STORMWATER MANAGEMENT AT NIST-GAITHERSBURG

NIST S 7301.10
Approval Date: 02/09/2022
Effective Date: xx/xx/xxxx

1. PURPOSE

The purpose of this suborder is to define the requirements and associated roles and responsibilities for stormwater management at the NIST-Gaithersburg Site.

2. BACKGROUND

The NIST Gaithersburg Site encompasses 579 acres and includes over 60 buildings. In 2021, impervious surfaces *e.g.*, pavement, building roofs, at the Gaithersburg Site include 35 acres of buildings and 64 acres of parking/loading areas, roads, and sidewalks.

Impervious surfaces prevent precipitation from infiltrating naturally into the soil. Precipitation that flows off impervious areas, stormwater runoff, is conveyed by drains and pipelines and released to nearby streams. As stormwater flows across an impervious surface it picks up pollutants including litter, oil, gasoline, anti-freeze, landscape debris, fertilizers, and sediments. Impervious surfaces also increase the amount of water discharging to streams, which during larger rain events, can erode and degrade stream channels. Stormwater management practices are intended to reduce the quantity and improve the quality of stormwater runoff.

In accordance with federal and state regulations (referenced below, in Section 4) the Maryland Department of the Environment (MDE) issued NIST a General Permit for Discharges from State and Federal Small Municipal Separate Storm Sewer Systems, also known as an MS4 Permit. This permit regulates discharges into the Gaithersburg Site's stormwater system with a primary emphasis on water quality, pollution prevention, and erosion control.

Under the MS4 permit, NIST must implement six minimum control measures that include Personnel Education and Outreach, Public or Personnel Involvement and Participation, Illicit Discharge Detection and Elimination, Construction Site Stormwater Runoff Control, Post Construction Stormwater Management, and Pollution Prevention and Good Housekeeping.

In addition, NIST must implement stormwater management practices, as part of the Chesapeake Bay Restoration Program, that will result in treating twenty percent of the currently untreated stormwater runoff from the NIST Gaithersburg Site.

NIST P 7300.00, the NIST Environmental Management Policy, articulates NIST's commitment to the management of stormwater in compliance with applicable regulations and permits.

3. APPLICABILITY

This suborder applies to all activities by NIST employees, associates, and contractors at the NIST Gaithersburg Site that may impact stormwater.

4. REFERENCES

Legal and other requirements common to all NIST Environmental Suborders can be found in Section 4 of NIST O 730.01. The legal and other requirements specific to this suborder are as follows:

a. Code of Federal Regulations (CFR), Title 40, Subchapter D

b. Code of Maryland Regulations (COMAR) Title 26, Subtitle 8 Water Pollution

c. MDE National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges from State and Federal Small Municipal Separate Storm Sewer Systems (MS4), General Discharge Permit No. 13-SF-5501 (latest version)

d. MDE General Permit for Stormwater Associated with Construction Activity, General NPDES Discharge Permit Number MDRC (latest version)

e. Public Law 110-140, *Energy Independence and Security Act, Section 438*

f. *USEPA Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act* (EPA841-B-09-001), dated December, 2009

g. *Maryland Stormwater Management and Erosion and Sediment Control Guidelines for State and Federal Projects* (latest version)

h. *Maryland Standards and Specifications for Soil Erosion and Sediment Control* (latest version)

i. *2000 Maryland Stormwater Design Manual, Volumes I & II* (latest version)

5. APPLICABLE NIST SUBORDERS

a. NIST S 7301.01: *Environmental Management System*

b. NIST S 7301.08: *Oil Storage and Handling at NIST-Gaithersburg*

c. NIST S 7301.06: *Chemical Waste Accumulation and Disposal at NIST-Gaithersburg*

d. NIST S 7301.12: *Wastewater Management at NIST-Gaithersburg*

e. NIST S 7401.01: *Fire Protection and Life Safety for Design and Construction*

6. REQUIREMENTS

a. General Requirements

(1) NIST shall implement a stormwater management program designed to reduce the discharge of stormwater pollutants to the maximum extent practicable. This shall be accomplished through the implementation of the six (6) minimum control measures described in Section 6.b below.

(2) NIST shall comply with Maryland state requirements for Chesapeake Bay Restoration and shall not exceed the total maximum daily loads (TMDLs), the maximum amount of an impairing substance that a water body can assimilate and still maintain water quality standards, for target pollutants such as nitrogen, phosphorus and sediment. This shall be accomplished by implementing the restoration and reporting requirements described in Section 6.c below.

