



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region08

Ref: 8ENF-W-NW

SENT VIA EMAIL
DIGITAL READ RECEIPT REQUESTED

David Garrity
Environmental Engineer
National Institute of Standards and Technology
david.garrity@nist.gov

Re: Inspection Report for U.S. Department of Commerce, Boulder Laboratories MS4, NPDES
Permit No. COR042002

Dear Mr. Garrity:

On September 13-14, 2021, representatives of the U.S. Environmental Protection Agency inspected the U.S. Department of Commerce, Boulder Laboratories municipal separate storm sewer system (MS4) in Boulder, Colorado, to evaluate compliance with the MS4's National Pollutant Discharge Elimination System permit. The inspection was conducted under the authority of Section 308 of the Clean Water Act (Act). Enclosed is a report of the inspection.

Inspection findings are summarized within the enclosed inspection report in a table titled "Findings and Corrective Actions." Within **thirty (30) days** of receipt of this report, please provide the EPA with a summary of corrective actions taken to address each of the findings identified in the report and any information that may change the findings. This summary should be sent to:

Stephanie Meyers
meyers.stephanie@epa.gov

Please contact me at 303-312-6938 or meyers.stephanie@epa.gov if you have any questions regarding this letter or the enclosed report.

Sincerely,

**STEPHANIE
MEYERS**

Digitally signed by
STEPHANIE MEYERS

Date: 2021.11.02
09:46:51 -06'00'

Stephanie Meyers
NPDES and Wetlands Enforcement Section
Enforcement and Compliance Assurance Division

Enclosures:

- 1) NPDES Storm Water Inspection Report – MS4
- 2) Photo Log

cc: Katie Schlatter, Operations Director, NIST (via email)

Brian Brass, Safety, Health, and Environment Division Chief, NIST (via email)

NPDES Stormwater Inspection Report – MS4

National Database Information	
Inspection Date: September 13-14, 2021	Inspection Type: Municipal Separate Stormwater Sewer System (MS4)
Entry/Exit Time: 9:00 am / 11:35 am	NPDES ID Number: COR042002
NAICS Code: 921190 General Government Support	Inspection ID: 202109_COR042002
Lead inspector and affiliation: Stephanie Meyers, US EPA Region 8	
Inspector and affiliation: Akash Johnson, US EPA Region 8	

Facility Location Information (Name/Location/ Mailing Address)	
Site/Facility Name & Location: U.S. Department of Commerce – National Institute of Standards and Technology (NIST) 825 Broadway St. Boulder, CO 80305	Email Report to: David Garrity Environmental Engineer National Institute of Standards and Technology david.garrity@nist.gov

Contact Information	
Facility Contacts: <i>(indicate primary lead and present during inspection)</i>	Name(s)/Title
	David Garrity / Environmental Engineer / NIST / primary lead during opening conference and onsite inspection
	Elizabeth Mackey / Chief Safety Officer / NIST / present during opening conference
	Stephen Banovic / Deputy Chief Safety Officer / NIST / present during opening conference
	Brian Brass / Safety Health and Environment Division Chief / NIST / present during opening conference and onsite inspection
	Chris Colburn / Facilities Maintenance Division Chief / NIST / present during opening conference
	Danielle Swarts / Facilities Maintenance Division / NIST / present during opening conference
	Keith Weidenbach / Facilities Maintenance Division / NIST / present during opening conference
	Brenda Hitchcock / Contracting Officer – Acquisitions Management Division / NIST / present during opening conference
	Ruben Rodriguez / Design and Construction Division / NIST / present during opening conference
	Randall Collander / Safety Group / NOAA / present during opening conference
	Phil Lawrence / Project Manager / NIST / present during onsite inspection
	Alex Bettam / Assistant Superintendent – Design and Construction Division / NIST / present during onsite inspection
	Kendalyn Morgan / Contractor / Whiting-Turner Contracting Company / present during onsite inspection
Authorized Official	Marla Dowell / Director / NIST Boulder Laboratory

Permit Information	
Is the permit on site and available? Yes	
Effective Date: October 1, 2014	Expiration Date: September 30, 2019 (administratively continued)
Latitude: 39° 59' 47.14" North	Longitude: -105° 15' 43.01" West
Receiving Water(s): Skunk Creek, Anderson Ditch, and other associated waters of the United States within the exterior boundaries of the Department of Commerce, Boulder Laboratories	
Regulatory Inspector's source of information: Facility contacts, documents received during the inspection, permit and permit fact sheet.	

