



UNITED STATES DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
325 Broadway
Boulder, Colorado 80305-3328 173.02

28 March 2013

Greg Davis
U.S. Environmental Protection Agency
Mailcode: 8P-W-WW
1595 Wynkoop Street
Denver, CO 80202-1129

Reference: Stormwater Annual Report 2012, National Institute of Standards and Technology / Department of Commerce Boulder Laboratories

Dear Mr. Davis:

Enclosed is the Stormwater Annual Report for the 2012 calendar year.

Any questions regarding the National Institute of Standards and Technology (NIST) / Department of Commerce (DoC), Boulder Laboratories stormwater program or the attached report can be directed to the NIST, Boulder Safety, Health and Environment Division (BSHED) environmental engineer, Dave Garrity, at (303) 497-4577 or david.garrity@nist.gov.

Supporting documentation including the annual audit may be found on the enclosed CD-ROM.

Sincerely,

Brian Brass
Chief, NIST Boulder Safety, Health and Environment Division

Attachments
Storm Water Annual Report Form

NIST

EPA-BAFB-00001121



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
999 18TH STREET- SUITE 300
DENVER, CO 80202-2466
Phone 800-227-8917
<http://www.epa.gov/region8>

STORM WATER ANNUAL REPORT FORM

This form is for regulated small MS4s (Municipal Separate Storm Sewer Systems) and may be used to meet the annual reporting requirements for regulated small MS4s as outlined in 40 CFR§122.34g(3). While it is not required for MS4s to use this form to meet federal regulations, MS4s are encouraged to use this format to allow for more efficient recordkeeping and to minimize paper consumption. This form may be submitted electronically provided that a signature is either scanned or provided as a hard copy addendum to the report.

Completed forms may be sent to:

Greg Davis
Mailcode: 8P-W-WW
1595 Wynkoop Street
Denver, CO 80202-1129
E-mail: davis.gregory@epa.gov

All sections of this form must be completed and Item X on Page X must be signed and certified. Please print or type.

Permittee Information

Permittee (Agency Name): U.S. Department of Commerce, Boulder Laboratories (NIST, NOAA, NTIA)
Mailing Address: 325 Broadway, MC 173.02
City, State and Zip Code: Boulder, CO 80305-3328
Contact Phone Number: (303) 497-4577
Permit Certification No. COR042002
Have any areas been added to the MS4 due to annexation or other legal means? NO

Reporting Period (check one):

Jan. 1, 2012 to Dec. 31, 2012

Construction Program Contact:

The following information will be provided on EPA's web site to assist construction site operators in determining municipality-specific requirements for their projects:

Have you assigned an appropriate contact person/work unit to address questions regarding your municipality's construction and post-construction requirements? Yes

EPA-BAFB-00001122

If Yes:

Position/work group title: Engineering, Maintenance and Support Services (EMSS), Operations,
Supervisory Engineer
Contact phone number: (303) 497-5660, (303) 497-3191

If a web site has been created with information on complying with your municipality's construction and/or post-construction requirements, list address:

Implementation of EPA's Storm water Management Program

The purpose of the Annual Report is to report on the status of your implementation of the permit requirements, including compliance with the standard of reducing the discharge of pollutants from your MS4 to the Maximum Extent Practicable (MEP). Address each of the following items for **each** of the six program areas:

1. Public education and outreach on storm water impacts;
2. Public participation/involvement;
3. Illicit discharge detection and elimination;
4. Construction site storm water runoff control;
5. Post-construction storm water management in new development and redevelopment; and
6. Pollution prevention/good housekeeping for municipal operations

As the permittee, you must collect and maintain adequate information to demonstrate implementation of the six program areas as per your Storm water Management Program. Note that although the annual report only requires the submittal of certain information as outlined below, additional information may be requested by EPA to audit the implementation of your storm water management program. For example, construction site inspection reports, outreach materials, and records of maintenance activities performed may be requested by EPA outside of the annual report.

If another entity does not have its own permit but is instead covered under your permit, the Annual Report information under Section D of this form must also be provided for each such entity.

Public education and outreach on storm water impacts

Provide the status of any Measurable Goal scheduled for completion during the reporting period or for which activities have begun. For program elements started, but not completed, any milestones that have been met must be indicated. If a change will be proposed to the BMP or Measurable Goal as part of the Annual Report, this must be stated and the proposed changes discussed. For each change proposed, you must provide information on:

1. The BMP/Measurable goal for which a change is proposed;
2. Any proposed changes to the BMP description;
3. Any proposed changes to the measurable goals (including specific dates and measures); and
4. The rationale for the proposed changes.