(3) NIST shall take all reasonable steps to minimize or prevent any stormwater discharge that has a reasonable likelihood of adversely affecting human health or the environment.

(4) NIST shall submit reports, notifications, and other information to MDE as specified in the MS4 Permit and this suborder. All reports shall be signed by a duly authorized employee. This authority has been delegated to the NIST Gaithersburg Environmental Management Group Leader.

(5) Authorized Stormwater Discharges – In addition to precipitation, the following non-stormwater sources may discharge into the stormwater drainage system if not contaminated with pollutants:

(a) Landscape irrigation;
(b) Diverted stream flows;
(c) Rising groundwater;
(d) Uncontaminated groundwater infiltration;
(e) Uncontaminated pumped groundwater;
(f) Foundation drains;
(g) Air conditioning condensate;
(h) Irrigation water;
(i) Springs;
(j) Water from crawl space pumps;
(k) Footing drains;
(l) Lawn watering runoff;
(m) Flows from riparian habitats and wetlands;
(n) Residual street wash water;
(o) Discharges or flows from fire-fighting activities; and
(p) Dechlorinated potable water from hydrant flushing or fire flow testing.

Non-stormwater sources, stormwater associated with industrial activity, or discharges associated with construction activities may be authorized to discharge via the storm sewer system if such discharges are specifically authorized under an applicable NPDES discharge permit. NIST activities requiring specific NPDES discharge permits shall coordinate with the EMG to obtain the permits and maintain compliance requirements after permit issuance.

(6) Restricted Stormwater Discharges - Other than the items listed in (5), no materials shall be released to the storm drainage system at the NIST-Gaithersburg Site. Illicit discharges to storm water systems shall be prohibited at NIST. Contact the Environmental Management Group (EMG) at x5375, option 3 with any questions.

(7) Discharges into Sanitary Sewer System - Stormwater shall not be discharged into the sanitary sewer system. Any discharge into the sanitary sewer system shall meet the requirements of NIST S 7301.12: *Wastewater Management at NIST-Gaithersburg.*

(8) On an ongoing basis NIST shall evaluate new projects and changes to existing systems and equipment (*i.e.*, management of change) to determine the applicability of state and/or federal stormwater regulations, and any necessary actions that must be taken by NIST

prior to implementation, *e.g.*, Best Management Practice (BMP) implementation or permit modifications.

b. Minimum Control Measures

NIST shall implement best management practices (BMPs) necessary to meet the following minimum control measures and as specified in the NIST MS4 Permit.

(1) Personnel Education and Outreach

NIST shall implement and maintain a personnel education and outreach program to promote the reduction of stormwater pollution. The education and outreach program shall include information on the impacts of stormwater discharges on receiving waters, why controlling these discharges is important, and how personnel can contribute to stormwater pollution prevention. The personal education and outreach program shall determine the NIST target audience and educate them on the impacts of stormwater. Stormwater education materials shall be distributed through appropriate methods. Staff shall be able to report water quality complaints, *e.g.,* muddy water flowing from a construction site, to the Safety Assistance Number (x5375, Option 3).

(2) Personnel Involvement and Participation

NIST shall create and foster opportunities for public and/or staff participation in the MS4 management program for controlling stormwater discharges. The EMG shall host public and/or staff involvement and participation activities and determine the staff target audience. A minimum number of 5 public and/or staff participation events shall be held each 5-year permit term.

(3) Illicit Discharge Detection and Elimination

NIST shall implement and enforce an illicit discharge detection and elimination program to detect and eliminate illicit discharges into the stormwater system. Any discharges other than those authorized under Section 6.a(4), are considered illicit discharges. It is NIST policy that illicit discharges to the stormwater system shall be prohibited. NIST shall perform the following to comply with this requirement:

(a) Maintenance of updated stormwater system mapping;

(b) Annual field screening of outfalls;

(c) Inspections to identify sources of illegal discharges;

(d) Elimination of illegal connections or illicit discharges; and

(e) Immediate response to and remediation of spills and unauthorized releases to the stormwater system.