Areas Evaluated During Inspection		
<u>Permit</u>	<u>Effluent/Receiving Waters</u>	Compliance Schedule
<u>Records/Reports</u>	Flow Measurement	<u>Pollution Prevention</u>
<u>Facility Site Review</u>	Self-Monitoring Program	Laboratory
Weather conditions during inspection (e.g., temperature, sky, precipitation): The weather condition on September 14, 2021 (date of on-site inspection) was partly cloudy with a high of 65 °F.		

MS4 Program areas during inspection			
Public Education & Outreach	Yes	Public Involvement & Participation	Yes
Illicit Discharge Detection and Elimination (IDDE)	Yes	New Development/Redevelopment (NDRD)	Yes
Industrial Facilities	N/A	Construction Sites Program	Yes
Pollution Prevention and Good Housekeeping	Yes	Stormwater Monitoring	Yes
Program Management	Yes	Compliance Schedule	N/A

Report Review and Signature		
Drafter Name	Address/Phone Number	Date
Stephanie Meyers	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202	10/27/2021
	303-312-6938	
Reviewer Name	Address/Phone Number	Date
Akash Johnson	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202	10/29/2021
	303-312-6067	
Supervisor Signature/Name	Address/Phone Number	Date
 Digitally signed by MICHAEL BOEGLIN Date: 2021.11.02 09:39:14 -06'00'	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202	11/2/2021
	Michael Boeglin	

Inspection Narrative and Site Description

The inspection was conducted at the Department of Commerce Boulder Laboratories (facility) located in Boulder, Colorado to evaluate compliance with its municipal separate storm sewer system (MS4) National Pollutant Discharge Elimination System (NPDES) permit. The U.S Environmental Protection Agency (EPA) is responsible for implementing the NPDES program at Federal Facilities within the State of Colorado. The inspection was announced a few weeks prior to the inspection to coordinate logistics for the inspection. On September 13, 2021, EPA inspectors Stephanie Meyers and Akash Johnson (inspectors) held a virtual opening conference via Microsoft Teams to explain the purpose of the inspection, followed by questions pertaining to the facility's implementation of the permit's Minimum Pollution Control Measures. On September 14, 2021, the EPA inspectors conducted onsite inspection activities, discussed further below. Throughout the inspection, the inspectors noted their observations in electronic and hard-copy checklists. Photographs taken during the inspection are included in the attached photo log.

The Department of Commerce Boulder Laboratories (facility) campus houses the National Institute of Standards and Technology (NIST), the National Oceanic and Atmospheric Administration (NOAA), and the National Telecommunications and Information Administration (NTIA). While these three agencies occupy the property, the Stormwater Management Plan (SWMP) and the EPA NPDES MS4 permit are managed and administered by NIST personnel. A Service Level Agreement amongst the three agencies is in place, which outlines responsibilities of each agency pursuant to MS4 permit responsibilities.

The primary purpose of the facility is research and development, including support for the standards for frequency and time interval, atmospheric conditions, and weather forecasting. Laboratories are available for research related to electrical engineering, physics, chemistry, materials science and engineering, information technology, and atmospheric research. The facility has approximately 1,600-1,700 staff and contractors and no residential housing. Due to COVID-19 concerns, roughly 20% of staff are currently working on site. The majority of the facility campus is open space, and approximately 35-40% of the 204-acre campus is developed. Development is clustered along the eastern edge of the property and is primarily composed of the NIST and NOAA laboratory complexes. A few small maintenance facilities and storage areas are located to the west of the laboratories.