Describe any measurable goal(s) for Public Education and Outreach on storm water impacts for the reporting; including dates and numeric measures:

Measurable Goal(s) Including dates and numeric measures, as previously submitted	Status: Including dates and numeric measures	Changes proposed to BMP and/or Measurable Goal? (Yes/No). If yes, provide information on proposed changes and rationale.
I. Educate facility personnel on the requirements for complying with the terms of the MS4 permit. II. Develop public education program. Educate public on impacts of stormwater discharges and pollution prevention. III. Produce and distribute information on erosion and runoff, location of annual reports. IV. Educate public on facility-specific stormwater information, including SW Management BMPs and watershed information. V. Educate personnel on hazardous waste collection procedures.	I-V. In 2012, a PowerPoint presentation was made available on the NIST Boulder and DoC Boulder Labs web sites. Guidance outlining compliance requirements has been provided to contractors bidding on construction projects on-site. Hazardous waste generator training is required for all personnel generating or handling hazardous waste and made available to all personnel as online training or in classroom training. Copies of training materials are provided on the enclosed CDROM.	I-V. No.

Public education and outreach on storm water impacts (continued)

Narrative description. Provide any descriptions which may further describe the implementation of this minimum measure. Such narrative may include descriptions of efforts which overlap several minimum measures or descriptions of documents or programs which have been created in an effort to implement this minimum measure:

Materials distributed for public education and outreach are included on the enclosed CDROM.

Public participation/involvement

Provide the status of any Measurable Goal scheduled for completion during the reporting period or for which activities have begun. For program elements started, but not completed, any milestones that have been met must be indicated. If a change will be proposed to the BMP or Measurable Goal as part of the Annual Report, this must be stated and the proposed changes discussed. For each change proposed, you must provide information on:

5. The BMP/Measurable goal for which a change is proposed;
6. Any proposed changes to the BMP description;
7. Any proposed changes to the measurable goals (including specific dates and measures); and
8. The rationale for the proposed changes.

Describe any measurable goal(s) for Public Education and Outreach on storm water impacts for the reporting; including dates and numeric measures:

Measurable Goal(s) Including dates and numeric measures, as previously submitted	Status: Including dates and numeric measures	Changes proposed to BMP and/or Measurable Goal? (Yes/No). If yes, provide information on proposed changes and rationale.
<p>I. Initiate a site and stream cleanup for Skunk Creek and Anderson Ditch activity for volunteers.</p> <p>II. Adopt a Storm Drain Program and storm drain stenciling.</p>	<p>I. The channel of Anderson Ditch is cleaned by NIST Engineering, Maintenance, Service and Support personnel, construction contractors and the Anderson Ditch Company. Following the completion of the first phase of the construction of the Building 1 Extension/Precision Measurement Laboratory, the Anderson Ditch channel was restored.</p> <p>II. An Adopt a Storm Drain program that is open to the public is not feasible due to site access issues.</p>	<p>I – II. No. In both cases, having volunteers performing work on federal property is not feasible due to site access and liability issues. Also, in the past, public interest in these projects has been minimal. Department of Commerce, Boulder Laboratories personnel perform stream channel maintenance and storm drain marking using Keep It Clean Partnership stickers. Stickers were affixed to storm drains inlets in September 2009 and damaged stickers will be replaced as needed.</p>

Public participation/involvement (continued)

Narrative description. Provide any descriptions which may further describe the implementation of this minimum measure. Such narrative may include descriptions of efforts which overlap several minimum measures or descriptions of documents or programs which have been created in an effort to implement this minimum measure:

During sitewide inspections, trash or other debris in the channel of Skunk Creek or Anderson Ditch is noted. This information is provided to NIST EMSS.

Illicit discharge detection and elimination

Provide the status of any Measurable Goal scheduled for completion during the reporting period or for which activities have begun. For program elements started, but not completed, any milestones that have been met must be indicated. If a change will be proposed to the BMP or Measurable Goal as part of the Annual Report, this must be stated and the proposed changes discussed. For each change proposed, you must provide information on:

9. The BMP/Measurable goal for which a change is proposed;
10. Any proposed changes to the BMP description;
11. Any proposed changes to the measurable goals (including specific dates and measures); and
12. The rationale for the proposed changes.

