu>; McGinty, Mac <MMcGinty@ccwa.vccs.edu>
Subject: RE: Illicit Discharge Notification
Thank you Mr. Taylor for providing this information.

I have previously spoken with Mr. Sano. On November 10, 2015, Mr. Sano called me regarding petroleum products in the truck driving area at the JTCC Chester Campus. I immediately inspected the areas that we discussed. I was unable to find any spills or evidence of spills in the area stated or parking areas utilized by the Truck Driving Program, where Mr. Sano was a former instructor. I was also unable to locate any evidence of petroleum products in the outfalls downstream upon 2 separate inspections that day. Attached you will find my IDDE tracking form with pictures related to Mr. Sano’s notification on November 10, 2015.

Today (11/30/15) upon receiving your notification, I inspected the area again. I did find a transmission unit that was in the process of being removed from Campus left uncovered. Due to the rain, residual fluids had begun to drip onto the pavement and work towards the closest DI. It appears that the fluids were drained from the transmission properly, but residual material was running off the unit, due to the tarp blowing off and rain falling on the unit. The DI’s in the area were barricaded and oil dry was laid down as well, as a precautionary measure. Upon inspection, it did not appear that petroleum products had made it to the DI’s or outfall. Due to the continued rain, I called in Clean Harbors to remove the water barricaded and assist with cleaning the oil dry in the area. The transmission unit was picked up by the vendor as well. Upon my last inspection of the outfall (approx. 30 mins ago) I did not appear that there was any petroleum product in the outflowing storm water DI or outfall. I am continuing to document this event, I have attached pictures from today’s events. We will complete a IDDE tracking form upon the conclusion of this rain event, if there is no appearance of material in the outfall.

Please let me know if you have any questions/comments. Thanks you,

Greg

Greg A. Dunaway
Director of Facilities and Safety
John Tyler Community College -- Defining Your Future
800 Charter Colony Parkway
Midlothian, Virginia, 23114
Midlothian Phone: (804) 594-1430
Chester Phone: (804) 706-5063
gdunaway@jtcc.edu

From: Taylor, David [mailto:TaylorDA@chesterfield.gov]
Sent: Monday, November 30, 2015 9:51 AM
To: Dunaway, Gregory
Cc: Kazio, Jeremy (DEQ) (Jeremy.Kazio@deq.virginia.gov); Flanigan, Scott
Subject: Illicit Discharge Notification

Good morning,

On Wednesday, November 25, at 10:15am, we received a call on our 24 hour illicit discharge notification hotline about illicit discharge activities that have occurred on the John Tyler Community College – Chester Campus. The report indicated that automotive fluids have been improperly discharged onto impervious surfaces on the southernmost parking lot area of the campus at the end of Moyar Drive. Apparently, spills have occurred in this area that have not been properly contained or cleaned up, and general neglect of automotive equipment has resulted in
fluids being discharged to the parking area. Additionally, the reporting party indicated that motor oil was allowed to discharge directly onto the parking lot surface.

The reporting party’s contact information is as follows:

Jack Sano
804-389-2896

Please let me know if you have any questions or concerns or if I can be of any assistance moving forward. Also, please note that I have copied the pollution response coordinator for the Virginia Department of Environmental Quality (Jeremy Kazio) on this email.

Thank you,

David A. Taylor
Stormwater Compliance Specialist
Chesterfield County Environmental Engineering - Watershed Management
9800 Government Center Parkway | P.O. Box 40 | Chesterfield, VA 23832
P: 804-751-4652 | M: 804-929-0768 | taylorda@chesterfield.gov
Illicit Discharge Hotline: 804-717-6161

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Appendix E- BMP 5.2 SWM Facility Tracking Database

(Electronic Database Provided as Enclosure)