NIST's Safety, Health, and Environment Division, Office of Facilities and Management, and Design and Construction Division aid in implementing the facility's MS4 program. The facility has developed a SWMP to outline the activities and responsibilities of the MS4 as required by the permit. The SWMP is reviewed and updated on an annual basis. The municipal activities within the MS4 consist of maintenance and operation of the following: vehicle maintenance and equipment facilities, utilities, roads and grounds, construction sites, materials storage, and hazardous materials disposal.

During the September 14, 2021 onsite inspection activities, EPA inspectors first met with David Garrity, presented their credentials, then visited his office to discuss the itinerary for the day. The group then proceeded with a walk-through of an active construction project occurring around Building 1 (Photo 150) (NPDES Construction Stormwater Permit Numbers COR10F06J and COR10F06L). For the construction site walk-through, the group was joined by NIST representative Phil Lawrence, Project Manager and Whiting-Turner Contracting Company representatives Alex Bettam and Kendalyn Morgan. During the walk-through, David Garrity demonstrated how NIST representatives would conduct their required monthly and quarterly construction site inspections.

Inspection Narrative and Site Description

Notice of Intent and Stormwater Pollution Prevention Plan information was posted outside the site (photo 149). Foundation dewatering activities were observed throughout the site (photo 151), and inlets capturing dewatering effluent contained BMPs (photo 152).

Following the construction site walk-through, the EPA inspectors and David Garrity proceeded with a site review of the campus, joined at times by NIST representatives Brian Brass, Safety Health and Environment Division Chief, and Chris Colburn, Facilities Maintenance Division Chief. During the campus site review, the inspectors observed various outlets and outfalls throughout the site associated with Skunk Creek and Anderson Ditch (photos 154 and 155). EPA inspectors also observed the maintenance and storage facilities on site including the fueling station (photo 156) which is equipped with a spill kit (photo 157), the vehicle maintenance building (photo 158), the equipment yard (photos 159 and 160), and Building 23 where hazardous waste and empty drums are stored (photo 161). The onsite inspection concluded with observations of various other inlets and outfalls throughout the site (photos 163, 164, and 165).

At the end of the site inspection, the inspectors held a closing conference with David Garrity where they discussed preliminary findings. On September 27, 2021, the EPA sent an email to David Garrity with the preliminary findings from the inspection.

Findings and Corrective Actions

Finding #1: An enforcement policy which meets the requirements of the permit to effectively prohibit non stormwater discharges is not maintained by NIST.

An enforcement policy which effectively prohibits non stormwater discharges into the storm sewer system and includes a description of a range of actions and enforcement procedures to be taken in response to an illicit discharge is not maintained by NIST.

Permit requirement:

Part 2.4.2 of the permit states, “Maintain an enforcement policy which effectively prohibits, through ordinance or other regulatory mechanism available under the legal authorities of the MS4, non-stormwater discharges into the storm sewer system and implement appropriate enforcement procedures and actions. The enforcement policy should include a description of the range of actions to be taken by the Department of Commerce, Boulder Laboratories, in response to an illicit discharge.”

Corrective Action:

On September 29, 2021, EPA received information from David Garrity that the stormwater management plan (SWMP) will be updated by NIST to detail the enforcement process more clearly for illicit discharges. Provide the EPA with the updated SWMP that includes a more detailed and effective enforcement policy in response to illicit discharges.

Finding #2: NIST does not maintain a list of policies and procedures to be used for enforcement of construction site compliance.

A list of policies and procedures to be used for enforcement of construction site compliance is not maintained by NIST. SOP 2 contains some information on construction site enforcement procedures, but the delineation of enforcement authority between NIST Safety, Health, and Environment Division (BSHED) Staff and Contracting Officer Representatives (CORs) and escalating degrees of enforcement mechanisms are not clearly documented in the SMWP or other records reviewed.

Permit requirement:

Part 2.5.2 of the permit states, “Use an ordinance or other regulatory mechanism available under the legal authorities of the permittee to require erosion and sediment controls and sanctions to ensure compliance with the terms of the NPDES General Permit for Stormwater Discharges for Construction Activity in Colorado, COR10000F (i.e., the Construction General Permit (CGP)).”