(4) Construction and Stormwater Runoff Control

NIST shall develop, implement, and enforce an acceptable erosion and sediment control program that complies with state and federal laws and regulations. For any construction activity that disturbs ≥5,000 ft^2 of earth or involves ≥100 yd^3 of earth movement, NIST shall prepare an Erosion and Sediment Control Plan and obtain approval and permitting from the MDE's Plan Review Division. Submitted plans shall be in compliance with the *Maryland Stormwater Management and Erosion and Sediment Control Guidelines for State and Federal Projects* (most recent revision), and MDE's *Maryland Standards and Specifications for Soil Erosion and Sediment Control* (most recent revision). NIST shall obtain MDE review and approval of Erosion and Sediment Control and Stormwater Management Plans prior to disturbing or moving any earth. NIST shall notify the MDE Compliance Division at least one week before a permitted project starts and schedule a pre-construction meeting or inspection.

For construction projects that disturb 1 acre or more NIST shall submit a Notice of Intent (NOI) to apply for coverage under MDE's General NPDES Permit for Stormwater Associated with Construction Activity. Projects with General NPDES permit coverage shall comply with all monitoring and recordkeeping requirements, *e.g.*, weekly and post rain event inspections of the construction site, specified in the permit. If the MDE General NPDES Permit for Stormwater Associated with Construction Activity is expired without a replacement permit, NIST projects shall follow MDE protocol and either submit a Declaration of Intent (DOI) to voluntarily adhere to the requirements of the expired permit or apply for an individual NPDES permit.

All construction activities at NIST that require soil disturbance, but do not meet the threshold for obtaining an MDE permit (sites disturbing < 5,000 ft^2 or <100 yd^3 of earth) shall also utilize appropriate sediment and erosion control practices as established by MDE in the *Maryland Standards and Specifications for Soil Erosion and Sediment Control* (most recent revision). Following completion of construction, each site shall be reseeded and replanted within seven days to control erosion and sediment runoff.

It is NIST Policy that any tree that is removed or dies shall be replaced in the same location or an approved alternate location.

The Safety Assistance Number (x5375, Option 3) shall be used to take calls for any stormwater issues related to construction activities. NIST staff who observe any stormwater issues are encouraged to call the Safety Assistance Number or contact an

OFPM representative to investigate. The complainant shall be notified of the investigation and findings within seven days.

Key government or contractor personnel managing or inspecting construction activities with MDE sediment and erosion control permits shall be certified via the MDE's Responsible Personnel Certification online training.

(5) Post-Construction Stormwater Management

NIST shall implement post construction stormwater management, in accordance with COMAR 26.17.02, for any new development and redevelopment that disturbs 5,000 square feet or more of land area.

NIST projects that exceed 5,000 square feet of soil disturbance shall also conform to the stormwater runoff requirements of Section 438 of the Energy Independence and Security Act of 2007 (EISA).

For all applicable projects, stormwater management plans shall be submitted to the MDE for review and approval. Plans shall be prepared in accordance with the *Maryland Stormwater Management and Erosion and Sediment Control Guidelines for State and Federal Projects* (February 2015) or most recent version for compliance with state stormwater management requirements.

NIST shall implement the principles, methods, and practices found in the latest version of the *2000 Maryland Stormwater Design Manual, Volumes I & II (Manual)*, and the latest version of MDE's *Maryland Stormwater Management Guidelines for State and Federal Projects*. This includes that environmental site design (ESD) be implemented to the maximum extent practicable (MEP).

(a) Reporting is required for Post Construction Stormwater Management

Annually; NIST shall report the following to the MDE:

i. Total number of stormwater management plans submitted to MDE for review and approval;

ii. Total number of as-built plans submitted to MDE and approved;

iii. Verification that BMPs are maintained in accordance with MDE requirements outlined in the approved stormwater management plans; and

iv. Training courses attended on BMP design, performance, inspection, and routine maintenance; and

v. An Urban BMP database for the NIST Gaithersburg Site that provides a stormwater BMP inventory with inspection and maintenance activities.

(b) Maintenance Required for Post Construction Stormwater Management
Stormwater Best Management Practices (BMPs) such as outfalls, bioretention, micro-bioretention, rain gardens, swales, ponds, retention areas, etc., shall be maintained according to requirements outlined in MDE approved stormwater management plans. All stormwater BMPs shall be visually inspected for maintenance issues annually at a minimum. Any deficiencies shall be addressed within the year. For deficiencies that cannot be addressed within a year, NIST shall implement a plan of action that shall be reported to MDE in annual reports.

(6) Pollution Prevention and Good Housekeeping
NIST-Gaithersburg shall implement and maintain a good housekeeping plan to reduce stormwater pollutants. NIST personnel with the potential to impact stormwater quality through their daily activities shall receive annual training designed to reduce or eliminate the discharge of pollutants during property operations. At NIST these personnel are mostly members of OFPM.

