STORMWATER MANAGEMENT AT NIST-BOULDER

NIST S 7301.11
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1. PURPOSE

The purpose of this suborder is to establish the requirements and associated roles and responsibilities regarding the discharge of stormwater, and to outline the program elements to ensure compliance with regulatory and permit requirements and applicable policies at NIST Boulder.

2. BACKGROUND

a. The Department of Commerce (DoC) Boulder Labs encompasses 206 acres and includes over 25 buildings, 2.3 miles of roads, and 9.8 acres of parking lots. Approximately 140 acres is set aside as open space and is used by DoC Boulder Labs personnel and the public.

Impervious surfaces at the DoC Boulder Labs (roofs, pavement) prevent rain, snow, and sleet from infiltrating naturally into the soil. Stormwater runoff is routed and conveyed away from these impervious surfaces by storm drains and storm sewers and released to the City of Boulder Storm Sewer System and nearby streams. As stormwater flows to its collection and release points it picks up pollutants including litter, oil, gasoline, anti-freeze, landscape debris, fertilizers, herbicides, pesticides and sediments. Large amounts of impervious surface also increase the amount of stormwater runoff, which during large rain events can degrade the quality of the streams that receive the runoff. Stormwater management practices are intended to reduce the quantity and improve the quality of stormwater runoff.

(1) The U.S. Environmental Protection Agency (EPA) issued the DoC Boulder Labs, including NIST, a permit to discharge stormwater, regulating its discharges into the site's stormwater management system with a primary emphasis on pollution prevention and erosion control. The permit designates the DoC Boulder Labs as a Small Municipal Separate Storm Sewer System, also known as an MS4 Permit.

[1] The revision history for this document can be found in Appendix A

(2) This document outlines the requirements of the MS4 Permit and the portions of the overall DoC Boulder Labs Stormwater Management Program applicable to NIST Boulder. The MS4 permit requires that the DoC Boulder Labs produce and maintain a stormwater management plan (SWMP), identifying permit requirements, the process for meeting those requirements and the party responsible for each action.

b. NIST P 7300.00 articulates NIST's commitment to making environmental management, including management of stormwater in compliance with applicable regulations and permits, an integral core value and vital part of the NIST culture by, in part:

(1) Complying with applicable laws, regulations, and other promulgated safety and health requirements; and

(2) Abating deficiencies and taking actions to prevent incidents from occurring.

c. The DoC Boulder Laboratories must meet the requirements of the following:

(1) 40 CFR Parts 100-149; and

(2) 5 CCR 1002-38.

3. APPLICABILITY

a. This suborder applies to all activities at the NIST-Boulder site that may impact stormwater.

Under the cross-service agreement, personnel employed by or contracted by other agencies at the DoC Boulder Laboratories are required to comply with the requirements of the DoC Boulder Labs SWMP, Municipal Separate Storm Sewer System Permit, applicable state and federal regulations and the cross services agreement.

4. REFERENCES

Legal and other requirements common to all NIST Environmental Suborders can be found in Section 4 of NIST O 7301.00. The legal and other requirements specific to this suborder are as follows:

a. 40 CFR 100-149, *Water Programs*

b. COR042004, *NPDES General Permit for Discharges from State and Federal Small Municipal Separate Storm Sewer Systems*, issued 1 October 2014

c. *DoC Boulder Labs Stormwater Management Plan (SWMP)*

d. COR10F000, *EPA Construction General Permit 2022 Revisions*

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)

g. *Mile High Flood Control District Criteria Manual*.

h. Department of Commerce, Department Administrative Order (DAO) 202-751, *Discipline*

i. Federal Acquisitions Regulations (FAR), Subpart 49.4, *Termination for Default*

5. APPLICABLE NIST SUBORDERS

Other NIST Environmental Suborders applicable to work covered by this suborder include the following:

a. NIST S 7301.01: *Environmental Management System*;

b. NIST S 7301.07: *Chemical Waste Accumulation and Disposal at NIST Boulder*;

c. NIST S 7301.09: *Oil Storage and Handling at NIST Boulder*; and

d. NIST S 7301.13: *Wastewater Management at NIST Boulder*.