Part 2.5.3 of the permit states, “Maintain a list of policies and procedures which can be used to enforce construction site compliance within the Department of Commerce, Boulder Laboratories independent of EPA staff directly enforcing the CGP.”

Part 2.5.15.3 of the permit states the SWMP must contain, “A description of the sanctions and enforcement mechanisms Department of Commerce, Boulder Laboratories uses to ensure that construction activities disturbing equal to or greater than one acre of land are in compliance with the terms of the construction stormwater permit.”

Corrective Action:

On September 29, 2021, EPA received information from David Garrity that the SWMP will be updated by NIST to detail the enforcement process more clearly for noncompliance with the CGP. Provide the EPA with the updated SWMP that includes a more detailed and effective enforcement policy in response to noncompliance with the CGP.

Finding 3: The current NIST COR construction site inspector has not been trained on construction stormwater controls or the terms of the CGP.

A facility representative indicated that the current NIST COR construction site inspector has not been trained on the maintenance and installation of Best Management Practices (BMPs) for construction stormwater control and the terms of the construction stormwater permit.

Permit Requirement:

Parts 2.2.3 of the permit states, “Provide and document training to fleet maintenance staff, site maintenance staff, Engineering, Maintenance, and Support Services (EMSS) construction project managers, and Contracting Office Technical Representatives (COTRs) to learn about the policies and procedures for maintaining construction site runoff controls, applicable industrial onsite Best Management Practices (BMPs), and management of stormwater runoff using post-construction stormwater controls.”

Corrective Action:

On September 29, 2021, EPA received information from David Garrity that training for construction CORs is under development. Provide the EPA with the construction site and stormwater control training descriptions, as well as documentation that CORs that have completed the required training.

Finding #4: The COR construction site inspector does not utilize a construction site inspection checklist to document inspections.

A construction site inspection checklist is not included in the SWMP and it is unclear whether the COR inspector utilizes a construction site inspection checklist form, or other documentation, and if it was the same form or documentation used by BSHED staff.

Permit Requirements:

Part 2.5.8 of the permit states, “Maintain a site inspection form in the SWMP for use by NIST stormwater managers at sites which includes BMP maintenance specifications as required in the UDFCD Criteria Manual Volume 3.”

Part 2.5.9 of the permit states, “Inspect, at least monthly, all construction projects for compliance with the terms of EPA’s Construction General Permit or other applicable State or local requirements. For use in inspecting individual projects, use a construction site inspection checklist or other appropriate documentation specific to the construction stormwater permit.”

Corrective Action:

On September 29, 2021, EPA received information from David Garrity that the inspection checklist has been revised, and oversight inspection checklists include additional checkboxes to verify the COR has conducted monthly construction site inspections using the above-mentioned checklist. Both checklists were provided to EPA. On October 27, 2021, David Garrity provided the inspection reports for the monthly and quarterly inspections conducted on October 12, 2021. No further action is needed.

Finding #5: Inspections of active construction sites were not being conducted on a monthly basis.

A facility representative indicated that, since April 15, 2021, inspections of active construction sites were not being conducted on at least a monthly basis as required by the permit.

Permit Requirement:

Part 2.5.9 of the permit states, “Inspect, at least monthly, all construction projects for compliance with the terms of EPA’s Construction General Permit or other applicable State or local requirements. For use in inspecting individual projects, use a construction site inspection checklist or other appropriate documentation specific to the construction stormwater permit.”

Corrective Action:

On September 29, 2021, EPA received information from David Garrity that there were no active construction sites under the CGP from July 2018 to April 2021, therefore no monthly inspections were required. Inspection reports prior to July 2018 were submitted to EPA. On April 15, 2021, the Wing 5 renovation project commenced, therefore monthly inspections were required to be conducted since the start of construction. On October 27, 2021, David Garrity provided the inspection reports for the monthly and quarterly inspections conducted on October 12, 2021. No further action is needed.