Stormwater pollution prevention and good housekeeping efforts shall be reported to MDE in annual progress reports.

c. Chesapeake Bay Restoration and Meeting Total Maximum Daily Loads
NIST shall comply with MS4 Permit requirements to reduce nutrient and sediment loads as part of the Chesapeake Bay Restoration Program. This shall be accomplished by treating stormwater runoff from twenty percent of the existing untreated impervious surfaces at NIST Gaithersburg. Compliance with restoration requirements shall be accomplished by performing the following:

(1) NIST shall develop and implement an Impervious Area Restoration Work Plan to include:

(a) A baseline impervious area assessment identifying the total impervious area at the NIST Gaithersburg Site and the impervious areas that are treated with acceptable water quality best management practices;

(b) An Urban BMP Database as described in Section 6.b(5)(a); and

(c) Activities and milestones that will be performed over the permit term to towards the twenty percent impervious area restoration requirement.

(2) This Impervious Area Restoration Work Plan shall be submitted to MDE annually as part of NIST's annual MS4 reports to MDE.

d. Monitoring and Reporting

(1) Monitoring
NIST shall conduct monitoring necessary to evaluate the effectiveness of the stormwater management program, including:

(a) An Annual Review of the Stormwater Management Program by EMG;

(b) Monitoring all construction projects with MDE approved erosion and sediment control plans for permit compliance by OFPM; and

(c) Monitoring all construction, excavation and earth disturbing activities include properly implemented erosion and sediment controls and that these controls are effective by OFPM.

(2) Reporting and Emergency Notifications

(a) The EMG shall conduct all reporting required by the MS4 Permit.

(b) In the event an accidental or unauthorized discharge occurs that may result in a violation of the permit requirements or negatively affect the environment, the EMG shall notify the following:

i. MDE Emergency Response Program: 1-866-633-4686; and

ii. As required, the National Response Center: 1-800-424-8802.

(c) The EMG shall submit an annual report to MDE regarding the status of the stormwater management program. Specific requirements and elements of the annual report are detailed in the MS4 Permit. The report is due on 31 October of each year.

e. Maintenance

(1) Stormwater BMPs subject to this Suborder shall be maintained in a manner that ensures compliance with performance requirements established in the MS4 Permit.

Stormwater management features require periodic inspection and maintenance to include removal of debris, weeding, shoring, mulching, replanting, cleaning, or replacement of piping, etc. A program of periodic inspection and maintenance shall be established and conducted by the Gaithersburg Facility Maintenance Division (GFMD).

(2) Records of maintenance activities shall be maintained per Step 6.h. below.

f. Evaluation of Compliance

(1) The NIST-Gaithersburg EMG shall conduct a compliance evaluation of this program on at least an annual basis. A standard checklist or spreadsheet maintained by EMG identifying the requirements of the MS4 permit and the status of actions implemented to comply with the requirements shall be used.

(2) Results of compliance evaluations shall be documented, coordinated with GFMD for any corrective actions needed, and records maintained per Section 6.h. below.

(3) Significant findings from compliance evaluations shall be addressed using the NIST EMS Suborder requirements for Non-Conformances, Corrective and Preventive Action.

g. Training

(1) All required training shall be provided and recorded in NIST *Safety Education and Training System* (SET). Training shall be provided to the following:

(a) NIST staff whose work could impact the stormwater system shall complete the training associated with this suborder NIST S 7301.10: *Stormwater Management at NIST Gaithersburg.*

(b) NIST staff that work with hazardous chemicals and generate chemical waste shall be trained through NIST S 7301.06: *NIST Gaithersburg Chemical Waste Accumulation and Disposal*.

(c) NIST Gaithersburg oil handling personnel performing tasks related to petroleum storage tanks or oil-filled equipment shall complete NIST S 7301.08: *NIST Gaithersburg Oil Spill Prevention and Response* training.

(2) Training for Construction Site Stormwater Runoff Control shall be provided to NIST personnel responsible for construction or projects through the *MDE's Responsible Personnel Certification* online training located at:

http://mderpc.mde.state.md.us/Account/login.aspx

(3) Training for Post Construction Stormwater Management shall be provided to staff responsible for proper stormwater BMP design, performance, inspection, and routine maintenance through courses such as the Montgomery County Department of Environmental Protection Stormwater Facility Maintenance Contractor Training or equivalent.

