

Minimum Control Measure #1 - Public Education and Outreach on Stormwater Impacts

Eastern State Hospital (ESH) will implement a public education program through various Best Management Practices to distribute educational materials to the hospital community (employees) and conduct other similar outreach activities about the impacts of stormwater discharges on water bodies and the steps that the community can take to reduce pollutants in stormwater runoff. ESH will continue to develop and distribute its education material using diverse strategies to target the non-tradition and specific audience that the ESH community entails. ESH will use the following Best Management Practices to meet the stated objective of MCM #1. The Responsible Party for all BMP's identified in the MS4 Program Plan will be the B&G Superintendent.

Proposed BMP	Elements of BMP	Measurable Goal and Effectiveness	Target Date	Items Included in Annual Report	Compliance Status	Plans for next permit year
1a. Education on Stormwater Discharges to Impaired Waters	In addition to its existing education program, ESH will educate the hospital community on discharges to impaired waters, in particular, Powhatan Creek. ESH will continue to use diverse media (including but not limited to the weekly bulletin, website, and annual training). Materials will be revised, as needed, to appropriately address Powhatan Creek. Website will include links to existing information from various agencies such as the EPA and DCR.	<ul style="list-style-type: none"> • Track the number of materials that have been published and distributed. • Qualitatively track the number of materials that are taken by the community • Include a "ticker counter" on ESH website. 	<ul style="list-style-type: none"> • Continue through the permit cycle. 	<ul style="list-style-type: none"> • Copies of the education material and the website address. • Qualitative summary of materials taken. • Website address. • Ticker counter summary. 	<ul style="list-style-type: none"> • Meeting compliance requirements. 	<ul style="list-style-type: none"> • Ensure new employees are trained on stormwater plan and continue to review plan with veteran employees.
1b. Education on Hazards Associated with Illegal Dumping	In addition to its existing education program, ESH will educate the hospital community on hazards associated with illegal dumping. ESH will continue to use diverse media (including but not limited to the weekly bulletin, website, and annual training) to increase education on illegal dumping. Materials will be revised, as needed.	<ul style="list-style-type: none"> • Track the number of materials that have been published and distributed. • Qualitatively track the number of materials that are taken by the community. • Include a "ticker counter" on ESH website. 	<ul style="list-style-type: none"> • Continue through the permit cycle. 	<ul style="list-style-type: none"> • Copies of the education material and the website address. • Qualitative summary of materials taken. • Website Address. • Ticker counter summary. 	<ul style="list-style-type: none"> • Meeting compliance requirements. 	<ul style="list-style-type: none"> • Ensure new employees are trained on illegal dumping hazards and use available resources to continue and reinforce education.
1c. Involvement in Water Quality Improvement Projects	ESH will continue its participation in activities that promote improved water quality in the area. ESH will continue to participate in its annual VDOT Adopt-A-Highway program as well as conduct quarterly trash pickups on the campus property.	<ul style="list-style-type: none"> • ESH will participate in at least one Adopt-A-Highway event, annually. • ESH will conduct at least four trash pickups events, annually. • ESH will post the dates of such improvement projects on its website. 	<ul style="list-style-type: none"> • Continue through the permit cycle. 	<ul style="list-style-type: none"> • A summary of improvements projects. 	<ul style="list-style-type: none"> • Meeting compliance requirements. 	<ul style="list-style-type: none"> • ESH will continue to participate in the Adopt-A-Highway program and campus grounds trash pickups.

Minimum Control Measure #2 - Public Participation and Involvement

ESH will implement a public involvement program through various Best Management Practices to encourage public involvement regarding stormwater control measures on campus property. ESH will use the following Best Management Practices to meet the stated objective of MCM #2. The Responsible Party for all BMP's identified in the MS4 Program Plan will be the B&G Superintendent.