6. REQUIREMENTS

a. General Requirements and Limitations on Coverage

(1) Duty to Comply - NIST shall develop a stormwater management program designed to reduce the discharge of pollutants to the maximum extent practicable. This shall be accomplished through the implementation of the terms of the MS4 permit described in Section 6.b below.

(2) Duty to Mitigate – NIST shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the

environment. Implementation of these control measures is addressed in the DoC Boulder Labs SWMP.

(3) Signature of Authorized Administrator – All required reports, notifications and other information submitted to EPA shall be signed by a duly authorized employee. These employees include:

(a) BSHED Chief (MS4 Permit application, annual report, responses to regulatory agencies);

(b) NIST Boulder Operations Director (MS4 Permit application, annual report, responses to regulatory agencies, stormwater management plan);

(c) NIST Boulder Laboratory Director (MS4 Permit application, annual report, responses to regulatory agencies, stormwater management plan);

(d) NIST Chief Safety Officer (MS4 Permit application, annual report, responses to regulatory agencies, stormwater management plan); and

(e) NIST Chief Facilities Management Officer (construction permits for projects covered under the EPA Construction General Permit).

(4) Authorized Discharges – The discharges below are allowed under the MS4 permit, when properly managed to minimize pollutants introduced into stormwater:

(a) Stormwater, including precipitation runoff and snow melt;

(b) The following discharges from operation and maintenance activities:

i. Water line flushing;
ii. Landscape irrigation;
iii. Diverted stream flows;
iv. Rising ground waters;
v. Uncontaminated ground water infiltration;
vi. Uncontaminated pumped ground water;
vii. Discharges from potable water sources;
viii. Foundation drains;
ix. Air conditioning condensate;
x. Irrigation water;
xi. Springs;
xii. Water from crawl space pumps;

xiii. Footing drains;
xiv. Lawn watering;
xv. Flows from riparian habitats and wetlands;
xvi. Dechlorinated swimming pool discharges;
xvii. Street wash water;
xviii. Power washing where no chemicals are used;
xix. Roof drains;
xx. Fire hydrant flushings;
xxi. Emergency discharges required to prevent imminent threat to human health or severe property damage, provided that reasonable and prudent measures have been taken to minimize the impact of such discharges; and
xxii. Discharges or flows from firefighting activities occurring during emergency situations.

Note: Discharges associated with industrial (manufacturing, processing or raw materials storage at an industrial plant) or construction activities (clearing, grading and/or excavating) must be authorized under an applicable National Pollutant Discharge Elimination System (NPDES) Sector Permit or the EPA Construction General Permit. Industrial stormwater discharges do not occur at the DoC Boulder Labs.

(5) Management of Change
On an ongoing basis, the Boulder Safety, Health and Environment Division (BSHED) Stormwater Program Manager shall:

(a) Evaluate new projects and changes to existing systems and equipment, to evaluate the applicability of State and/or Federal stormwater regulations or permit terms;

(b) Determine any necessary actions that must be taken by NIST prior to implementation (*e.g.*, Best Management Practices [BMP] implementation, permit modifications); and

(c) Provide guidance to implement action items needed to ensure full compliance throughout the change process.

b. Permit Requirement Minimum Control Measures
NIST shall implement BMPs necessary to meet the following minimum control measures, as outlined in the SWMP.

(1) Personnel Education and Outreach
Public Education and Outreach shall be provided through announcements in the Boulder Labs Weekly Bulletin. The processes for complying with this requirement may be found in the DoC Boulder Labs SWMP.

(2) Public Involvement and Participation
The processes identified in the DoC Boulder Labs Stormwater Management Plan shall be followed by the personnel designated as responsible parties.

(3) Illicit Discharge Detection and Elimination and Reporting

(a) Spills and releases to stormwater, considered illicit discharges under the MS4 Permit, shall be reported in compliance with the NIST Boulder Accidental Hazardous Material Release Reporting Procedure (AHMRRP).