(4) Training for Pollution Prevention and Good Housekeeping shall be provided to NIST Personnel through trainings on the following programs:

(a) NIST S 7301.10: *Stormwater Management at NIST Gaithersburg*;

(b) NIST S 7301.08: *NIST Gaithersburg Oil Spill Prevention and Response;*

(c) NIST S 7301.06: *NIST Gaithersburg Chemical Waste Accumulation and Disposal*.

OFPM trainings on topics that reduce or eliminate the discharge of pollutants during property operations, such as proper pesticide/herbicide and road salt application, shall also satisfy this requirement. Training formats may include in-person, online, toolbox talks, and on-the-job.

h. Recordkeeping

NIST shall maintain records as necessary to demonstrate compliance with the MS4 Permit. These records and any supporting documentation shall be submitted to MDE upon request. NIST's MS4 program information and records shall be available to the public during regular business hours. NIST EMS Procedure 15.0 EMS Records Management in the EMS Suborder

and NIST S 7101.15: *SMS Documents and Records Control* shall be used to ensure proper identification, storage, protection, retrieval, retention, and disposal of records.

(1) Records needed to demonstrate compliance with general MS4 Permit requirements shall be maintained by the EMG. These include:

(a) Annual reports identified in Section 6.c(2)(c);
(b) Emergency notification reports;
(c) Regulatory correspondence;
(d) Compliance evaluation reports;
(e) Records of annual stormwater program compliance inspections;
(f) Training records;
(g) Education and outreach records;
(h) Personnel involvement and participation records;
(i) Maintenance records (produced by GFMD);
(j) Permit applications and related information;
(k) Construction Stormwater Management Reports and Stormwater BMP Drawings; and
(l) Current and historic permits, including construction permits.

(2) Records to demonstrate compliance with requirements identified in Section 6.

(3) All records required by this Suborder shall be maintained for a period of at least three (3) years after termination of the NIST MS4 Permit.

7. DEFINITIONS

Definitions common to all NIST EMS suborders can be found in Section 6 of NIST O 730.01.

a. Best Management Practice – Structural device or nonstructural practice designed to temporarily store or treat stormwater runoff to mitigate flooding and reduce stormwater pollution. Examples of best management practices include microbioretention basins, rain gardens, sand filters, and grass swales.

b. Contaminant – Any material that may negatively impact water quality. See *pollutant.*

c. Disturbance – An activity by which the surface cover, *e.g.,* grass or other vegetation, is removed or altered, therefore making the soil susceptible to erosion

d. Environmental Site Design – Design strategy, required by the Maryland Department of the Environment, for maintaining predevelopment stormwater runoff characteristics and protecting natural resources. Examples of environmental site design for stormwater include installing bioretention basins, rain gardens, and grassy swales.

e. Erosion and sediment controls – A system of protective measures, devices, and techniques, such as silt fence and inlet protection, that minimize soil erosion and off-site sedimentation.

f. Erosion and sediment control plan – An erosion and sediment control strategy and procedures designed in accordance with current MDE standards and approved by the MDE. The plan specifies control measures to be taken to minimizes erosion and prevent the off-site release of sediment at construction sites.

g. Illicit Discharge – Any discharge to the storm sewer system that is not composed entirely of stormwater runoff or other authorized discharges listed in Section 6.a.4. Examples include sanitary sewer lines mistakenly connected to the stormwater system or improperly discharging wastewater to the stormwater system.

h. Maintenance – An activity to repair or restore an asset to its original function

i. Minimum Control Measure – The minimum requirement to satisfy a regulatory condition. Minimum control measures are defined by NIST's MS4 permit.

j. Municipal Separate Storm Sewer System – A conveyance or system of conveyances that is:
   - owned by a state, city, town, village, or other public entity that discharges to waters of the U.S.,
   - designed or used to collect or convey stormwater, *e.g.*, storm drains, pipes, ditches,
   - not a combined sewer, and
   - not part of a sewage treatment plant, or publicly owned treatment works.

k. National Pollutant Discharge Elimination System – A permitting program authorized by the Clean Water Act and enforced by the Environmental Protection Agency and MDE that regulates discharges of pollutants into waters of the United States.

l. Notice of Intent – An application for coverage under an MDE general permit.

m. Pollutant – Per 40 CFR 122.2, any dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of

1954, as amended (42 U.S.C. 2011 *et seq.*)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

n. Post-Construction Stormwater Control Measures – Permanent stormwater control measures or BMPs that will remain in place after completion of construction in order to retain, detain, infiltrate, or treat stormwater discharges from impervious surfaces installed as part of a development or redevelopment project.

o. Stormwater Best Management Practice – Best management practice to control stormwater quality and quantity. Stormwater BMPs are structural, vegetative, or managerial practices used to treat, prevent, or reduce water pollution.

p. Stormwater Management Plan – A plan to manage stormwater runoff from newly constructed impervious areas. The plans are prepared in accordance with current MDE standards and are reviewed and approved by the MDE. Stormwater management plans use the principles of Environmental Site Design and typically require the installation of structural stormwater management practices such as micro-bioretention basins, rain gardens, swales, etc.