Describe any measurable goal(s) for Public Education and Outreach on storm water impacts for the reporting; including dates and numeric measures:

Measurable Goal(s) Including dates and numeric measures, as previously submitted	Status: Including dates and numeric measures	Changes proposed to BMP and/or Measurable Goal? (Yes/No). If yes, provide information on proposed changes and rationale.
<p>I. Establish an Illicit Discharge Detection and Elimination Program</p> <p>II. Prohibit non-stormwater discharges</p> <p>III. Dry weather screening for illicit discharges.</p> <p>IV. Tracking and cataloging non-stormwater discharges</p>	<p>I. In 2012, this program relied on monthly sitewide inspections and reports of illicit discharges from NIST EMSS personnel, other DoC Boulder Laboratories Personnel and the surrounding community. Existing training communicates the prohibition on discharging chemicals to the environment.</p> <p>II. Information was distributed via email to DoC Laboratories personnel involved with construction projects stating that non-stormwater discharges were prohibited. These emails focused on construction activity.</p> <p>III. A program of dry weather screening is under development and includes monthly inspections that have been performed for over 3 years.</p> <p>IV. The tracking of illicit discharges identified during inspections or reported by DoC Boulder Labs personnel is performed using a database maintained by the NIST BSHED Environmental Engineer.</p>	<p>I-IV. No.</p>

Illicit discharge detection and elimination (continued)

Narrative description. Provide any descriptions which may further describe the implementation of this minimum measure. Such narrative may include descriptions of efforts which overlap several minimum measures or descriptions of documents or programs which have been created in an effort to implement this minimum measure:

The annual internal audit of NIST Boulder's stormwater management program is provided on the enclosed CDROM. Appendix E contains the NIST Accidental Hazardous Material Release Reporting Procedure (AHMRRP) which includes procedures for reporting releases of any hazardous substance to stormwater. Illicit discharges identified in the past have been one-time releases which were stopped when identified. There were no illicit discharges identified in 2012 so Appendix F contains only the statement reflecting that information. Appendix G includes standard operating procedures for characterization, handling and disposal of hazardous wastes and a summary of hazardous, universal and non-hazardous wastes (other than municipal solid waste) disposed. These procedures are intended to minimize the risk of releases of hazardous waste to the environment.

Construction site storm water runoff control

Provide the status of any Measurable Goal scheduled for completion during the reporting period or for which activities have begun. For program elements started, but not completed, any milestones that have been met must be indicated. If a change will be proposed to the BMP or Measurable Goal as part of the Annual Report, this must be stated and the proposed changes discussed. For each change proposed, you must provide information on:

13. The BMP/Measurable goal for which a change is proposed;

14. Any proposed changes to the BMP description;
15. Any proposed changes to the measurable goals (including specific dates and measures); and
16. The rationale for the proposed changes.

Describe any measurable goal(s) for Public Education and Outreach on storm water impacts for the reporting; including dates and numeric measures:

Measurable Goal(s) Including dates and numeric measures, as previously submitted	Status: Including dates and numeric measures	Changes proposed to BMP and/or Measurable Goal? (Yes/No). If yes, provide information on proposed changes and rationale.
<p>I. Construction contracts need to include language requiring compliance with the terms of the MS4 permit</p> <p>II. Inform contractors of stormwater permit requirements</p>	<p>I and II. Information regarding requirements of the MS4 was communicated to contractors bidding on construction projects at the DoC Boulder Labs. Federal contracts contain language requiring the contractor to comply with all applicable regulations.</p>	<p>I – II. No.</p>
<p>III. Implement procedures for site plan review which consider potential water quality impacts.</p>	<p>III. The current construction activity at the DoC Boulder Laboratories is being done under a site development plan and Environmental Impact Statement produced in 1995. A process for addressing new requirements will be developed as part of the SWMP and implemented.</p>	<p>III. No.</p>
<p>IV. Enforcement of construction stormwater pollution prevention plans</p>	<p>IV. The NIST BSHED environmental engineer reviews construction SWPPPs and provides comments to the NIST EMSS construction project manager. The environmental engineer also inspects construction sites on a monthly basis and reports noncompliance with the Construction General Permit to the EMSS construction project manager.</p>	<p>IV. No.</p>

Construction site storm water runoff control (continued)

Narrative description. Provide any descriptions which may further describe the implementation of this minimum measure. Such narrative may include descriptions of efforts which overlap several minimum measures or descriptions of documents or programs which have been created in an effort to implement this minimum measure:

The annual internal audit of NIST Boulder's stormwater management program and a copy of the DoC Boulder Labs Stormwater Management Plan are provided on the enclosed CDROM. The Electronic Notice-of-Intent (eNOI) for the construction projects larger than one acre in area is included as Appendix C. Contract language for projects requiring compliance with the relevant terms of MS4 permit and best management practices is included in Appendix H1. Only sections of the statement of work applicable to environmental compliance were included. Appendices H2 and H3 contain section 01100 and 02270 of a construction contract which specify requirements for stormwater pollution prevention. Language will need to be added to require compliance with Section 438 of the Energy Independence and Security Act and the MS4 permit for post-construction stormwater management. Appendices J1 – J3 contains inspection reports for a construction site larger than one acre in area located on the DoC Boulder Laboratories facility (Building 1 Extension or B1E). Two of the reported inspections were performed by the NIST Boulder Safety, Health and Environment Division and one by the construction contractor (DRG Construction). The standard operating procedure followed for inspection of construction sites is included in Appendix K.

Post-construction storm water management in new development and redevelopment

Provide the status of any Measurable Goal scheduled for completion during the reporting period or for which activities have begun. For program elements started, but not completed, any milestones that have been met must be indicated. If a change will be proposed to the BMP or Measurable Goal as part of the Annual Report, this must be stated and the proposed changes discussed. For each change proposed, you must provide information on:

- 17. The BMP/Measurable goal for which a change is proposed;
- 18. Any proposed changes to the BMP description;
- 19. Any proposed changes to the measurable goals (including specific dates and measures); and
- 20. The rationale for the proposed changes.

Describe any measurable goal(s) for Public Education and Outreach on storm water impacts for the reporting; including dates and numeric measures:

Measurable Goal(s) Including dates and numeric measures, as previously submitted	Status: Including dates and numeric measures	Changes proposed to BMP and/or Measurable Goal? (Yes/No). If yes, provide information on proposed changes and rationale.
<p>I. Sites over 5000 ft² require BMPs to maintain pre-development hydrology.</p> <p>II. Regulatory mechanism to require post-construction stormwater management. Requires installation and operations and maintenance of BMPs</p> <p>III. Stormwater BMP operations and maintenance program</p> <p>IV. All contracts initiated after permit is in effect must have post-construction stormwater BMPs.</p> <p>V. Record keeping for O&M - inspections & maintenance.</p>	<p>I. This goal will require education of the planning and development personnel in the NIST Chief of Facilities Maintenance Office (CFMO) and is in progress.</p> <p>II. A Federal facility such as the DoC Boulder Laboratories cannot enact regulations of this nature. However contractual requirements can be written to require post-construction stormwater management.</p> <p>III. A formal stormwater BMP maintenance program is under development.</p> <p>IV. This goal will require education of the planning and development personnel in the NIST Chief of Facilities Maintenance Office (CFMO) and is in progress.</p> <p>V. A formal stormwater BMP maintenance program is in the early stages of development.</p>	<p>I – V. No.</p>

**Post-construction storm water management in new development and redevelopment
(continued)**

Narrative description. Provide any descriptions which may further describe the implementation of this minimum measure. Such narrative may include descriptions of efforts which overlap several minimum measures or descriptions of documents or programs which have been created in an effort to implement this minimum measure:

Progress toward this requirement has been made by providing NIST EMSS with the stormwater management plan and meeting with personnel to review requirements for post construction stormwater management and O&M of post construction BMPs. With the limited number of construction projects on site, only a small number of personnel are involved in planning and construction.

Pollution prevention/good housekeeping for municipal operation

Provide the status of any Measurable Goal scheduled for completion during the reporting period or for which activities have begun. For program elements started, but not completed, any milestones that have been met must be indicated. If a change will be proposed to the BMP or Measurable Goal as part of the Annual Report, this must be stated and the proposed changes discussed. For each change proposed, you must provide information on:

- The BMP/Measurable goal for which a change is proposed;
- Any proposed changes to the BMP description;
- Any proposed changes to the measurable goals (including specific dates and measures); and
- The rationale for the proposed changes.

Describe any measurable goal(s) for Public Education and Outreach on storm water impacts for the reporting; including dates and numeric measures:

Measurable Goal(s) Including dates and numeric measures, as previously submitted	Status: Including dates and numeric measures	Changes proposed to BMP and/or Measurable Goal? (Yes/No). If yes, provide information on proposed changes and rationale.
I. Update stormwater system maps and drawings	I. Stormwater BMPs were located during the development of the stormwater management plan and drawings were produced.	I. No.
II. Household Hazardous Waste Collection Program	II. The Boulder County household hazardous waste facility will not accept waste collected at the DoC Boulder Laboratories because it will only accept waste from Boulder County Residents. The location of household hazardous waste collection facilities was provided to DoC Boulder Laboratories personnel in April 2012 by email and is available on the NIST Office of Safety, Health and Environment web page as a link to the Colorado Department of Public Health and Environment.	II. No.
III. Develop preventative maintenance procedures for the stormwater system and BMPs.	III. This is in progress. NIST EMSS have been provided with the stormwater management plan and informed of its requirements. In addition, monthly inspections identify needed maintenance on BMPs.	III. No.

