5.0 CONSTRUCTION SITE RUNOFF CONTROL

HIARNG has developed this Construction Site Runoff Control Program to reduce the discharge of pollutants from construction projects occurring on State and Federal Military facilities and/or property to the MEP. Specifically, soil exposed and disturbed by construction activities is considered a significant source of stormwater pollution. Additionally, construction activities may add impervious surfaces such as buildings, roads, and parking lots which alter the natural hydrology of the land by increasing the volume and velocity of stormwater runoff by decreasing its infiltration capacity. This additional stormwater runoff may result in more pollutants that enter the MS4 and receiving water.

The Construction Site Runoff Program includes the following BMPs:

- Implement the *Construction, Repair, and Maintenance Stormwater Best Management Practices Manual*;
- Implement and maintain an inventory of all construction projects on State and Federal Military facilities and/or property and track project information;
- Review and approve the appropriate Stormwater Pollution Prevention Plan (SWPPP) and other pollution prevention measures (e.g., for Erosion and Sediment Control, Grading, Post-construction BMP and Landscaping) or similar plans/documents prior to approval of a project's construction plans and specifications;
- Conduct initial, monthly, and all other necessary inspections throughout the duration of the construction project implementing the approved inspection forms, and track inspections in the AMD;
- Implement enforcement actions and assess any penalties for projects in non-compliance with HIARNG's policies, standards, and project-specific requirements and permits. Develop, implement and enforce the HIARNG *Enforcement Response Plan*;
- Implement Annual Training on the Construction Site Runoff Control Program, *Construction, Repair, and Maintenance Stormwater Best Management Practice Manual*, and enforcement of non-compliance; and,
- Implement an educational program to ensure inclusion of all project applicants, contractors, and other responsible parties have an understanding of the HIARNG stormwater requirements.

5.1 BMP IMPLEMENTATION

Part D.1.d.(1) of the Permit requires the implementation of the *Construction, Repair, and Maintenance Stormwater Best Management Practices Manual* (Appendix H), which includes standards from the Construction BMPs Field Manual, Maintenance Activities BMPs Field Manual, and Stormwater Permanent BMPs Field Manual. The *Construction, Repair, and Maintenance Stormwater Best Management Practices Manual* will be implemented at all HIARNG facilities to provide guidance to all personnel, tenants, employees, and contractors involved in construction, repair or maintenance activities, regardless of project size and scope in accordance with Part

D.1.d.(1) and Part D.1.d.(2) of the Permit.

The *Construction, Repair, and Maintenance Stormwater Best Management Practices Manual* references the applicable DoD guidance Unified Facilities Criteria (UFC) 03 210 10 Low Impact Development and provides step by step instructions for NPDES permitting and compliance at construction sites. The *Construction, Repair, and Maintenance Stormwater Best Management Practices Manual* is updated as necessary, or at least once per permit term to include descriptions of new or modified BMPs, including permanent BMPs and low impact development (LID) practices.

5.2 INVENTORY OF CONSTRUCTION SITES

HIARNG's ENV maintains an inventory spreadsheet that is utilized to track State and Federal Military facilities and/or property construction projects. Information on each project includes, but is not limited to the following:

- Permit or File Number, if applicable;
- Status of Plan Review and Approval;
- Inspection Dates;
- Enforcement Actions, if applicable; and,
- Notice of General Permit Coverage (NGPC) under HAR 11-55 Appendix C, if applicable.

5.3 PLAN REVIEW AND APPROVAL

HIARNG's ENV is responsible for reviewing the Scope of Work, design drawings, NOI, and SWPPP, if applicable, to ensure they comply with the *Construction, Repair, and Maintenance Stormwater Best Management Practices Manual*, HAR 11-55 Appendix C, and any local and/or regulatory requirements. This review also ensures LID and appropriate BMPs have been included in the proposed Scope of Work. The goal is to ensure measures will be implemented to reduce pollutant discharge at the site to the Best Practicable Control Technology (BPT), Best Available Technology (BAT), and Best Conventional Pollution Control Technology (BCT) discharge requirement, consistent with the CWA and other federal and state requirements to ensure the project will not cause or contribute an exceedance of water quality standards.

The Water Quality Compliance Specialist utilizes the SWPPP Review Checklist found in the *Construction, Repair, and Maintenance Stormwater Best Management Practices Manual* to review and evaluate all SWPPPs and verify they contain the content and planning information required by HAR 11-55 Appendix A and HAR 11-55 Appendix C. Deficiencies found in the SWPPP will be corrected by the project contractor and recorded on the Log of Changes to the SWPPP also found in the *Construction, Repair, and Maintenance Stormwater Best Management Practices Manual*.

All State and Federal Military facilities and/or property construction projects require a permit or written equivalent approval for discharge connections to HIARNG's MS4. Each permit is maintained in HIARNG's AMD. Prior to issuing a construction project connection permit, discharge permit, or encroachment permit, the Water Quality Compliance Specialist will ensure

the following:

- Project Designer has provided proof of filing an NOI Form C or NPDES Application if disturbing one acre or more;
- Project Designer has provided proof of filing a NOI Form F and/or G or NPDES Application if hydrotesting effluent or construction dewatering effluent will occur at the project site; and,
- SWPPP or other documents relating to pollution prevention or similar have been reviewed and accepted.