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

- Colorado Department of Public Health and Environment 877-518-5608
- EPA Region 8 303-312-6312
- City of Boulder 303-413-7340

(b) The NIST Boulder Program Manager shall perform dry weather screening by visually monitoring the following locations for sources of water other than previously identified sources. Dry weather screening shall be performed no less than seven days following a rain event and when there is no snow present to avoid misidentifying runoff as a possible illicit discharge.

i. Dry weather screening shall be performed at the following locations:

(i) Outfalls in the open space between Building 33 and Broadway;
(ii) Stormwater basin south of Building 33;
(iii) Building 1 North Basin;
(iv) Building 1 South Basin;
(v) Drop inlet along Marconi Rd northwest of Wing 1 of Building 1; and
(vi) Visitor Center Basin.

ii. Each screening location shall be monitored for the following:

(i) Discharges not previously identified;
(ii) Visible contamination; and
(iii) Odors.

iii. The following sources of groundwater intrusion or discharges from dewatering have been identified:

(i) Condensate and dewatering from Building 33 discharging to the outfalls in the open space between Building 33 and Broadway;
(ii) Dewatering from Building 42 discharging to the basin south of Building 33;
(iii) Groundwater intrusion from foundation drains/sump at Building 81 discharging to the Building 1 North Basin.
(iv) Dewatering from Wing 6 of Building 1 discharging to the Building 1 South Basin; and
(v) Dewatering from Wing 5 of Building 1 discharging to the City of Boulder storm sewer system under Broadway north of Building 1 (monitored at a storm sewer drop inlet northwest of Wing 1).

iv. If needed sampling will be performed to identify contaminants;

v. Discharges of contaminants shall be reported per 6.b.(3)(a); and

vi. The sources of discharges containing contaminants shall be investigated and the responsible OU or agency (if not part of NIST) shall be responsible for eliminating the illicit discharge.

vii. The processes identified in the DoC Boulder Labs SWMP shall be followed by the personnel designated as responsible parties.

(4) Construction and Stormwater Runoff Control
The processes identified in SOP #2 - *Construction Site Plan Review* of the DoC Boulder Labs Stormwater Management Plan shall be followed by the personnel designated as responsible parties.

(5) Post-construction Stormwater Management
The processes identified in SOP #1 - *Post-Construction Stormwater Planning and Design* in the DoC Boulder Labs Stormwater Management Plan shall be followed by the personnel designated as responsible parties.

(6) Pollution Prevention and Good Housekeeping
The processes identified in the DoC Boulder Labs SWMP shall be followed by the personnel designated as responsible parties.

c. Monitoring and Reports

(1) Monitoring - Monitoring shall be conducted to evaluate the effectiveness of the stormwater management program, including evaluation of this Suborder and the SWMP to ensure that the requirements of the MS4 permit are met.

(a) An Annual Audit of the Stormwater Management Program shall be conducted by the BSHED Stormwater Program Manager to evaluate the effectiveness of the programs and BMPs implemented. The audit shall be completed in time to use the contents to produce the Annual Report and submit it to EPA by the April 1 deadline specified in the MS4 permit. Required information (inspection reports, maintenance procedures and reports and other documentation) shall be requested from OFPM and GSA/NOAA by February 1 so the information can be provided by March 1 allowing sufficient time to complete the audit and annual report. The specific requirements and elements of the Annual Audit and report are detailed in the MS4 Permit and SWMP.

(b) The NIST Chief Facilities Management Officer (CFMO) shall ensure that the contracting officer representative (COR) for a construction project or other designated personnel monitor all contractor construction projects to ensure that proper erosion and sedimentation elements are in place and functioning properly. This includes documented inspections on at least a monthly basis.

(c) The NIST Chief Facilities Management Officer (CFMO) shall ensure that in-house excavation and earth moving activities include properly implemented erosion and sedimentation controls and that these controls are effective.

(d) BSHED shall periodically review construction activities and other activities on-site to ensure that proper stormwater management pollution prevention practices are in place. Reviews include:

i. Review of construction plans for compliance with the MS4 permit (post construction stormwater BMPs) and EPA Construction General Permit (CGP), including but not limited to the Stormwater Pollution Prevention Plan (SWPPP), and design/specifications for erosion and sediment control BMPs;

ii. Review monthly inspections performed by the contracting officer representative or other Design and Construction Division-Boulder personnel;

iii. Quarterly inspections of construction sites permitted under the CGP;

iv. Semiannual sitewide inspections of outdoor research and maintenance areas, including dry weather screening and looking for illicit discharges;

See SOPs 1, 2, 4, 6, 7 and 8 in the SWMP for the processes.