Proposed BMP	Elements of BMP	Measurable Goal and Effectiveness	Target Date	Items Included in Annual Report	Compliance Status	Plans for next permit year
2a. Reporting Procedures	ESH will develop reporting procedures for notifying appropriate personnel of stormwater observations and possible violations. Procedures will also be developed for receipt and consideration of information submitted by the public for construction related issues. Such information will be integrated into the educational material.	• Track the number of communications/complaints that are received.	• Continue through the permit cycle.	• Copies of the education material. • A summary of communications/complaints.	• Meeting compliance requirements.	• Continue to integrate information into educational materials and ask for feedback on effectiveness of written materials. Use feedback to improve the quality of the written materials.
2b. Availability of MS4 Program Plan and Annual Report	ESH will make available both its MS4 Program Plan and its annual reports. These documents will be posted on the ESH website, which would be available for download. ESH will develop procedures to record comments that are received from the community.	• Track the number of comments received by the community.	• Continue through the permit cycle.	• A summary of comments received.	• Meeting compliance requirements.	• Review community comments and integrate improvements into training documentation to improve MS4 program.
2c. Increased Involvement in Water Quality Improvements Projects	ESH will continue to promote community involvement by posting dates of activities on its website as well as other forms of communication, if appropriate.	• ESH will post the dates of improvement projects on its website as well as the number of attendees.	• Continue through the permit cycle.	• A summary of improvements projects.	• Meeting compliance requirements.	• Post associated activities to website to include community.

Minimum Control Measure #3- Illicit Discharge Detection and Elimination

ESH will implement a program through various Best Management Practices to effectively detect and eliminate illicit discharges into the hospital's MS4. ESH will use the following Best Management Practices to meet the stated objective of MCM #3. The Responsible Party for all BMP's identified in the MS4 Program Plan will be the B&G Superintendent.

Proposed BMP	Elements of BMP	Measurable Goal and Effectiveness	Target Date	Items Included in Annual Report	Compliance Status	Plans for next permit year
3a. Stormwater Drainage System Map	ESH will update and consolidate its stormwater drainage system map. The map will show all known outfall locations, the associated receiving water body, and the associated HUCs. As the drainage system changes due to development, the map will updated in a timely manner.	<ul style="list-style-type: none"> Maintain a current and accurate stormwater drainage system map 	<ul style="list-style-type: none"> Continue through the permit cycle. 	<ul style="list-style-type: none"> Status of map as well as date of latest revision. 	<ul style="list-style-type: none"> Meeting compliance requirements. 	<ul style="list-style-type: none"> Continue to maintain and update maps as needed.
3b. Illicit Discharge Screening	ESH will develop a "Task Report", which will be used as the illicit discharge screening system, under its existing Preventive Maintenance (PM) program. The "Task Report" will include appropriate screening items that meet the objective of the publication entitled "Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment, Environmental Protection Agency." If any illicit discharges and/or suspect discharges are found a "Corrective Action Report" will be generated.	<ul style="list-style-type: none"> Develop and maintain an effective screening system. The goal for this BMP will be the development and implementation of screening procedures as well as tracking the number of illicit discharges detected through such screening procedures. 	<ul style="list-style-type: none"> Continue through the permit cycle. 	<ul style="list-style-type: none"> Copies of the Task Report and Corrective Action Report templates. 	<ul style="list-style-type: none"> Meeting compliance requirements. 	<ul style="list-style-type: none"> Continue to report any discharges and create corrective action reports as necessary.
3c. Illicit Discharge Tracking System	Develop a system to effectively track the number of illicit discharges identified through the Task Report system. The system will include a total count of the number of occurrences as well as a narrative on how they were controlled or eliminated.	<ul style="list-style-type: none"> Develop and maintain an effective tracking system. ESH will screen all of its outfalls, annually. The goal for this BMP will be measured by the number of illicit discharges detected and the overall elimination or reduction of such discharges. 	<ul style="list-style-type: none"> Continue through the permit cycle. 	<ul style="list-style-type: none"> A summary of the illicit discharges identified and measures taken to control or eliminate. 	<ul style="list-style-type: none"> Meeting compliance requirements. 	<ul style="list-style-type: none"> Continue established reporting procedures.

Minimum Control Measure #4 - Construction Site Stormwater Runoff Control

ESH will implement a program through various Best Management Practices to reduce pollutants in any stormwater runoff from the MS4 from construction activities that result in land disturbances of greater than or equal to 2,500 square feet in all areas of the campuses. The Eastern State Hospital will use the following Best Management Practices to meet the stated objective of MCM #4. The Responsible Party for all BMP's identified in the MS4 Program Plan will be the B&G Superintendent.