8. ACRONYMS

Acronyms common to all NIST EMS suborders can be found in Section 7 of NIST O 730.01. The acronyms specific to this suborder are as follows:

a. BMP – Best Management Practice

b. COR – Contracting Officer Representative

c. EMS – NIST Environmental Management System

d. EMG – Environmental Management Group which is part of the Gaithersburg Safety, Health, and Environment Division

e. EPA – U.S. Environmental Protection Agency

f. ESD – Environmental Site Design

g. GDCD – Gaithersburg Design and Construction Division

h. GFMD – Gaithersburg Facilities Maintenance Division

i. GSHED – Gaithersburg Safety, Health, and Environment Division (151)

j. MDE – Maryland Department of the Environment

k. MS4 – Municipal Separate Storm Sewer System

l. NPDES – National Pollutant Discharge Elimination System

m. NOI – Notice of Intent to apply for coverage under a general or individual permit from the MDE

n. OFPM – NIST Office of Facilities and Property Management

o. OSHE – NIST Office of Safety, Health and Environment

p. SET – NIST Safety Education and Training system

q. SPCC – Spill Prevention, Control and Countermeasures

9. RESPONSIBILITIES

Roles and responsibilities common to all NIST Environmental Suborders can be found in NIST O 7301.00. The roles and responsibilities specific to this suborder are as follows:

a. Chief Safety Officer (CSO) – As NIST's designated Environmental Manager, the CSO is responsible for overseeing NIST's efforts in complying with the requirements identified in this suborder.

b. OU Directors are responsible for:

(1) Establishing and implementing policies and procedures, as needed, for the requirements of this suborder to be met.

(2) Ensuring subordinate managers have the authority, resources, and training needed to implement OU-established policies, procedures to meet the requirements of this suborder.

(3) Using OU funds to pay any civil penalties identified in regulatory inspections and resulting from regulatory violations in their respective OUs.

c. Division Chiefs and Group Leaders are responsible for:

(1) Implementing this suborder as it applies to activities involving their personnel and space in accordance with any applicable OU-established policies and procedures.

(2) Ensuring contaminants and pollutants are handled in a manner preventing illicit discharges to the stormwater system.

(3) Ensuring OSHE and regulatory inspectors are provided access to areas under their supervision.

(4) Upon receiving inspection reports on their respective workplaces, ensuring corrective actions are performed and completed in the timeframe specified by the regulatory agency.

d. NIST-Gaithersburg Employees and Associates are responsible for the following:

(1) Ensuring their activities do not release pollutants to the stormwater system.

(2) Reporting to the NIST EMG (5375, Option 3) any activity that is suspected to release stormwater pollution or unauthorized discharges into the stormwater system.

(3) Reporting any spills or releases that could enter a storm drain to the emergency number (x2222).

e. Environmental Management Group Leader, Gaithersburg Safety, Health, and Environment Division, Office of Safety, Health, and Environment is responsible for the following:

(1) Ensuring compliance with monitoring, recordkeeping and reporting requirements established in the MDE MS4 stormwater discharge permit.

(2) Performing an internal compliance evaluation and program annual review once per calendar year at a minimum to verify ongoing compliance with the MS4 Permit.

(3) Reporting to the MDE as specified in Section 6.c.

(4) Communicating the regulatory requirements to affected personnel and providing training as necessary.

(5) Providing informational outreach to NIST staff regarding storm water and encouraging participation in local events.

(6) Ensuring review of site design packages to ensure that environmental site design is incorporated into any storm water management element.

(7) Performing field verification of construction projects to ensure that proper erosion and sedimentation practices are being employed and are effective.

(8) Performing annual inspections of Stormwater BMPs and reporting deficiencies to the GFMD.

(9) Performing annual illicit discharge outfall screenings per the NIST Standard Operating Procedures for Storm Water Outfall Inspection Illicit Discharge Detection and Elimination.