(e) Currently, BSHED performs only qualitative monitoring of water quality. If negative impacts on water quality are suspected, The BSHED Stormwater Program Manager shall perform additional sampling or monitoring appropriate to the suspected contamination. See SOP #7 - *Stormwater Illicit Discharge Detection, Elimination and Reporting Program* for documentation of the inspection process.

i. Stream monitoring shall be performed on a quarterly basis using the following process:

(i) Observing Skunk Creek and Anderson Ditch at the following points:

- Anderson Ditch at the northern boundary of the DoC Boulder Labs;
- Anderson Ditch at the southern boundary of the DoC Boulder Labs;
- Skunk Creek at the upstream boundary with the Green Mountain Cemetery; and
- Skunk Creek upstream of the King Avenue bridge.

(ii) Making a qualitative evaluation of the following:

- Bank stability;
- Presence of trash;
- Color of water;
- Odor from water;
- Clarity/turbidity of water;
- Presence/absence of floating solids;
- Presence/absence of settled solids;
- Presence/absence of foam; and

- Presence/absence of an oil sheen.

(iii)Reporting illicit discharges in accordance with 6.b.(3)(a).

(f) The BSHED Stormwater Program Manager shall submit an annual report to EPA (address below) regarding the status of the stormwater management program. The report is due on 1 April of each year.

(g) Reports shall be submitted to EPA at the following address:

U.S. EPA, Region 8
Policy, Information Management & Environmental Justice
Program (8ENF-PJ)
Attention: Director
1595 Wynkoop Street
Denver, Colorado 80202-1129

d. Maintenance

(1) Best management practices (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 maintenance, including cleaning of debris, shoring, mulching, replanting, replacement of piping, etc. A program of scheduled preventative maintenance (PM), inspections of BMPs, and maintenance and repair areas has been established by the NIST Office of Facilities and Property Management. The PM inspections shall be tracked in the MAXIMO Asset Management System or a system replacing MAXIMO.

(2) Personnel identified as being responsible for maintenance activities in Section 9 shall ensure that maintenance is performed in compliance with the SWMP and MS4 Permit.

(3) Maintenance activities shall be documented per Section 6.g.

e. Evaluation of Compliance

(1) BSHED Stormwater Program Manager shall conduct a compliance evaluation of the regulatory requirements of this program on at least an annual basis. A spreadsheet identifying the requirements of the MS4 Permit and the status of actions implemented to comply with the requirements has been developed and is in use for this purpose.

(2) Results of compliance evaluations shall be documented and records maintained as EMS Records per Section 6.g.

(3) Findings from compliance evaluations shall be addressed using the requirements for Non-Conformances, Corrective and Preventive Action found in NIST S 7301.01 Environmental Management System.

f. Training

(1) Training required for Public Education and Outreach shall be provided to DoC Boulder Labs personnel in the form of announcements in the Boulder Labs Weekly Bulletin. Announcements cover pollution prevention, waste management and reporting of releases. Copies of announcements shall be included in the annual report.

(2) In order to meet the Illicit Discharge/Release Reporting requirements of the MS4 permit, NIST Boulder personnel shall complete the following training when applicable to their duties:

(a) *NIST S 7301.07: Accidental Hazardous Material Release Training for Users*; or

(b) *NIST S 7301.07: Accidental Hazardous Material Release Training for Non-Users*; and

(c) *NIST S 7301.07: Hazardous Waste Generator Training for NIST Boulder* or *NIST S 7301.07 Boulder Labs Hazardous Waste Generator Training for OFPM Boulder Personnel* either in SET or a classroom session, if handling or generating hazardous waste.

(3) NIST Boulder personnel performing tasks related to petroleum storage tanks or oil-filled equipment shall complete one of the following division-specific courses in SET or a classroom session.

(a) *NIST S 7301.09: Boulder Spill Prevention, Control and Countermeasures (SPCC) Training* (OFPM personnel)

(b) *NIST S 7301.09: SPCC Training for Division 184*

(c) *NIST S 7301.09: Spill Prevention, Control and Countermeasures Training for Division 647*

(d) *NIST S 7301.09: Spill Prevention, Control and Countermeasures Training for Division 688*

(4) Personnel responsible for construction or projects shall complete *NIST S 7301.11: Boulder Stormwater Compliance and Management on Construction Projects*. Training is available in SET or in classroom sessions.