Proposed BMP	Elements of BMP	Measurable Goal and Effectiveness	Target Date	Items Included in Annual Report	Compliance Status	Plans for next permit year
4a. Erosion and Sediment Control During Construction	As a State agency, ESH must follow the State review process for plans and drawings, which includes submissions to the Bureau of Capital Outlay Management, the Department of Environmental Quality, the Department of Conservation and Recreation, etc. This review process ensures that the required DCR approvals and permits are obtained prior to construction and in accordance with State and federal law pertaining to construction projects. Copies of all necessary permits (i.e. VSMP construction permit) will be provided to the office of the Director of Operations as part of the construction documents. In addition, unlike typical MS4's (i.e., counties and cities) where most of the development involves private entities, any construction that occurs on the respective campuses is managed and operated by the hospital and its representatives. Therefore, ESH and the DBHDS have inherent control over the construction activities that occur on each campus through the use of the General Conditions of the Construction Contract document developed by the Department of General Services (DGS).	<ul style="list-style-type: none"> Continue current practices that ensure compliance with appropriate state and federal laws pertaining to construction projects. 	<ul style="list-style-type: none"> Continue through the permit cycle. 	<ul style="list-style-type: none"> The typical language included in all construction documents/specifications related to stormwater runoff control measures. 	<ul style="list-style-type: none"> Meeting compliance requirements. 	<ul style="list-style-type: none"> Plans will be submitted as required for any construction projects along with all required permits.
4b. Construction Site Inspection	ESH will develop and employ procedures for site inspection and enforcement of control measures. During the actual construction phase, a State certified Erosion and Sediment Control inspector will inspect the site for all erosion and sediment control measures provided by the contractor to ensure that the contractor continues to maintain these measures throughout the project.	<ul style="list-style-type: none"> The goal for the BMP will be measured by the site inspections performed and the documented findings and the severity of those findings. 	<ul style="list-style-type: none"> Continue through the permit cycle. 	<ul style="list-style-type: none"> Number of inspections performed and associated dates & findings. Any corrective actions that may have resulted from inspections. 	<ul style="list-style-type: none"> Meeting compliance requirements. 	<ul style="list-style-type: none"> Inspections will be requested for any construction projects.
4c. Land Disturbance Activity Tracking System	ESH will track regulated land-disturbing activities and submit the total number of regulated activities and total disturbed acreage.	<ul style="list-style-type: none"> Track the number of regulated land-disturbing activities 	<ul style="list-style-type: none"> Continue through the permit cycle. 	<ul style="list-style-type: none"> A summary of regulated activities. 	<ul style="list-style-type: none"> Meeting compliance requirements. 	<ul style="list-style-type: none"> Tracking procedures will continue as established.

Minimum Control Measure #5 - Post-Construction Stormwater Management in New Development and Redevelopment

Eastern State Hospital will implement a program through various Best Management Practices to enforce procedures to address stormwater runoff to the MS4 from new development and redevelopment projects that disturb greater than or equal to 2,500 square feet in all areas of the hospital. The Eastern State Hospital will use the following Best Management Practices to meet the stated objective of MCM #5. The Responsible Party for all BMP's identified in the MS4 Program Plan will be the B&G Superintendent.