(10) Maintaining this Suborder, the Good Housekeeping Plan per Section 6.b(6), and the Impervious Area Restoration Workplan (included in the MS4 Annual Reports).

(11) Providing training as identified in Section 6.f.

(12) Maintaining general records identified in Section 6.g.

f. Division Chief, Gaithersburg Facility Maintenance Division, Office of Facilities and Property Management (OFPM) is responsible for the following:

(1) Ensuring fertilizer, herbicide, and pesticide application practices, equipment maintenance, and general landscaping are performed in a manner that minimizes storm water pollution and complies with the requirements identified in the Good Housekeeping Plan.

(2) Ensuring excavation and other earth-moving activities, conducted by GFMD personnel, are performed in a manner to minimize disturbance, minimize erosion and sedimentation and that proper erosion controls are implemented.

(3) Ensuring that disturbed soil is stabilized with seed and straw mulch or equivalent vegetative stabilization method within 7 days of project conclusion.

(4) Ensuring MDE permitting is obtained for GFMD projects that disturb $\geq$5,000 ft^2 of earth or involves $\geq$100 yd^3 of earth movement.

(5) Ensuring stormwater discharges associated with activities performed or managed by GFMD personnel comply with Section 6.a(4).

(6) Ensuring illicit discharges and illegal connections are promptly eliminated when discovered.

(7) Obtaining and maintaining training for GFMD personnel as identified in Section 6.f.

(8) Ensuring landscaping is performed in a manner that promotes soil stabilization, prevents erosion.

(9) Ensuring the site's storm water management features and storm sewer system are maintained as part of NISTs preventive maintenance program.

(10) Ensuring that stormwater BMP maintenance and inspections are performed in accordance with MDE approved stormwater management plans.

(11) Taking action to bring any failing stormwater BMPs into compliance.

(12) Ensuring any unauthorized release to the stormwater system or other nonconformance with this suborder is immediately reported to the EMG.

(13) Ensuring stormwater issues raised by NIST-Gaithersburg personnel or the public are addressed promptly.

(14) Maintaining updated mapping of the NIST storm sewer system identifying all stormwater conveyances, outfalls, stormwater best management practices (BMPs), and waters of the U.S. receiving stormwater discharges.

(15) Supporting NIST efforts for staff outreach and public participation events related to stormwater, *e.g.*, Earth Day tree planting and Take Your Child to Work Day.

(16) Maintaining records of maintenance activities on storm water BMPs in accordance with MDE requirements on approved stormwater management plans.

(17) Maintaining as-built drawings of all construction projects at NIST-Gaithersburg.

g. Gaithersburg Design and Construction Division Chief (GDCD), OFPM is responsible for the following:

(1) Ensuring for any construction activity that disturbs ≥5,000 ft^2 of earth or involves ≥100 yd^3 of earth movement:

(a) A stormwater management plan and erosion and sediment control plan are prepared, and MDE approval and permitting is obtained;

(b) As required, public notification requirements are met;

(c) Required monitoring and maintenance of erosion and sedimentation controls is conducted during the construction; and

(d) MDE erosion and sedimentation inspectors are escorted as needed.
Plans submitted to MDE shall be in compliance with the *Maryland Stormwater Management and Erosion and Sediment Control Guidelines for State and Federal Projects* (February 2015), *2000 Maryland Stormwater Design Manual, Volumes I & II* (May 2009), and MDE's *2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control* or most recent revisions.

(2) Ensuring projects disturbing an acre or more shall submit an NOI for coverage under MDE's General NPDES for Stormwater Associated with Construction Activity. This is in addition to the MDE approval for a stormwater management and erosion and sediment control plan. Perform all monitoring, recordkeeping, and notification requirements required by the general NPDES permit.

(3) Ensuring that all projects with ESD stormwater management structures submit as-builts to MDE for approval prior to closing out the project.

(4) Coordinating additional permitting requirements with the EMG for project that may impact wetland areas, *e.g.*, Nontidal Wetlands and Waterways permit, specific NPDES discharge permits. Performing all monitoring, recordkeeping, and notification requirements required by the MDE permit(s).

(5) Ensuring plans and designs for any construction project exceeding 5,000 ft^2, maintain or restore pre-development hydrology by conforming with the *USEPA Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act* (EPA841-B-09-001).

(6) Ensuring all NIST construction contracts contain clauses requiring the contractor's compliance with applicable stormwater regulations and permits. Ensuring that all deliverables, including MDE approved stormwater as-built drawings and BMP warranty information are provided by contractors before contractor submits Notice-of-Termination to MDE.