(5) Contracting officers for any construction projects shall complete *NIST S 7301.11: Environmental Requirements for Construction Contracts – Boulder*.

(6) Personnel with responsibilities for inspecting construction sites permitted under the EPA Construction General Permit shall be trained in the procedure for inspecting stormwater BMPs. This requirement includes completing *NIST S 7301.11: Construction Inspection Training Course - EPA National Pollutant Discharge Elimination System (NPDES)*.

(7) Personnel responsible for facilities operation and maintenance shall complete *NIST S 7301.11: Boulder Stormwater Compliance and Management for Operations and Maintenance*. Training is available in SET or in classroom sessions.

(8) The NIST Chief Facilities Management Officer (CFMO) shall ensure that job-specific training listed in the permit and SWMP is provided to personnel with responsibilities for maintenance, snow removal and pesticide/herbicide application duties.

g. Recordkeeping

(1) NIST shall maintain records as necessary to demonstrate compliance with the MS4 Permit and other stormwater related regulations. These records shall be submitted to EPA upon request and shall be available to the public at reasonable times during regular business hours. To ensure proper identification, storage, protection, retrieval, retention, and disposal of records, EMS Records Management shall be performed in accordance with NIST S 7301.01 Environmental Management System.

(a) Records needed to demonstrate compliance with general MS4 Permit requirements shall be maintained by BSHED. See Section 9 for identification of parties responsible for keeping records. These include:

i. Annual reports identified in Section 6.c.
ii. Reports of releases to stormwater
iii. Regulatory Correspondence
iv. Audit Reports

v. Inspection Records
vi. Training Records
vii. Maintenance records
viii. Permit Applications and related information
ix. Current and Historic Permits, including Construction Permits
x. Current and Historic SWMPs.

(b) Records to demonstrate compliance with equipment-specific requirements of the MS4 Permit shall be maintained by the various groups identified in Section 9.

(c) All records required by this Suborder shall be maintained for a period of no less than three (3) years after termination of the DoC Boulder Labs MS4 Permit.

7. DEFINITIONS

Definitions common to all NIST EMS suborders can be found in Section 7 of NIST O 7301.00.

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

b. 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.

c. Post-Construction Stormwater Control Measures – Permanent stormwater control measures or BMPs designed to 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.

8. ACRONYMS

Acronyms common to all NIST EMS suborders can be found in Section 8 of NIST O 7301.00. The acronyms specific to this suborder are as follows:

a. AHMRRP – NIST Boulder Accidental Hazardous Material Release Reporting Procedure

b. BMP – Best Management Practice

c. BSHED – NIST Boulder Safety, Health and Environment Division (153)

d. CDPHE – Colorado Department of Public Health and Environment

e. CFMO – NIST Chief Facilities Management Officer

f. CGP – EPA Construction General Permit

g. COR – Contracting Officer Representative

h. EMS – NIST Environmental Management System

i. EPA – U.S. Environmental Protection Agency

j. FAR – Federal Acquisitions Regulations

k. MHFD – Mile High Flood District

l. MS4 – Municipal Separate Storm Sewer System

m. OFPM – NIST Office of Facilities and Property Management

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

o. SET – NIST Safety Education and Training system

p. SPCC – Spill Prevention, Control and Countermeasures

q. SWMP – Stormwater Management Plan

r. SWPPP – Stormwater Pollution Prevention Plan

9. RESPONSIBILITIES

Roles and responsibilities common to all NIST Environmental Suborders can be found in Section 9 of NIST O 7301.00. The roles and responsibilities specific to this suborder are as follows:

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

b. OU Directors are responsible for:

(1) Establishing 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 and procedures;

(3) Ensuring illicit discharges resulting from OU activities are mitigated; and

(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;

(3) Ensuring releases are reported in accordance with NIST policy and procedures (AHMRRP or procedure replacing it);

(4) Ensuring regulatory inspectors are provided access to areas under their supervision;

(5) Upon receiving inspection reports on their respective workplaces, ensure corrective actions are performed;

(6) Ensuring deficiencies or violations resulting from regulatory inspections of areas operated by that OU are addressed in the timeframe required by the regulatory agency; and