Pollution prevention/good housekeeping for municipal operation (continued)

Narrative description. Provide any descriptions which may further describe the implementation of this minimum measure. Such narrative may include descriptions of efforts which overlap several minimum measures or descriptions of documents or programs which have been created in an effort to implement this minimum measure:

A large, empty rectangular box with a thin black border, occupying the central portion of the page. It is intended for a narrative description of pollution prevention or good housekeeping measures for municipal operations.

Results of Information collected and analyzed.* If you have collected and/or analyzed information during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants, submit a short summary of the information and any analysis completed.

Measurable Goal	Results of information collected and analyzed that must be reported for this item
<p>I. Develop a dry weather monitoring program.</p> <p>II. Monitor surface water quality entering and leaving the facility.</p>	<p>I. A dry weather monitoring was developed as part of the stormwater management plan. Monthly inspections look for discharges and determinations are made as to the source and status under the permit.</p> <p>II. A surface water monitoring program as required under the MS4 permit was developed as part of the stormwater management plan. Surface monitoring will occur starting the spring of 2013.</p>

*Data collected to audit the implementation status of a program element does not need to be reported in the annual report unless required by an established measurable goal or as a requirement or result of an inspection or enforcement action. For example, data such as street miles swept, visitors at an information booth, or visits to a web site should not be included in the annual report unless directly related to a measurable goal or committed to be reported and/or analyzed in a program description.

Summary of inspections and enforcement actions. Provide a summary of the number and nature of inspections and formal enforcement actions performed. Site-specific information may also be included, but is not required.

Program Area	Description of Enforcement Actions/Inspections
<p>Inspections were performed on the Building 1 Extension and Building 1 Renovation construction sites on a monthly basis throughout the 2012 calendar year.</p> <p>Sitewide inspections continued throughout 2012.</p>	<p>During all inspections, minor issues such as the need for maintenance of erosion and sediment control were noted on the inspection checklist. The checklists were provided to the NIST EMSS project managers and construction inspectors who then provided copies of the checklists to the contractor. Appendix J of the Department of Commerce Boulder Laboratories Stormwater Management Program Internal Audit for Calendar Year 2012 shows a completed inspection checklist for an inspection of the Building 1 Renovation site performed by the contractor.</p> <p>The condition and/or use of stormwater BMPs throughout the site were noted and findings are communicated to the NIST Engineering, Maintenance and Support Services (EMSS) Division. Appendix I of the Department of Commerce Boulder Laboratories Stormwater Management Program Internal Audit for Calendar Year 2012 includes an example of an inspection report for a sitewide inspection of stormwater BMPs.</p>

Proposed changes to the storm water management program. Provide a narrative description of any changes or additions to the stormwater management program.

Notice of Program Element Operation by a Second Party. Another government entity may be relied on to perform requirements of your MS4 permit. However, as the permittee, you remain liable for compliance with the terms of the permit if the requirements are not fulfilled. You must complete this Annual Report for the geographic areas covered under your permit, for all program areas, even if one or more program elements/areas is being performed by another entity. (However, if you are performing a program element for another permittee, you do not need to include that activity in this report.) If you are relying on another government entity to satisfy some of your permit obligations (and if the information has not been previously provided to the Division in earlier reports or the application), the Annual Report must include a statement to that effect. If the BMP and/or Measurable Goal will be modified in addition to the change of operator to another government entity, the change must be included in Item #X, above. Example statement: "As of September 15, 2003, Monroe County is performing the construction site plan reviews for the Nixon Air Force Base in accordance with the procedures in the Base's original application."

Not applicable.

EPA-BAFB-00001139

Certification.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."



3/28/13

Signature of Permittee (legally responsible person)**

Date Signed

Brian Brass

Chief, Boulder Safety, Health and Environment Division, NIST

Name (printed)

Title

**This report may be signed by a duly authorized representative of the permittee in conjunction with the signatory requirements for NPDES permitting provided at 40 CFR§122.22(b).

EPA-BAFB-00001140