(7) Ensuring that completed as-built drawings are submitted to the GFMD for storage and maintenance.

(8) Providing oversight of all contracted construction work to ensure compliance with relevant stormwater regulations and permits.

(9) Ensuring stormwater issues raised by NIST-Gaithersburg personnel or the public are addressed promptly.

(10) Providing stormwater metrics information required for MS4 permit reporting as identified in Section 6.b(5).

(11) Obtaining and maintaining training for GDCD personnel as identified in Section 6.f

(12) Maintaining all records required by construction stormwater permits for a minimum of 3 years after the project has ended.

h. Grounds and Service Support Group Supervisor, Gaithersburg Facility Maintenance Division, OFPM is responsible for the following:

(1) Inspecting and maintaining stormwater best management features, such as micro-bioretention basins, rain gardens, and swales, in accordance with MDE approved stormwater management plans. With GFMD support, providing corrective action plans to bring failing BMPs into compliance.

(2) Performing stormwater management practices such as street sweeping and storm inlet cleaning according to OFPM procedures.

(3) Performing landscaping practices, such as application of fertilizers, herbicides, pesticides, and winter road deicing/snow removal per best management practices identified in the NIST-Gaithersburg Good Housekeeping Plan.

(4) Conducting training to promote good housekeeping and minimize stormwater pollution annually, at a minimum. Training may include in-person, online, toolbox talks, on-the-job, or other formats.

(5) Maintaining current pesticide application licenses and certifications.

(6) Performing excavation and other earth-moving activities in a manner to minimize disturbance and minimize erosion and sedimentation. Ensuring that proper sediment and erosion control measures are implemented.

(7) Obtaining and maintaining training for personnel as identified by the EMG Group Leader and documented in the MS4 annual reports.

(8) Maintaining consistent ground cover throughout the NIST-Gaithersburg Site to promote soil stabilization and minimize erosion.

(9) Ensuring that any unauthorized release to the stormwater system or other nonconformance with this suborder is immediately reported to the EMG.

(10) Maintaining records of maintenance activities on stormwater or erosion control elements.

(11) Collecting and maintaining records on street sweeping and storm inlet cleaning per Section 6.d.

i. Site Services Group Leader, Facilities Services Division, OFPM is responsible for the following:

(1) Performing vehicle maintenance and refueling per best management practices identified in the NIST-Gaithersburg Good Housekeeping Plan.

(2) Performing vehicle washing per best management practices identified in the NIST-Gaithersburg Good Housekeeping Plan.

j. NIST Fire Department is responsible for the following:

(1) Receiving notifications of spills through the emergency notification system (x2222).

(2) Serving as incident commander and providing 24-hour emergency response to contain, control and clean up spills.

(3) Contacting the EMG when a spill is reported through the emergency notification system.

(4) When the EMG is not on-site (off hours), NIST Fire Department shall:

(a) Ensure spill cleanups are complete;

(b) Collect and retain all spill cleanup material, *e.g.*, absorbent pads, granular absorbent, recovered liquids, in appropriate containers;

(c) Provide required regulatory agency spill notifications; and

(d) Contact the EMG for waste disposal.

k. Department of Commerce Police are responsible for the following

(a) Notifying the NIST Fire Department of unauthorized releases to the stormwater system;

(b) Securing areas around reported releases; and

(c) Serving as incident commander until relieved by the NIST Fire Department.

10. AUTHORITIES

For authorities applicable to all NIST Environmental Suborders, see of NIST O 7301.00.

a. Stormwater Inspectors and inspection team members are authorized to:

(1) Enter any construction site or other work area without delay. Access shall be provided during regular working hours and other reasonable times, within reasonable limits, and in a reasonable manner;

(2) Inspect and investigate workspaces including all pertinent conditions, structures, machines, apparatus, devices, equipment, and materials therein;

(3) Consult with a reasonable number of employees during the walkaround;

(4) Question privately any worker, supervisor, or manager in charge of the workspace; and

(5) Deny the right of accompaniment to any person whose participation interferes with a fair and orderly inspection.

11. DIRECTIVE OWNER

Chief Safety Officer

12. APPENDICES

A. Revision History

862 # Appendix A. Revision History

863

Revision	Approval Date	Effective Date	Description of Change
None	02/09/2022	XX/XX/202X	None – Initial Document
1	08/23/2023	XX/XX/202X	Corrected numbering on referenced suborders.
2	9/22/2023	XX/XX/202X	Corrected training in GDCD responsibilities section

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