(7) Ensuring releases of pollutants (illicit discharges) caused by division personnel are sanctioned in accordance with DAO 202-751.

d. NIST Boulder Employees, Associates and Contractors are responsible for the following:

(1) Ensuring their activities do not release pollutants to stormwater;

(2) Reporting to the BSHED any activity that may release stormwater pollution or unauthorized discharges into the environment;

(3) Reporting any spills or releases to their supervisor or the contracting officer representative for the project on which they are working (construction and maintenance contractors only).

e. The BSHED Stormwater Program Manager is responsible for the following:

(1) Ensuring compliance with monitoring and reporting requirements established in the MS4 permit;

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

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

(4) Communicating the regulatory requirements to affected personnel and providing training as necessary. Providing informational outreach to NIST staff regarding stormwater and encouraging participation in local events;

(5) Performing annual dry weather screening as described in 6.b.(3)(b).

(6) Performing a review of site design packages to ensure that the requirements of the MS4 Permit are incorporated into any stormwater management element;

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

(a) Performing quarterly oversight inspections; and

(b) Support to construction CORs.

(8) Maintaining this Suborder and the SWMP.

(9) Maintaining general records identified below:

i. Annual reports identified in Section 6.c.;
ii. Reports of releases to stormwater;
iii. Regulatory Correspondence;
iv. Audit Reports;
v. Inspection Records;
vi. Training Records;
vii. Monitoring reports;
viii. Permit Applications and related information;
ix. Current and Historic Permits, including Construction Permits; and
x. Current and Historic SWMPs.

f. The NIST Chief Facilities Management Officer (CFMO) is responsible for the following:

(1) Ensuring fertilization, herbicidal, and pesticide practices, equipment maintenance, and general landscaping are performed in a manner that minimizes stormwater pollution and complies with the requirements identified in the MS4 Permit and SWMP;

(2) Ensuring excavation and other earth-moving activities are performed in a manner to minimize disturbance, minimize erosion and sedimentation and that proper erosion controls are implemented on projects managed by OFPM personnel;

(3) Ensuring discharges associated with activities performed or managed by OFPM personnel comply with Subpart 1.3.2 for the MS4 Permit. Note: “pollutants” also includes heated water and sediment;

(4) Obtaining and maintaining training for personnel as identified in the MS4 Permit;

(5) Ensuring landscaping is performed in a manner that promotes soil stabilization, prevents erosion and controls noxious weeds;

(6) Ensuring the site’s stormwater management features and storm sewer system are maintained as part of NISTs preventive maintenance program;

(7) Ensuring any nonconformance, release or excursion is immediately reported to BSHED;

(8) Ensuring complaints from DoC Boulder Labs personnel or the public regarding stormwater management and compliance are addressed when occurring in areas for which OFPM is responsible;

(9) Ensuring up-to-date drawings of the storm sewer system are maintained. See SOP #3 *Storm Sewer Map Updating* in the SWMP;

(10) Ensuring maintenance and inspections are performed in compliance with the MS4 permit and SWMP. See SOP #4 – 6 in the SWMP;

(11) Maintaining records of maintenance activities on stormwater or erosion control elements, including the following:

(a) Construction COR's inspection reports;

(b) Electronic Notices-of-Intent (eNOI) submitted to EPA; and

(c) Reports from preventative maintenance (PM) inspection of maintenance areas, stormwater basins, channels and storm sewers.

(12) Ensuring any construction projects managed by OFPM personnel are performed in compliance with the requirements of the MS4 Permit, EPA Construction General Permit, DoC Boulder Labs Stormwater Management Plan, Mile High Flood District Criteria Manual, Section 438 of the Energy Independence and Security Act;

(13) Ensuring engineering and design services comply with the requirements of the MS4 permit, SWMP (including SOP#1) and applicable regulations. This includes specifications, plans and designs being revised to comply with Subsections 2.6.9 and 2.6.10 of the MS4 Permit;

(14) Ensuring plans and designs for new stormwater management systems or significant modification of existing systems conform 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) and the *Mile High Flood Control District Criteria Manual*;

(15) Ensuring the following tasks are completed for any new construction project that disturbs >1 acre or is part of a larger plan of development exceeding one acre:

(a) A SWPPP is prepared in compliance with the CGP;

(b) The SWPPP is submitted to BSHED for review;

(c) The SWPPP is revised to address comments and correct deficiencies;

(d) The contractor does not begin land-disturbing work until the eNOI has been approved by EPA. No contact from EPA for 14 days after certification of the eNOI is considered *de facto* approval;

(e) OFPM personnel conduct required monitoring of erosion and sedimentation controls during construction, and escort EPA erosion and sedimentation inspectors as needed; and

(f) Construction contractors comply with the terms of the CGP, install and maintain BMPs per MHFD specifications and update the SWPPP to reflect current conditions.