HIARNG prohibits the commencement of any construction project until verification that the project receives an NGPC under HAR 11-55 Appendix C and satisfies the applicable requirements of the NPDES permit program unless the project will disturb less than one acre of land, including the staging area.

5.4 PROJECTS LESS THAN ONE ACRE

Construction projects that disturb less than one acre and will not impact HIARNG's MS4 may be considered exempt from documentation review and site inspection requirements under the Construction Site Runoff Control Program. The following activities are considered exempt:

- Minor land disturbance (i.e., minor landscaping activities and interior improvements)
- Post, pole, sign, and fencing installation;
- Utility repair work;
- Parking lot, driveway, and miscellaneous paved surface repair; and,
- Repair and maintenance activities.

For non-exempt projects that disturb less than one acre, the Project Designer must notify HIARNG ENV and provide a description of the project location, timeframe, and nearest receiving water body. These projects are still required to follow applicable BMPs listed in the *Construction, Repair, and Maintenance Stormwater Best Management Practices Manual* and may be subject to inspections described below.

5.5 INSPECTIONS

A critical aspect of the pollution prevention process is the requirement to inspect BMPs at construction sites. Different types of inspections are performed as a part of the HIARNG Construction Site Runoff Control Program which include initial and routine independent inspections.

HIARNG's NPDES Construction Inspection Form, provided in the *Construction, Repair, and Maintenance Stormwater Best Management Practices Manual* will be used to document the initial and routine inspections and will be maintained in HIARNG's AMD. Photographs supporting the inspector's findings will be provided as an attachment to the NPDES Construction Inspection Form. All corrective actions are required to be addressed by the timeline indicated for each

deficiency type: Critical; Major; and Non-critical as identified in Table 5-5.

TABLE 5-1: DEFICIENCY CATEGORY

Deficiency Type	Definition	Corrective Action Deadline
Critical	Poses immediate threat of discharge of pollutants to the MS4 or receiving water. Any issues that cause an illicit discharge if a storm event were to occur. Examples: spills that haven't been cleaned up, lack of proper perimeter control, and unprotected storm drain inlets.	Corrective actions are due at close of business day on the day of detection.
Major	Poses a significant threat of discharge of pollutants to the MS4 or receiving water. Examples: lack of NPDES permit (if required), lack of SWPPP or BMP Plan, perimeter BMPs are not functional, dewatering without BMPs.	Corrective actions due five calendar days after the detection or before the next forecasted rain event, whichever is sooner.
Non-Critical	Deficiency does not pose an immediate threat for discharge to the MS4 or receiving water. Examples: SWPPP or BMP Plan is not updated, contractor self-inspections are not conducted, BMPs are implemented but require maintenance.	Corrective action deadline is "as directed by the inspector" but typically due 30 days after the detection.

5.5.1 Initial Inspection

Prior to the initiation of ground-disturbing activities at any construction site, an engineer or qualified inspector employed or retained by HIARNG, shall inspect the site to verify BMPs have been installed correctly and in the correct locations as required by the plan. The initial inspection includes a review of:

- Site erosion and sediment controls;
- Good housekeeping practices; and,
- Compliance with plans or similar documents that have been approved by HIARNG.

Any areas that have the potential for erosion and sediment runoff or other pollutant discharges will be identified by the inspector and documented in the NDPES Construction Inspection Form. All deficiencies observed must be corrected and accepted by HIARNG prior to the start of ground disturbing activities.

5.5.2 Routine Independent Inspections

Independent BMP inspectors are defined as BMP-qualified personnel who are not involved in the day-to-day planning, design, or implementation of the construction contract. The independent inspectors will perform monthly BMP site inspections on all contract, in-house, and maintenance construction projects in addition to the inspections required by the NPDES permit.

Additionally, all construction projects with a connection permit, encroachment permit, or discharge of surface runoff permit/approval will be inspected monthly by an independent BMP inspector. If the project has a SWPPP or other equivalent document(s), the inspection shall also

verify that the BMPs were properly installed and at the locations specified in the Plan.