Proposed BMP	Elements of BMP	Measurable Goal and Effectiveness	Target Date	Items Included in Annual Report	Compliance Status	Plans for next permit year
5a. Stormwater Controls	ESH must follow the State review process of plans and drawings, which includes submissions to the Bureau of Capital Outlay Management (to ensure compliance with Construction & Professional Services Manual), the Department of Environmental Quality, the Department of Conservation and Recreation, etc. This review process ensures that projects are initially designed using state technical criteria and that the required approvals and permits are obtained prior to construction and in accordance with the Virginia Stormwater Management Act (VSMA). Any construction that occurs on the respective campuses is managed and operated by the campus and its representatives. Therefore, ESH and DBHDS have inherent control over the construction activities that occur on each campus through the use of the General Conditions of the Construction Contract document developed by the DGS.	<ul style="list-style-type: none"> Continue current practices that ensure compliance with appropriate state and federal laws pertaining to stormwater management. 	<ul style="list-style-type: none"> Continue through the permit cycle. 	<ul style="list-style-type: none"> The typical language included in all construction documents/ specifications related to stormwater runoff control measures. 	<ul style="list-style-type: none"> Meeting compliance requirements. 	<ul style="list-style-type: none"> ESH and DBHDS will continue inherent controls over any construction activities.
5b. Site Inspection and Maintenance	ESH will continue a program for the periodic inspection and maintenance of structural stormwater controls after construction has been completed and the building turned over to the hospital. ESH will revise its current "Task Report" for annual cleaning of storm drains to meet this state objective of this MCM. If degradations and obstructions are observed, necessary steps will be taken to correct the findings using a "Corrective Action Report". During adverse weather, any drains that are observed to be backed up due to debris or foliage are opened up and allowed to flow freely.	<ul style="list-style-type: none"> The goal for this BMP will be measured by the number of inspections performed and the associated findings. ESH will inspect all of its stormwater facilities, annually. 	<ul style="list-style-type: none"> Continue through the permit cycle. 	<ul style="list-style-type: none"> The following items will be included in the Annual Reports: <ul style="list-style-type: none"> The number of inspections performed & the associated findings. Any corrective action or maintenance that occurred as a result. 	<ul style="list-style-type: none"> Meeting compliance requirements. 	<ul style="list-style-type: none"> Revisions will be made to procedures for annual cleaning of storm drains and cleanings if necessary. Will continue to maintain current established procedures for maintenance of debris and foliage to ensure free flow to drains.
5c. Permanent Stormwater Management Tracking System	The objective for this BMP is to develop a tracking system for all permanent stormwater management facilities. ESH, where installed, will track all known permanent stormwater management facilities that discharge to the MS4 including the following information: type of BMP, HUC, receiving water body, and acres treated.	<ul style="list-style-type: none"> The goal for this BMP will be measured by the tracking system developed. 	<ul style="list-style-type: none"> Continue through the permit cycle. 	<ul style="list-style-type: none"> The following items will be included in the Annual Reports: <ul style="list-style-type: none"> Type of BMP, HUC, receiving body, and acres treated. 	<ul style="list-style-type: none"> Meeting compliance requirements. 	<ul style="list-style-type: none"> B&G will continue to maintain tracking stormwater activities and update as necessary.

Minimum Control Measure #6 - Pollution Prevention/Good Housekeeping for Facility Operations

Eastern State Hospital will implement an operation and maintenance program through various Best Management Practices that have the ultimate goal of preventing or reducing pollutant runoff from facility operations.. The Eastern State Hospital will use the following Best Management Practices to meet the stated objective of MCM #6. The Responsible Party for all BMP's identified in the MS4 Program Plan will be the B&G Superintendent.

Proposed BMP	Elements of BMP	Measurable Goal and Effectiveness	Target Date	Items Included in Annual Report	Compliance Status	Plans for next permit year
6a. Training	ESH will continue to utilize existing training programs (including but not limited to annual training for Buildings & Grounds, Transportation, Security, and Housekeeping). In addition, ESH will incorporate an educational video on MS4 and Pollution Prevention to selected departments.	<ul style="list-style-type: none"> The goal for this BMP will be measured by the number of individuals trained on an annual basis. 	<ul style="list-style-type: none"> Continue through the permit cycle. 	<ul style="list-style-type: none"> Summary of the training material and those departments in attendance. 	<ul style="list-style-type: none"> Meeting compliance requirements. 	<ul style="list-style-type: none"> Employee feedback will be reviewed as to the effectiveness of current training. Training materials will be enhanced to meet the needs of the ESH community.
6b. Materials Handling and Storage	ESH will develop materials handling and storage procedures that effectively address the following issues: Eliminate illicit discharges from storage yards, fleet or maintenance shops, and outdoor storage areas. Waste materials are properly disposed. Materials that are soluble or erodible shall be protected from exposure to precipitation.	<ul style="list-style-type: none"> The goal for this BMP will be the elimination of illicit discharges from facility operations as well as proper disposal of all waste materials. 	<ul style="list-style-type: none"> Continue through the permit cycle. 	<ul style="list-style-type: none"> The following items will be included in the Annual Reports in relation to the scheduled outline: Corrective action or steps taken to eliminate illicit discharges from facility operations, and Inventory use records. 	<ul style="list-style-type: none"> Meeting compliance requirements. 	<ul style="list-style-type: none"> Storage area for waste materials will be moved to Building 19 for protection form exposure.
6c. Nutrient Management	Nutrients are not applied to ESH property DCR has been notified regarding the hospital's status	N/A	N/A	N/A	N/A	N/A