(16) Ensuring all NIST construction contracts contain clauses requiring the contractor's compliance with applicable stormwater regulations and permit terms;

(17) Provide oversight of all contracted construction work to ensure compliance with relevant stormwater regulations;

(18) Ensuring complaints from DoC Boulder Labs personnel or the public regarding stormwater management and compliance are addressed when occurring in areas for which OFPM is responsible;

(19) Ensuring all deliverables, including drawings and warranty information are provided by contractors before contractor submits Notice-of-Termination to EPA. See SOPs #2 and 3 in SWMP;

(20) Ensuring appropriate dewatering permits are obtained for construction projects;

(21) Maintaining all records required by any construction stormwater permits;

(22) Ensuring all contracts for development or redevelopment exceeding one acre or part of a larger plan of development exceeding one acre include the means to enforce the requirements of the MS4 permit and CGP;

(23) Ensuring all contracts for development or redevelopment exceeding one acre or part of a larger plan of development exceeding one acre include requirements for post-construction stormwater control measures that comply with Subparts 2.6.9 or 2.6.10 of the MS4 Permit;

(24) Ensuring contracts for development or redevelopment projects exceeding one acre or part of a larger plan of development exceeding one acre include requirements for review of designs and plans by a certified pesticide/herbicide applicator or landscape architect/planner to ensure that revegetation plans contain effective plans for establishment of vegetation and control of noxious weeds following construction or that vegetation complies with the requirements of the Boulder Labs Site Master Plan;

(25) Ensuring contracts for development or redevelopment projects larger than 5000 ft^2 but smaller than 1 acre in area include terms requiring compliance with Section 438 of the Energy Independence and Security Act;

(26) Ensuring the requirements of the MS4 Permit and CGP are enforced on construction contractors and utilize contractual sanctions as specified in Subpart 49.4 of the Federal Acquisitions Regulation (FAR) to ensure compliance; and

(27) Ensuring contractors do not submit a notice-of-termination to EPA prior to providing all deliverables (including as-built drawings of any storm sewers or stormwater controls) and stabilizing the site to the point that 70% of the site is revegetated.

g. NIST Boulder, Emergency Services Office, Emergency Coordinator is responsible for the following:

(1) Ensuring Occupant Emergency Plan is followed during response to any emergency;

(2) Informing the DoC Boulder Labs Boulder Board of Directors of the emergency and the nature of the response; and

(3) Review reports of releases submitted to regulatory agencies.

h. Department of Commerce Police is responsible for the following:

(1) Securing areas around reported releases;

(2) Notifying Emergency Coordinator of release;

(3) Serving as incident commander until relieved; and

(4) Assisting emergency responders from outside agencies (Boulder-Fire Rescue) with accessing the DoC Boulder labs facility and locating the release.

10. AUTHORITIES

There are no authorities specific to this suborder alone. For authorities applicable to all NIST Environmental Suborders, see section 9 of NIST O 7301.00.

NIST/DoC and/or regulatory agency inspectors and inspection team members are authorized to:

a. Enter without delay, and at reasonable times, any building, installation, facility, construction site, or other area, workplace, or environment where work is performed;

b. Inspect and investigate during regular working hours and at other reasonable times, and within reasonable limits and in a reasonable manner, workspaces including all pertinent conditions, structures, machines, apparatus, devices, equipment, and materials therein;

c. Consult with a reasonable number of employees, associates or contractors during the walkaround;

d. Question privately any worker, supervisor, or manager in charge of the workspace; and

e. 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

824 # Appendix A. Revision History

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Version	Approval Date	Effective Date	Description of Change
1	03/14/2023	03/14/2023	None – Initial Document

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