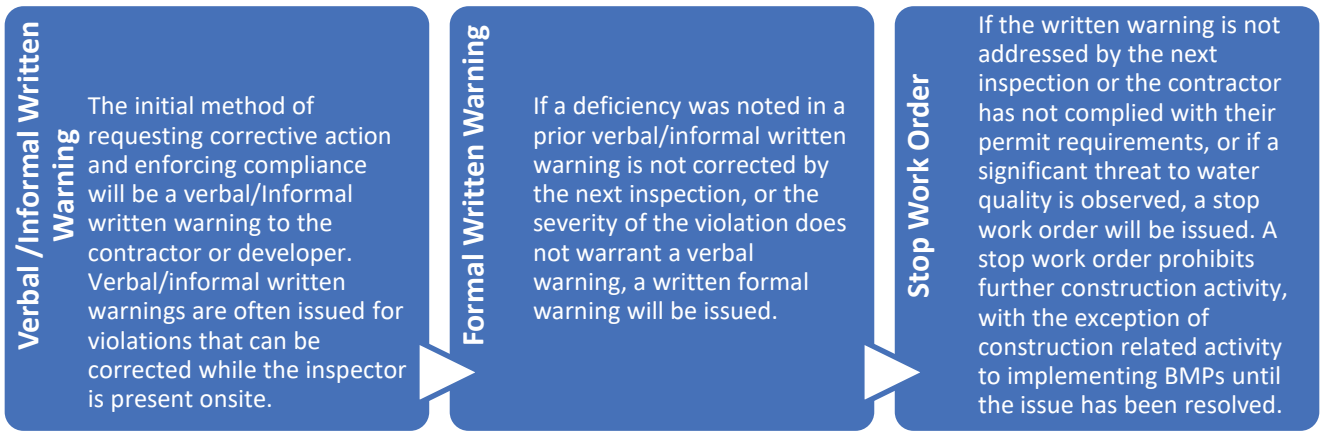
The inspection will include a documentation review including, but not limited to SWPPP or similar, applicable permits, site inspections, training records, etc. Inspectors will also verify that site conditions match the provided documents and that BMPs are properly maintained and effectively preventing pollutants from being discharged. A debrief, between the inspector and the site contractor representative to discuss deficiencies observed, will occur after the inspection has been completed. Through the HIARNG Project Manager, the site contractor representative will be notified of the deadline for corrective actions and a follow-up inspection may be scheduled. The site contractor representative will be required to sign the inspection form acknowledging the inspection results and corrective actions required. A copy of the signed inspection form acknowledging the inspection will be provided to the site contractor representative.

Any deficiencies identified during these inspections must be corrected by the contractor within the timeline indicated for each deficiency type. Photographs clearly indicating a deficiency has been addressed or providing documentation of items completed may be used to close out corrective actions. Follow-up inspections may be scheduled on an "as needed" basis but are not a requirement for every inspection. All critical deficiencies identified that cause an illicit discharge will be reported to the DOH.

5.6 ENFORCEMENT

Enforcement of construction project requirements is to be undertaken by HIARNG inspectors and staff with allocated enforcement authority through established policies and procedures. HIARNG drafted an *Enforcement Response Plan* (Appendix F) to provide guidance and establish procedures for appropriate corrective and enforcement actions as well as follow-up inspections when a construction site is not in full compliance with HIARNG's permits and/or standards.

There are several enforcement mechanism and penalties to ensure compliance discussed in the *Enforcement Response Plan*.



In the event HIARNG exhausts all enforcement procedures and cannot bring the contractor's construction site or construction operations into compliance or otherwise deems the site to pose an immediate and significant threat to water quality, human health, or environmental health,

HIARNG will notify DOH. HIARNG will provide email notification to DOH within one week of such determination. Following the email notification, a written notification will be completed to meet Part A.7. permit requirements and a copy of all inspection checklists, notes, and related correspondence will be provided within two weeks of the determination. If it has been determined that the site has not applied for permit coverage under the NPDES permit program, HIARNG will provide a written notification within two weeks of discovery.

5.7 TRAINING

Annual training on the Construction Site Runoff Control Program will be provided to all HIARNG personnel and contractors with construction stormwater responsibilities including, but not limited to engineers, construction and maintenance inspectors, and plan reviewers. Records of training will be maintained in the AMD.

5.8 MONITORING EFFECTIVENESS

The effectiveness of the HIARNG's Construction Site Runoff Control Program will be measured by specific cumulative metrics to determine its effectiveness. Any changes to the Construction Site Runoff Control Program will be included in the Annual Report.

TABLE 5-2 BMP IMPLEMENTATION SCHEDULE, ACTIVITY, AND MEASURABLE GOALS

Construction Site Runoff Control				
BMP Description	**BMP Activity**	**Measurable Goals**	**Responsible Department**	**Schedule**
Part D.1.d.(2) BMP Implementation	Require construction projects to implement BMPs and standards described in the *Construction, Repair, and Maintenance Stormwater Best Management Practice Manual*.	Inspect 100% of construction project to ensure BMPs are properly implemented.	ENV	Ongoing
Part D.1.d.(4) Plan Review and Approval	Conduct and document review of SWPPP and other applicable documents for planned construction activities.	Review 100% of SWPPPs and other applicable documents for construction activities.	ENV	Ongoing
Part D.1.d.(5) Inspections	Conduct initial and routine independent construction site inspections and utilize the HIARNG NPDES Construction Inspection Form. Track inspections.	Report the number of initial inspections and complete 100% of routine independent construction site inspections.	ENV	As Needed, Monthly
Part D.1.d.(6) Enforcement	Implement the *Enforcement Response Plan* to include written procedures for appropriate corrective and enforcement actions, and follow-up inspections.	Implement an *Enforcement Response Plan* by June 1, 2021.	ENV	June 1, 2021
Part D.1.d.(8) Training	Provide annual training on the Construction BMPs Program Plan to targeted groups.	Train 100% of individuals involved in construction stormwater responsibilities.	ENV	Annual, As Needed